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Publication date:
2019

[Link to publication from Aalborg University](#)

Citation for published version (APA):

Etzerodt, S. F. (2019). *Daycare Spending in Advanced Capitalist Countries: The Conditional Effects of Female Labor Market Integration*.

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Daycare Spending in Advanced Capitalist Countries: The Conditional Effects of Female Labor Market Integration

Working paper

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January 2017

Abstract

What are the effects of female labor market integration on daycare spending in advanced capitalist countries, and what factors condition the effects? In their seminal book, Huber & Stephens (2001a) argue that the interaction between female labor force participation (FLFP) and strong leftist governments will result in more welfare spending – essentially because female labor market integration increases demand for caregiving services. Applying their model to daycare spending this article finds no evidence for the Huber&Stephens hypothesis. The article instead finds that female labor market integration will increase daycare spending, but only in economies with strong employer organizations and political systems with few constitutional constraints on state power. In political economies with fragmented and weak employer organizations and a political system with many constitutional constraints, the mobilization of women on the labor market does not seem to result in more daycare spending. As such, the organization of the political economy and the structure of the state is argued to be strong mediating factors of the effects of female labor market integration on daycare spending – and hence on early childhood education. The arguments are tested using an error correction specification on 17 advanced capitalist countries with data from 1980-2007.

Keywords: Daycare spending, female labor market integration, female labor force participation, employer organization, constitutional structure, power resources, conditional effects, time-series cross-section, OECD-countries.

Introduction

What role does female labor market integration play for changes in daycare spending in advanced capitalist countries? The feminist revolution has rightfully increased the attention paid to the role of women in comparative politics (Orloff, 1993, Sainsbury, 1996) and studies on women's participation in the labor market is overwhelming (Becker, 1965; OECD, 1989; Grunow et al., 2012). However, the independent and conditional effects of female labor force participation on changes in daycare spending still remain unexplored.

In their seminal book, Huber & Stephens (2001a) argue that the interaction between increased female labor force participation (FLFP) and left parties in government is important in understanding welfare state expansion in the industrialized countries after WW II. The authors argue that as more women enter the labor market, the demand for daycare spending and welfare policy in general rises. If the interest of working women is aligned with the left it will tend to result in increased spending on welfare policies, or so the authors argue.

Applying this model to daycare spending, this article finds no evidence for Huber & Stephen's hypothesis that the interaction between left parties and the integration of women into the labor market should lead to more spending on daycare. Instead, it is, contrary to their other wisely enlightening hypothesis, argued that increased female labor market participation will increase spending on daycare, but only in economies with strong employer organizations and political systems with few constraints on state power – i.e. few institutional veto points. Since employers in the so-called market economies, in general, depend more on high-quality skills to sustain a high equilibrium production mode relative to employers in the so-called liberal market economies (Hall & Soskice, 2001; Martin & Swank, 2004), increasing female labor force participation will more likely result in more spending on daycare in countries with strong employer organizations. As such, it is argued that the organization of the political economy conditions the effects of FLFP on daycare spending.

But it is not only women's ability to ally with key actors that are key in understanding the conditional effects of FLFP on daycare spending: the political system also matters a great deal (Immergut, 1992). In countries with strong checks and balances on state power (such as presidential and federal systems), increased FLFP will less likely result in increased spending on daycare as policy proposal expanding social policy will get vetoed by the political system. Not so in systems with few institutional constraints on state power. Here the effects of FLFP will more likely result in higher spending on daycare spending as policies are less likely to be vetoed. The structure of the political system as well as employers' organizations, therefore, seem to be strong mediating factors of the effects of FLFP on daycare spending.

As such, the paper provides two new empirical insights. First, there does not seem to be any interaction effects between left parties and FLFP on daycare spending. Second, increasing FLFP will result in more daycare spending, but only in economies with strong employer organizations and political systems with few constitutional veto points.

In answering these questions, the article moreover tries to combine strands of literature that is yet to be married in explaining why some advanced capitalist countries increase spending on daycare relatively more than other. More specifically, I try to integrate female labor market integration with Varieties of Capitalism and the literature on constitutional structures in explaining changes in daycare spending across advanced capitalist countries. In doing so, I argue that the interaction between key actors (women and employers) as well as actors and political systems (women and constitutional structures) is important in understanding why the effects of FLFP on changes in daycare spending are different across advanced capitalist countries.

The theoretical models are tested using time-series cross-section data on 17 advanced capitalist countries from 1980-2007 with an error correction specification. The article is structured as follows: a short overview of some of the literature on the effects of female labor force participation is first presented. Second, a theoretical framework based on Varieties of Capitalism and the literature on constitutional veto points is presented. A number of methodological considerations are then put forward followed by an interpretation of the empirical findings. The final part of the paper discusses the findings and concludes.

Women and social policy

Much of the literature on women and family is centered around inequalities between the sexes and how different policy regimes affects women's' *vis-à-vis* men's opportunities (Esping-Andersen, 1999; Huber & Stephens, 2000; Korpi et al. 2013). These questions are important, but this article takes a different perspective and sees women as an independent force shaping the welfare state. An important contribution to the effects of FLFP on the welfare state is Huber & Stephens (2001) eloquently written book "Crisis and Development of the Welfare State". In the book, it is argued that as women enter the labor market demand for social policy increases. When stay-at-home-moms enter the labor market, parts of the caregiving responsibilities (i.e. children and the elderly) are moved out of the home (typically in daycare institutions and other caregiving institutions). As such more FLFP increases demand for more public spending on daycare spending.

Increased demand for caregiving policies moreover creates a "*positive feedback*" process since demand for daycare spending also increases demand for female labor (Huber & Stephens, 2001: 47; see also Iversen & Rosenbluth, 2010). If working women moreover can ally with left parties it will, in general, result in a

bigger welfare state, according to Huber & Stephens (2001). Brady et al. (2005) however find no evidence in support of the thesis that the interaction between FLFP and left parties should result in a bigger welfare state writ large. It is therefore somewhat uncertain if the interaction between working women and left parties should result in a bigger welfare state. If it is not the case, what other factors (if any) condition the effects of FLFP on changes in daycare spending? Neither Huber & Stephens nor Brady et al. test the argument directly on daycare spending, although the *raison d'être* of the theoretical argument relates more directly to daycare spending than welfare state spending in general.

At the micro level, Iversen & Rosenbluth (2006) moreover argue that working women have more positive preferences for social policy relative to stay-at-home moms. This is the case, as working women's outside opportunities is strengthened when daycare spending, such as high-quality daycare institutions, are present. Also, as a large portion of women is employed in public sector jobs, working women will tend to support the welfare state relatively more to stay-at-home moms who are relatively less dependent on the welfare state and daycare spending in general. Both micro level and macro level arguments can, therefore, help shed light on the study of daycare spending.

Women, employer organizations and constitutional structures

The theoretical model builds on insights from Varieties of Capitalism (Hall & Soskice, 2001) and the literature on constitutional structures (Immergut, 1992; Huber et al., 1993). Based on these two strands of literature the ambition here is to develop a model that can explain changes in daycare spending in different political economies when FLFP rises. There will first be an introduction to the two strands of literature followed by an interpretation of how the conditional effects of FLFP on daycare spending.

One of the core insights in the Varieties of Capitalism theory is that the institutional underpinnings of the political economy influence the actor's interests (Hall & Soskice, 2001; Mares, 2003; Martin & Swank, 2012). We would, therefore, expect key actors to have different preferences for social policies in different market economies. The literature distinguishes between two broad forms of market capitalism: coordinated market economies (CMEs) and liberal market economies (LMEs). Employers in CMEs are, in general, expected to have positive preferences for social policies. Firms in CMEs need an abundance of (high quality) specific skill assets in order to sustain a high-equilibrium production mode. As skill specificity is related to more labor market risks, social security is a prerequisite for workers investment in these skills (Iversen & Soskice, 2001). As such social policy can complement the high equilibrium production strategy in CMEs (Estévez-Abe et al., 2001; Iversen, 2005; Etzerodt & Eriksen, 2017). As a result, employers will be more positive toward social policy and investment high-quality human capital formation. The logic of

employer's preferences for social policy is different in LMEs where employers, in general, are less inclined to support social policy and human capital investment. Since firms in LMEs to a larger extent depend on production with general skill assets relative to skill-specific assets, employers will be less motivated to support social policy. On the contrary to CMEs, firms in LMEs will either be motivated to sustain the status quo or to cut spending on social policy to sustain comparative advantage (Hall & Soskice, 2001; Etzerodt & Eriksen, 2017).

From the literature on constitutional structures, I take the core insight that constitutional systems with many veto points will tend to impede and obstruct the policy-making process (Immergut, 1992; Huber et al., 1993; Huber & Stephens, 2001). In Immergut's (1992) seminal study, it is argued that the degree of *centralization* and *insulation* of power in the political system can explain differences in policy outcomes. In political systems where executive power is highly dispersed narrow interest can more easily veto policy proposals – i.e. block policy reforms. This is the case in presidential systems, bicameral systems and political systems with strong federalist governance structures. In political systems where power, to the contrary, is concentrated and where party discipline is the norm, policies will more likely be passed through the legislature. As Maioni (1992) moreover argues, parliamentary systems tend to foster strong party discipline which makes it harder for central actors to influence small minorities of the party (and hence veto a policy), as the whole party needs to be convinced. The constitutional structure of any given political economy is therefore expected to affect the policy-making process. As Huber & Stephens (2001: 46) formulates it:

“those features of constitutions that make it difficult to research and implement decisions based on narrow majorities – and that conversely let minority interest obstruct legislation – will impede far-reaching reforms in social policy”.

Constitutional systems with many veto points will, in other words, tend to retard daycare spending and social policy development in general.

A conditional model of female labor market integration and daycare spending

The argument that working women have an effect on daycare spending can as such be interpreted as an argument of social mobilization. When women enter the labor market, they mobilize through the workplace and transforms the political arena by changing coalitional structures as well. However, if the mobilization of working women has to succeed in increasing spending on daycare institutions, it has to be

coupled with the interest of other key actors in the political system – as well as the *modus operandi* of the political system itself.

If we combine the VoC model and the constitutional structure model with female labor market integration it is possible to develop a set of theoretical predictions and hypotheses. We start by introducing the expected interaction effects between working women and market economies and then elaborate on the role of the constitutional structure.

Even though firms in CMEs might statistically discriminate women and the skill structure may sustain sex segregation in the labor market (Estévez-Abe, 2005, Iversen & Rosenbluth, 2010), production in CMEs is, in the long run, still dependent on well-developed skills. As high-quality daycare institutions are important for the long-term functioning of an economy (Esping-Andersen, 2002) as well as for the development of less well of children to acquire skill assets (Esping-Andersen et al., 2002), investment in early childhood education is paramount for sustaining a high-equilibrium production mode. Investment in education at an early stage is therefore expected to be in the interest of employers in CMEs – in particular in the long run. That is not to say that single firms in CMEs will not oppose daycare reforms, but to say that in a knowledge economy quality production is highly dependent on investment in children at an early stage. Employers in CMEs should therefore, in general, be supportive of daycare spending. However, firms in LMEs will be inclined to keep cost down to secure profitability (Hall & Soskice, 2001; Knetter, 1989). As high welfare spending on daycare, all else equal, raises taxes which may weaken firm's competitiveness (Bruce, 2000; Hilman, 2003), employers in LMEs will be more inclined to support the status quo or even push for cuts in daycare spending. Employers in LMEs will, therefore, in general, be less supportive of expanding daycare spending.

As investment in caregiving policies can be expected to complement the production mode in CMEs, the effects of FLFP will more likely result in more spending on daycare in CMEs, but not in LMEs where employers are opposed to increased spending. The following hypothesis can, therefore, be tested:

H1: Female labor force participation will be positively correlated with daycare spending in CMEs, but not in LMEs.

It is however not only actors to whom working women can ally with that matters for changes in daycare spending. The constitutional structure can also condition the effects of FLFP on daycare spending. The logic is rather straightforward. If the interest of working women is aligned with key actors – such as employer's organizations – that is no certainty for getting legislation done as political systems with many veto points more easily can put an end to the policy-making process. A relatively easy and smooth road to accepting

new policies can, therefore, be a prerequisite if FLFP is to have a positive effect on daycare spending. One could, therefore, in general, expect the combination of political economies with few constitutional veto points and high FLFP to push more family-friendly policies through the legislature. The following hypothesis can, therefore, be tested:

H2: Female labor force participation will be positively correlated with daycare spending in countries with few constitutional veto points, but not in countries with many constitutional veto points.

Method and data

The hypotheses are tested using a time-series cross-section framework containing 17 advanced capitalist countries from 1980-2007¹. There are unfortunately no valid spending data on caregiving and daycare spending available before 1980. The timeframe has therefore primarily been chosen due to the availability of data.

As the dependent variable, public expenditures on *daycare/home-help services* is used as a measure of daycare spending (Brady et al., 2014). Public expenditure on daycare services is measured as a percentage of GDP. The measure, therefore, captures some of the core aspects of spending on daycare institutions. We will, therefore, expect higher levels of FLFP to be positively correlated with spending on daycare.

The main explanatory variable is *female labor force participation* (FLFP). The FLFP rate is the percentage of the female working-age population in the labor market. The three other explanatory variables are left parties, employers' organizations, and constitutional structures. *Left parties* measure the cumulative share of seats in the parliament held by leftist governments since 1946 (Brady et al., 2014). Different ways of operationalizing the partisan variable can, however, influence the empirics (Schmitt, 2016). A model with cabinet shares is there also used to test if the interaction between FLFP and left parties has an impact on daycare (Huber & Stephens, 2001). *Employer organization* is a composite index including measures of the *presence of national employers' federation, the peak federation's powers over members* (i.e., appointment power, veto power over collective bargains and lockouts, own conflict funds), and *policy-process integration of employers* in (e.g., boards, commissions) (Martin & Swank, 2012b: 11). The variable is arguably the best proxy available for employers' organization that relates most clearly to the theoretical argument put forward². However, the data series ends in 2003 and has therefore been extrapolated until

¹Australia, Austria, Belgium, Canada, Denmark, Finland France, Germany, Italy, Ireland, New Zealand, Norway, Switzerland, Sweden, United Kingdom, United States.

² That is not to say that it is a perfect measure as it is relatively time-invariant. There is, however, a lot of ground to cover when it comes to good measures for employers' organizations (Jahn, 2016).

2007. This should provide no major bias, as most of the variance in the variable is between countries. Further analysis moreover indicates that it is the case³. As a robustness check, a model with Martin & Swank's (2012) measure for macro corporatism has also been utilized. It yields similar results.

Constitutional structure is a composite index including seven aspects of constitutional structures: degree of federalism, presence of presidentialism, proportional representation/single-member district, degree of bicameralism, referenda in national policy-making, judicial review, degree of authoritarianism (Huber et al., 1993; Huber & Stephens, 2001).

Furthermore, a number of standard control variables are included. First, *real GDP per capita* in constant prices is included. The effects of GDP on welfare measures (such as daycare spending) is debatable; although, the GDP measure is conventionally assumed to be positively correlated with spending measures (Wilensky, 2002). However, since daycare spending is measured as a percentage of GDP, an increase in GDP should be negatively correlated with daycare spending as the numerator increases relative to the denominator (if GDP goes up daycare spending will, all else equal, be declining) GDP is, therefore, an important control variable in the current set-up.

Second, the *unemployment rate* is included to control for possible business cycle effects (Swank, 2002). If unemployment is high, it can also divert spending away from daycare to finance the unemployed temporarily. Unemployment is therefore expected to be negatively correlated with daycare spending.

Third, the *old-age dependency ratio* (the population over 65 in percentages of the population size) (Armingeon et al., 2016) is included to control for possible fiscal pressure on the welfare state (Pierson, 2001; Etzerodt et al., 2017). A high old-age dependency ratio is therefore expected to be negatively correlated with daycare spending.

Fourth, *debt* is included as high levels of debt are expected to be negatively correlated with daycare spending as countries with high levels of financial constraint can be forced to cut welfare spending (Pierson, 2001b). Debt is measured as *general government gross financial liabilities as a percentage of GDP* (Brady et al., 2014). Since some observations are missing in the dataset, simple linear interpolation has been implemented to fill out the missing values. However, interpolating values can give biased estimators. The regression models are therefore run both with and without debt as a control variable.

Fifth, "globalization" can also affect governments spending abilities. Globalization is operationalized as *capital mobility* – measuring capital account openness (inward and outward flows), which is an index ranging from 0 (no openness) to 100 (complete openness) – and *trade openness* defined as the sum of exports and imports as a percentage of GDP (Brady et al., 2014). The effects of globalization on welfare spending is highly debatable (Garrett, 1998; Iversen & Cusack, 2000; Jahn, 2006; Bussemeyer, 2009),

³ A set of models using 1981-2004 data (remember that the variable is lagged by one year) yields near identical estimates.

however, capital mobility is in general expected to be negatively correlated with welfare spending (Frieden & Rogowski, 1996; Swank, 2002; Swank, 2010). Trade openness is however expected to be positively correlated with welfare spending (Cameron, 1978; Garrett, 1998).

Sixth, deindustrialization is also included as a control variable (Iversen & Cusack, 2000). Deindustrialization is measured as “100 minus the sum of agricultural and industry employment as a percentage of the working-age-population” (Iversen & Cusack, 2000). Deindustrialization is in general expected to result in a more welfare spending – and hence more spending on daycare.

as governments have to cushion the labor force against risks imposed by deindustrialization.

Seventh, the *fertility rate* is included to catch possible changes in the demography of small children. The fertility rate is measured as the average number of births per women (Brady et al., 2014). High fertility rates are expected to increase spending on daycare institutions as more children rise the demand for caregiving policies.

Table 1. Main explanatory variables (mean values)

| Country | FLFP | Employer organization | Constitutional Structure | Left parties |
|----------------|-------------|------------------------------|---------------------------------|---------------------|
| Australia | 61,16 | 0,15 | 4,00 | 15,58 |
| Austria | 61,72 | 0,22 | 1,00 | 29,27 |
| Belgium | 50,74 | 0,22 | 2,07 | 15,95 |
| Canada | 67,34 | -1,96 | 5,00 | 0,00 |
| Denmark | 74,56 | 0,99 | 0,00 | 28,40 |
| Finland | 71,70 | 0,77 | 0,00 | 20,15 |
| France | 59,11 | 0,12 | 2,68 | 11,92 |
| Germany | 59,27 | -0,06 | 4,00 | 13,83 |
| Ireland | 47,37 | -0,03 | 0,00 | 4,73 |
| Italy | 44,04 | 0,05 | 1,43 | 6,13 |
| Netherlands | 55,47 | 0,10 | 1,00 | 11,06 |
| New Zealand | 65,34 | -0,19 | 1,14 | 15,85 |
| Norway | 71,73 | 0,95 | 0,00 | 35,85 |
| Sweden | 78,28 | 0,21 | 0,00 | 39,76 |
| Switzerland | 70,72 | -0,06 | 6,00 | 11,13 |
| United Kingdom | 66,18 | -0,21 | 2,00 | 18,89 |
| United States | 67,46 | -1,96 | 7,00 | 0,00 |

Since I am interested in the dynamic relationship between FLFP and daycare spending, an error correction model (ECM) is utilized. An Im-Pasaran-Shin and Levin-Lin-Chu test for unit root (Im et al., 2003; Levin et al., 2002) moreover show that there are severe problems with unit roots in the level of daycare spending⁴. As the dependent variable is first-differenced in an error correction model bias stemming from

⁴ This is the case with and without a trend specification with a one-year lag.

unit roots is therefore eliminated. Using an error correction specification is therefore also supported by the data structure, as using the level of daycare spending would result in severe biases.

ECMs furthermore have several advantages. First, the specification incorporates short-term (i.e. yearly changes) as well as long-term (i.e. level changes) effects of covariates on the dependent variable (Beck & Katz 1996, 2011; Iversen & Cusack, 2000). This makes it possible not only to distinguish between differences in time effects from the independent variables, but it also allows one to include almost time-invariant variables (e.g. constitutional structures) and slightly changing variables (e.g. employer's organizations) in the model. This is highly relevant in comparative political economy where a good portion of the variables is relatively time-invariant. Second, the model estimates the dynamic changes in daycare spending, which is of particular interest here. As the dependent variable is first-differenced it is possible to investigate what happens with the yearly changes in our measures for family and caregiving policies as the level and the first-difference of our explanatory variable changes. Third, some scholars argue that ECMs yield more reliable estimates than static level models (De Boef & Keele, 2008). This is even argued to be true in the presence of nonstationary processes (Podestá, 2006).

I furthermore prefer running the models with year fixed effects⁵ (to control for common shocks) instead of country fixed effects, as country fixed effects remove the variance between countries. As Plümper et al. (2005: 331) clearly put it: *“Country dummies control away the deviation of the variables’ mean of one unit from the variables’ mean of the base unit. Thus, unit dummies completely absorb differences in the level of independent variables across units”*. Given that I am interested in how *differences* in employers’ organizations, constitutional structures, and left parties mediate the effects of FLFP on daycare spending, running a model with country fixed effects would eliminate the variance of interest (i.e. the difference between countries) (see also Beck, 2008). Using country fixed effects would, therefore, result in bias as the theorized relationship would be eliminated. As such, I refrain from using country fixed effects and instead run the models with year fixed effects.

To correct for problems with serial correlation in the error terms all models are, furthermore, regressed with panel corrected standard errors (Beck & Katz, 1995) as well as Prais-Winsten estimates.

The model to be estimated can, therefore, be written as follows:

$$\Delta y_{i,t} = \alpha + \beta_1 y_{i,t-1} + \sum_j \beta^j x_{i,t-1}^j + \sum_j \beta_{\Delta}^j \Delta x_{i,t-1}^j + \epsilon_t,$$

⁵ A F-test moreover suggest the validity of including year dummies.

where y denotes the dependent variable (daycare spending) and x the independent variables. The subscript i refers to a particular country and subscript t to a particular year, superscript j denotes a particular independent variable while e is the error term. Δ signifies the first difference of a variable (and hence the short-term effects). The long-term effects are given by β^j / β_1 . All explanatory variables are furthermore lagged by one year (as shown by the t_{-1}), as one can expect a time lag on the effects of the independent variables.

Empirical findings

The results of the empirical tests are shown in table 2. As indicated in model I, FLFP seems to have a positive effect daycare spending, as indicated by the positive correlation between the FLFP level variable and changes in daycare spending. Recall that the long-term effects are given by 0,00154/0,0335. Countries where more women are integrated into the labor market, therefore, tend to increase spending on daycare. But how what are the conditional effects of FLFP on daycare spending?

The test of the Huber & Stephens (2001) hypothesis – that the interaction between left parties and FLFP will result in more daycare spending – is shown in model II in table 2. As indicated by the insignificant interaction terms – both the short-run and the long-run interaction term – the relative power of left parties does not mediate the effects of FLFP on daycare spending. To test if the insignificant interaction term is a result of the measure of the left party variable, a measure with cabinet shares instead of cumulative seats have been utilized (not shown). Using cabinet shares instead of the share of left seats in government still yields insignificant values, which solidifies the initial finding. There is, therefore, no apparent association between the interaction between FLFP and the partisan variable – and hence no support for Huber & Stephen's (2001) hypothesis.

This is not to say that Huber & Stephens (2001) empirical analysis is not valid as they test their model on data covering the expansion of the welfare state (1960-1985). They moreover use a static level model, which is likely to yield different results. More importantly, they do not test their model directly on daycare spending. However, the data presented here suggest that their model is not capable of explaining changes in daycare spending in the period after the welfare state has matured (from the 1980s and onwards).

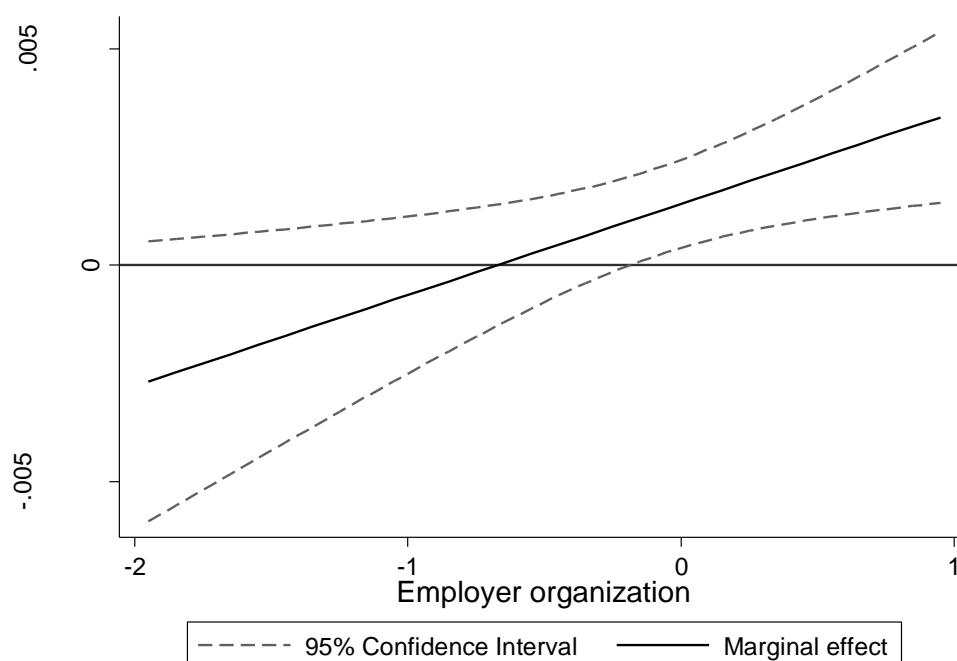
Table 2. Prais-Winsten estimates of the conditional effects of female labor force participation on daycare spending, 1980-2007.

| | I | II | III | IV |
|--|--------------------------------------|--|---------------------------------------|--|
| | Δ Daycare Spending | Δ Daycare Spending | Δ Daycare Spending | Δ Daycare Spending |
| Lagged dependent (level) | -0.0335 [*] (0.0187) | -0.0401 ^{**} (0.0191) | -0.0350 ^{**} (0.0178) | -0.0300 (0.0206) |
| Total fertility rate | 0.0169 (0.0137) | 0.0121 (0.0137) | 0.0245 (0.0154) | 0.0109 (0.0161) |
| Δ Total fertility rate | 0.0700 (0.0788) | 0.0426 (0.0785) | 0.0527 (0.0795) | 0.0943 (0.0802) |
| Left parties | -0.00176 ^{**} (0.000812) | -0.00189 ^{**} (0.000825) | -0.00212 ^{***} (0.000817) | -0.00264 (0.00355) |
| Δ Left parties | 0.00772 (0.0105) | 0.00993 (0.0105) | 0.00881 (0.0104) | 0.0184 (0.0120) |
| 65+ | 0.00561 [†] (0.00299) | 0.00690 ^{**} (0.00313) | 0.00684 ^{**} (0.00332) | 0.00519 [†] (0.00315) |
| Δ 65+ | 0.0155 (0.0298) | 0.00723 (0.0300) | 0.0161 (0.0290) | 0.0168 (0.0293) |
| Unemployment | -0.00452 ^{**} (0.00225) | -0.00555 ^{**} (0.00238) | -0.00438 ^{**} (0.00219) | -0.00393 [†] (0.00218) |
| Δ Unemployment | 0.00197 (0.00504) | 0.00240 (0.00501) | 0.000973 (0.00499) | 0.00149 (0.00499) |
| Capital mobility | -0.000252 (0.000296) | -0.000521 (0.000329) | -0.000623 [†] (0.000318) | -0.000387 (0.000292) |
| Δ Capital mobility | -0.000354 (0.000889) | -0.000152 (0.000877) | 0.00000245 (0.000880) | -0.000224 (0.000875) |
| rGDPc | -0.00000119 (0.00000817) | -0.00000165 [†] (0.00000877) | -0.000000516 (0.00000679) | -0.000000682 (0.00000743) |
| Δ rGDPc | 0.00000554 (0.00000699) | 0.00000768 (0.00000696) | 0.00000238 (0.00000689) | 0.00000374 (0.00000678) |
| Trade openness | -0.00000300 (0.0000815) | 0.0000481 (0.0000834) | 0.000116 (0.0000776) | 0.0000482 (0.0000905) |
| Δ Trade openness | -0.000618 (0.000924) | -0.000707 (0.000916) | -0.000354 (0.000924) | -0.000679 (0.000935) |
| Deindustrialization | 0.00349 [†] (0.00211) | 0.00421 [†] (0.00215) | 0.00205 (0.00169) | 0.00244 (0.00177) |
| Δ Deindustrialization | -0.00162 (0.00268) | -0.000570 (0.00265) | -0.000828 (0.00265) | -0.00144 (0.00270) |
| FLFP | 0.00154 ^{***} (0.000524) | 0.00142 ^{***} (0.000518) | 0.00225 ^{***} (0.000666) | 0.00102 [†] (0.000572) |
| Δ FLFP | 0.000785 (0.00374) | 0.0000432 (0.00371) | 0.00131 (0.00387) | -0.000716 (0.00435) |
| Constitutional structure | -0.00704 ^{***} (0.00246) | -0.00684 ^{***} (0.00244) | 0.0335 ^{**} (0.0143) | -0.00772 ^{***} (0.00273) |
| Δ Constitutional structure | — | — | — | -0.00568 (0.0233) |
| Employer organization | 0.0119 (0.00788) | -0.131 ^{**} (0.0563) | — | — |
| Δ Employer organization | 0.139 [†] (0.0731) | 0.0787 (0.0700) | — | — |
| Δ Left parties* Δ FLFP | — | 0.00859 (0.0110) | — | — |
| Left parties*FLFP | — | 0.0000154 (0.0000560) | — | — |
| Δ Employer organization*FLFP | — | — | -0.127 (0.0980) | — |
| Employer organization*FLFP | — | — | 0.00211 ^{**} (0.000841) | — |
| Δ Constitutional structure*FLFP | — | — | — | 0.00285 (0.0181) |
| Constitutional structure*FLFP | — | — | — | -0.000646 ^{***} (0.000228) |
| Constant | -0.312 [†] (0.178) | -0.202 (0.148) | -0.333 [†] (0.179) | -0.278 [†] (0.152) |
| <i>N</i> | 476 | 476 | 476 | 476 |
| Year fixed effects | Yes | Yes | Yes | Yes |
| <i>R</i> ² | 0.286 | 0.281 | 0.297 | 0.282 |

Note: Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Turning towards the interaction effects between FLFP and employers' organizations, the (level) interaction term between the two variables are significant at the 0,05 level (see model III in table 2). It is, however, important to show the marginal effects with a confidence interval, as calculating the effects by hand fails to tell under what conditions the marginal effects are different from zero (Brambor et al., 2006). The marginal effects are depicted in figure 1. As shown in figure 1 the marginal effects of FLFP are positively correlated with daycare spending, but only in CMEs – i.e. countries with strong employers' organizations – such as Denmark and Norway (but also continental European countries such as Austria and Belgium). The marginal effects moreover tend to be positively correlated with daycare spending in LMEs – i.e. countries with the absence of strong employer organizations such as USA and Canada – but these effects are not different from zero (as indicated by the confidence interval). These empirical findings therefore strongly indicate that employers' organizations condition the effects of FLFP on daycare spending in the long run: FLFP will have a positive effect on daycare spending, but only in countries with strong employer organizations.

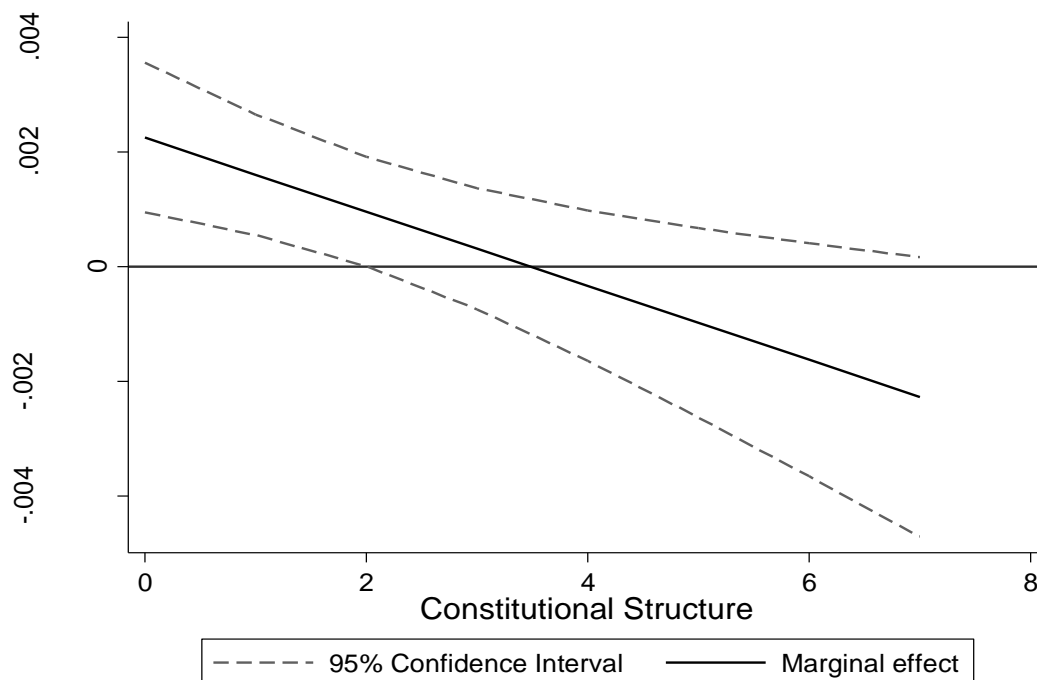
Figure 1. Marginal effects of female labor force participation on daycare spending, given various levels of employer organization.



Moving on to how constitutional structures condition the effects of FLFP, a set of models with an interaction term between FLFP and constitutional structures are moreover included in table 2. First, the (level) interaction term between FLFP and constitutional structures is highly significant at the 0,01 level,

indicating long-term effects from the interaction (see model IV). The marginal effects of FLFP are, moreover, positively correlated with daycare spending, but only in countries with few constitutional veto points (the Scandinavian countries, Austria, Ireland and Britain). The marginal effects on daycare spending are not different from zero in countries with many veto points (USA, Switzerland, Australia Canada and Germany). As hypothesized, FLFP will tend to be positively correlated with daycare spending in countries with few constitutional constraints. High levels of FLFP therefore seem to increase spending on daycare care, but only in countries with few constitutional veto points.

Figure 2. Marginal effects of female labor force participation on daycare spending, given various levels of veto points (constitutional structure).



The control variables moreover, in general, comply the expected predictions. The fertility rate is positively, but insignificantly correlated with daycare spending. The left party variable is somewhat surprisingly negatively correlated with daycare in most of the models. If one, however, runs a model with cabinet shares instead of cumulative seats, the left party variable becomes insignificant in most models (not shown). The (level) of old-age dependency (people over 65) is positively and significantly correlated with daycare spending. Unemployment is significantly and negatively correlated with daycare. Capital mobility and trade openness are in general negatively, but insignificant correlated with daycare spending. The level of GDP is as expected in general negatively correlated with daycare spending, although it is often insignificant. The effects of deindustrialization are somewhat inconclusive. The linear effects of the

constitutional structure are as expected negatively correlated with daycare. The linear effects of employer’s organizations moreover tend to be positively associated with the family policy measures.

Discussion

The hypothesized relationship between of FLFP and daycare spending, therefore, seems to be substantiated by the empirics. In political economies with both organized employer organizations and few constitutional constraints, the effects of female labor market integration will, therefore, tend to result in high levels of daycare spending (see the bottom right corner in figure 3). Countries with both fragmented employers’ organizations and many constitutional constraints will, however, tend to impede the effects of FLFP and will, therefore, in general, result in low levels of daycare spending (see the top left corner of figure 3). Countries with either fragmented employers’ organizations or many constitutional constraints will tend to obtain relative medium levels of daycare spending.

Figure 3. The effects of female labor force participation on daycare spending given the structure of employers’ organizations and the presence of constitutional constraints.

| | | Employer organization | |
|----------------------------|------|---|---|
| | | Fragmented | Organized |
| Constitutional constraints | Many | <p><i>Low</i></p> <p>(USA, Canada)</p> | <p><i>Moderate</i></p> <p>(Germany)</p> |
| | Few | <p><i>Moderate</i></p> <p>(New Zealand, UK)</p> | <p><i>High</i></p> <p>(Denmark, Sweden)</p> |

These findings go some way in explaining why spending on daycare varies amongst advanced capitalist countries. As the northern European countries – such as Denmark and Sweden – in general, have high levels of FLFP, organized employers (although Swedish employers have become more fragmented in the 1990s and 2000s) and few institutional constraints, it is then no surprise that they then also, in general, spend relatively more on daycare. At the other end of the scale, the USA and Canada have experienced a substantial increase in FLFP over the period. The increase in FLFP has, however, not resulted in substantially

higher spending on daycare as the political system with relatively many veto points and the fragmented nature of the political economy have blocked initiatives to increase spending on daycare.

The institutional underpinnings of most northern European countries, therefore, seem to support human capital formation at an early stage, which is both crucial for economic efficiency and social equality in the long run. Economically high investment in early childhood education can be crucial for sustaining a high-equilibrium production mode over the long run – for example in knowledge-intensive markets such as clean energy and nanotechnology – which is essential for firms' comparative advantages in CMEs. The combination of high female labor market integration, strong and well-organized employers' organizations and a political system with few constitutional constraints (among possible other factors) therefore seem to strengthen the comparative advantages of northern European CMS *vis á vis* southern European CMEs and LMEs. Socially, this combination of actors and institutions can also strengthen social solidarity. As argued by Heckmann (2006) and others, investment in early childhood education yields high returns in the long run. Chances of children born in well-off homes to become well integrated into to society are much greater when governments invest heavily in human capital formation and general well-being of kids at an early stage. The analysis has, as such, also implications for social solidarity and inequality in general. Securing high investment in children is certainly an important prerequisite for a well-functioning capitalist system in the knowledge economy.

Conclusion

What effects does female labor market integration have on changes in daycare spending? In this article, it is argued that high levels of employment amongst women substantially raises the demand for daycare spending forcing governments to raise spending on daycare. The effects of female labor force participation (FLFP) are, however, not linear amongst all advanced capitalist countries. In the article, it is argued contrary to prior research highlighting interaction effects between FLFP and left parties, that left parties do not mediate the effects of FLFP on changes in daycare spending. Instead, it is argued that employer organizations and constitutional structures condition the effects of FLFP. FLFP only seems to result in higher spending on daycare spending in countries with strong employer organizations and political systems with few constitutional constraints. If FLFP is to result in more daycare spending, it is therefore important that working women's interest are aligned with the interest of employers' organizations as well as a political system where it is relatively easy to push new policy through the legislature. However, in political economies with fragmented and weak employers' organizations and many constitutional constraints there tend to be no effects of FLFP on daycare spending. As such, the organization of the political economy and

the constitutional structure are important in understanding the conditional effects of FLFP on daycare spending.

Securing investment in early capital formation – i.e. investment in early childhood development – is furthermore argued to be a prerequisite for a well-functioning market economy. This is particularly the case in the northern European economies where the production mode is highly dependent on high-quality skill assets. However, high investment in early childhood development can also support social solidarity, as high levels of daycare spending increase less well-off children's chances of success in their adult life. High levels of daycare spending can, therefore, secure the combined objective of high economic performance and social equality in the long run.

At a theoretical level, the article tries to develop a new way of thinking about changes in daycare spending that links female labor market integration, Varieties of Capitalism and constitutional structures into one model. As such, I have tried to show the benefits of marrying these strands of literature in explaining daycare spending across advanced capitalist countries. Whether the model can explain broader welfare state changes is for future research to decide.

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