

# Women Matter: The Impact of Gender Empowerment on Abortion Regulation in 16 European Countries between 1960 and 2010

## Emma Budde

## Ludwig-Maximilians-Universität München

## Stephan Heichel

## Ludwig-Maximilians-Universität München

A bortion is undeniably a gender issue — even if not an exclusive one (e.g., Mazur 2002, 137–153; Warren 2000, 201–223. Due to a woman's physical reproductive capacities and, even more so, the patriarchal allocation of care work, members of the female sex bear by far the larger share of all burdens that come with pregnancy and especially unwanted pregnancy — be they physical, emotional, economic, life-course related, or other (England 2001; Tribe 1992, 106). For the longest time in history and across most societies and cultures, women were denied rights to make autonomous decisions in terms of whether and when to procreate, which is in one core aspect of bodily self-determination (Corrêa 2001; Staggenborg 2001).

Consequently, achieving this right became a core issue of gender emancipation and equality, first visible in Western states and later across the globe (ibid.). The struggle to achieve (a greater degree of)

Published by Cambridge University Press 1743-923X/16 \$30.00 for The Women and Politics Research Section of the American Political Science Association.

<sup>@</sup> The Women and Politics Research Section of the American Political Science Association, 2016 doi:10.1017/S1743923X16000556

reproductive freedom included the goal to ensure access to pregnancy terminations as a legally and readily available option (Cook, Dickens, and Fathalla 2003, 216–252; Corrêa 2001).

Given its outstanding role as a crucial gender policy (Mazur 2002, 137–153; McBride Stetson 2001; McBride and Mazur 2010, 13-26), it is striking that gender-related variables are rather scarce in studies that investigate the determinants of abortion regulation over time and across states. Existing comparative research on abortion that includes gender-specific explanatory factors is overwhelmingly of a qualitative nature and often descriptive (e.g., Outshoorn 1996). Those studies that do aim to explain policy changes mostly look at a small number of states only and, in terms of theory, emphasize complex interactions of gender-related structural and agency factors (Htun 2003; Lovendusky and Outshoorn 1986; but see McBride Stetson 2001). Qualitative studies have generated a wealth of in-depth knowledge on the factors, forces, and processes that shape abortion regulation in selective countries. However, it is striking that there are hardly any large-N cross-national studies that complement qualitative research with a quantitative perspective by systematically testing for the role of genderspecific and clearly operationalized independent variables on abortion regulatory changes over time and across a larger sample of states. (Exceptions are Asal, Brown, and Gibson Figueroa 2008; Gindulis 2002, 2003, 43–51).

We aim to fill this gap by analyzing the degree of restrictiveness of national abortion regulations. We define this dependent variable as the intensity of state legal interference in a women's decision to abort a pregnancy. Through the focus on gender-related factors, we add a gender perspective to quantitative analyses of abortion regulation. We complement existing case study research that has a gender perspective with quantitative insights into the relationship of female empowerment measures and policy output. By including 16 European countries over a time span of 50 years (1960–2010), we ensure an encompassing insight into the development of abortion regulations in Europe, exceeding the temporal scope of existing quantitative studies. Furthermore, a new dataset that we compiled based on close examinations of legal changes in all states under scrutiny, gave us the possibility to construct an index that captures state intervention's intensity on a woman's decision to abort, in a considerably more precise and accurate manner than has been done before.

We demonstrate that measures of women's empowerment are better predictors of abortion restrictiveness than conventional variables used in quantitative comparative policy research and morality policy research. Our findings suggest that the higher the share of women in parliament, the greater the female labor force participation rates, and the higher the level of women's tertiary education, the less restrictive national abortion regulations.

The paper proceeds as follows: after reviewing the state of abortion regulation research in terms of conceptualizations, operationalizations, descriptive as well as causal inference in the second section, we present the theoretical framework in the third section. This is followed by a brief elaboration on methodology. Afterward, we turn to the presentation of the study's concept and operationalization of the dependent variable, supplemented by some brief remarks on measurements and data employed for independent variables. We then present our empirical estimations and end with a brief conclusion and discussion of the results.

#### LITERATURE REVIEW

# Change in Abortion Regulation: Theoretical Approaches and Causal Inference

From this article's perspective, which is a macroquantitative approach, relevant existing studies can be grouped along three major lines. One research strand locates the regulation of abortion within "classic" comparative policy analysis. Studies explain the (relative) restrictiveness of national regulation using "conventional" theoretical approaches and respective explanatory figures (e.g., Asal, Brown, and Gibson Figueroa 2008; Brookes 1992; Gindulis 2002, 2003, 52–53). These are economic development or modernization in a broader understanding, democratic transition, left-right party competition, institutional constraints (such as judicial review) or internationalization (e.g., in terms of ratification of human rights treaties). A related factor that has so far only been qualitatively researched is the role of interest groups, especially physicians' organizations (e.g., Engeli and Varone 2011; Halfmann 2011, 66–97).

A second major theoretical perspective is morality policy analysis. Quantitative inquiries from this perspective investigate to what extent abortion regulation could be explained via religion (in various aspects such as the religion-state relationship), a religious-secular party cleavage, most notably in terms of the existence and the strength of religious-conservative parties, public opinion, and also mobilization and special interests. For the latter, the focus is more on the role of religious and especially Christian activism (like churches), including special activism targeting abortion (see especially Minkenberg 2002, 2003; also Engeli, Green-Pedersen, and Larsen 2012, 5-26).

Third, studies employ a gender (agency) perspective when trying to explain abortion regulation (changes) and shifts toward lower restrictiveness across states and over time (Githens and McBride Stetson 1996; McBride and Mazur 2010, 13–16; McBride Stetson 2001). One focus of this research strand is the role of either general women's rights activism or specific reproductive rights activism for explaining abortion regulation. At the same time, studies are interested in the impact of female representation in the legislative and executive (bureaucratic) spheres. Finally, this approach stresses the crucial role of the interaction of these factors.

Albeit single explanatory factors belonging to the women's empowerment concept (such as the number of female representatives in national parliaments or the female employment rate) are considered in several large-N studies of the first two theoretical perspectives, this is not embedded in a more encompassing theoretical women's empowerment approach. Studies from the third research perspective (if cross-national), although being theoretically closer, refrained from large-N inquiry.

#### Change in Abortion Regulation: Concept and Measurement

achievements have been made Considerable in terms of the conceptualization and operationalization of the dependent variable abortion regulation for quantitative comparative analyses (see especially Gindulis 2002, 2003, 43-51; also Brooks 1992, 347; Glendon 1987, 14; Minkenberg 2002; Outshoorn 1996, 149; Rolston and Eggert 1994, xxi; see also Kreitzer 2015 for a recent overview on subnational U.S. abortion regulations' measurements). However, there is still the need for further sophistication and preciseness. A particular problem in existing research is a correct classification of national regulatory models in terms of their degree of restrictiveness; there are still remarkable inconsistencies in the literature. Research needs to integrate the aspect of more relevant "procedural obstacles" in aggregated figures to appropriately determine their legal interference intensity. Recent descriptive inference analyses have convincingly demonstrated the tremendous importance of such seemingly minor regulatory tools, not only for detecting legal change, but also for establishing more nuanced national regulatory models (e.g., Levels, Sluiter, and Need 2014). This would include procedural aspects uncommon in most states at this time, but which have existed in the past. By tackling these problems, this study also improves on the concept and operationalization of the dependent variable abortion regulation more generally.

#### **Overall Assessment of Previous Research**

Albeit large-N studies have taken into account single gender empowerment variables for explaining abortion regulation in cross-national perspective, such analyses have different theoretical foci, are cross-sectional only, and employ an underspecified operationalization of the dependent variable (e.g., Asal, Brown, and Gibson Figueroa 2008). More sophisticated analyses that combine cross-sectional and longitudinal data that take gender empowerment factors into account are even rarer and quite old in the meantime (e.g., Gindulis 2002, 2003, 52–90) — that is, they are unable to take into account the remarkable dynamic of abortion regulation changes that unfolded in the first decade of the 21st century, even in Western states. At the same time, no attempts have been made yet to quantitatively test for the role of distinct women's empowerment factors.

Studies that systematically approach the regulation of abortion from a gender (agency) perspective so far refrained from employing a classical macroquantitative research design with the "state-year" as the unit of analysis (Githens and McBride Stetson 1996; McBride Stetson 2001; McBride and Mazur 2010; see also Mazur 2002, 137–153). Albeit political representation of women is a prominent explanatory factor within that scope, this research employs a meso- and microperspective. It is mostly interested in figuring out the more precise mechanisms (such as relevant gender framing) and scope conditions (such as group characteristics or the specific policy environment) that are relevant for women's reproductive rights activism to entail legal change.

Overall, it is not unfair to argue that for the most part we still lack theoretically guided, systematic (large-N) analyses that allow for rigorous testing of the role of gender-specific explanatory factors for abortion regulation while controlling for other theoretically competing independent variables. This contribution aims at closing this research gap.

#### THEORY AND HYPOTHESES

#### Abortion as a Gender Issue

As indicated in the introduction, we conceive abortion regulation to be at least a strong gender issue (meaning that it does not need to be defined as an exclusive gender issue necessarily. See, e.g., Mazur 2002, 137–53; McBride and Mazur 2010, 71–99; Warren 2000; Woliver 2002, 15–17,

82–114; see also Superson 2014 for a recent encompassing discussion) as well as an important issue for gender equality.<sup>1</sup>

Parliamentary debates on abortion take place against the backdrop of patriarchal societies and the discourse is shaped by and often reproduces gender stereotypes. Restrictive regulations are recurrently legitimized by the belief that women are not capable of foreseeing their own emotional response to the procedure (Nossif 2007, 61). At the same time, restricting access to abortion affirms women's role as procreators rather than individuals with the right to make decisions about their own bodies. Celis (2001, 55) observes that proponents and opponents of restrictive abortion regulation differed considerably in the ways in which they constructed women as a social category in the parliamentary debate on abortion in Belgium. Female members of parliament (but not exclusively female ones) constructed women as competent to take into account their own situation as well as a fetus' right to life when deciding to have an abortion or not (ibid., 55). Others have highlighted the important role female politicians played in pushing abortion regulations to become less restrictive in various national contexts (e.g., Köpl 2001, 17, 28 for the case of Austria; Calloni 2001, 188, 196, 201 for the case of Italy). Overall, it is plausible to hypothesize that with increased empowerment of women in a society, a woman's right to make decisions about her own body becomes more accepted.

#### Women's Empowerment/Emancipation

Accordingly, our theoretical framework is a gender perspective or, more precisely, a female empowerment or emancipation approach.<sup>2</sup> The core argument is, of course, that there is a relationship between women's positions in state and society and the regulation of abortion. Where the position of women is enhanced, abortion regulation should become less restrictive *ceteris paribus*. As women were for the longest time and in all states considered here deprived of achieving a level of empowerment similar to men, the liberalization of abortion regulation only started in the 20th century (Corrêa 2001; Petchesky 1990, 101–138; Staggenborg 2001). We also argue that for each of the women's empowerment elements introduced below, there is a plausible direct causal mechanism linking it to abortion regulation restrictiveness.

<sup>1.</sup> Based on England's definition of gender in that context (2001, 5911).

<sup>2.</sup> Both combined versions of the term with "gender" and "women" are used interchangeably in this article.

This women's empowerment theoretical approach — on the one hand — is different from stressing either general or specific women's rights activism (agency) as expressed in social mobilization, interest group formation, and political action on the issue (McBride and Mazur 2010, 71–99; McBride Stetson 2001). This means that the theoretical construct rather emphasizes the underlying economic and societal forces that might — among other impacts — result in an increased women's activism toward the abortion issue. On the other hand, the theory also stresses the direct representation of women in the political sphere hence in the relevant decision-making platforms — as crucial. As a result, this theoretical perspective somehow "bridges" intervening forces that might have resulted in an increased presence of women in politics. It is rather concerned with the direct effects of the underlying factors.

Albeit gender empowerment as a (social science) concept in a more general sense has, of course, a long tradition in gender and politics research (see, e.g., England 2001; Johnson 2001; Tong 2001 with further references); it was not until the mid-1990s that the concept was pinpointed and operationalized for quantitative assessment. The United Nations Development Program (UNDP) specifies it as increasing the share of women in the sphere of political decision making with respect to the legislative as well as the executive (administrative) branch, in the sphere of economic decision making and as increasing female economic independence - especially in terms of achieving the same level of earned income as men do (see Ismail, Rasdi, and Jamal 2011 for a brief discussion). Greater educational attainment should be added here. Current research on women's empowerment in development emphasizes educational attainment, political life, and wage work as crucial (e.g., Jejeebhoy and Santhya 2014). Albeit we will not employ UNEP's indicators (see section 5.3), we nonetheless principally adhere to that concept.

### **Educational Empowerment**

A first cornerstone of female empowerment in a society is educational attainment — that is, a development that increases women's overall level of education with the proponents' goal to achieve (at least) equal footage with men (e.g., Jejeebhoy and Santhya 2014). Greater educational attainment is a prerequisite for a greater representation of women in the spheres of political and economic decision making and is also necessary

to increase economic independence, thereby establishing the basis for work and incomes.

But there are also more direct links as to why women's educational attainment would impact the regulation of abortion. A higher level of education is usually affiliated with an increased level of information gathering, cosmopolitanism, and a greater interest in and awareness of societal and political developments including (more liberal) abortion regulation abroad. Better informed citizens — that is, not only women — are usually better equipped to understand political processes and decision making (and can, hence, influence from "below," e.g., Galston 2001). This refers not only to lobbying activities in a narrower sense, but to interest formulation and aggregation as prerequisites possibly (also) leading to electoral choices. In short, better educated women should be better able to advance their interests in a society and political system as compared to less-educated women.

Furthermore, a higher level of educational attainment creates more economic and "life-course" opportunities for women and is therefore associated with higher opportunity costs of having children and hence lower fertility (Bergman 2005, 30–31; Engelhardt and Prskawetz 2004, 41). This should also result in a stronger demand for less restrictive abortion regulations. We formulate our first two hypotheses accordingly:

 $H_{1a}$ : As the degree of women's educational attainment increases, the degree of abortion regulation restrictiveness decreases.

 $H_{1b}$ : As the difference between men's and women's educational attainment decreases, the degree of abortion regulation restrictiveness decreases.

#### **Economic Empowerment**

A second major pillar is economic empowerment. Though the concepts of educational empowerment and economic empowerment might seem closely related, they are not congruent.

As indicated above, one of the central life course opportunities of educational empowerment for women is pursuing a professional career. Under these circumstances, having children implies higher opportunity costs for women being employed or self-employed (Bergman 2005, 30–31; Engelhardt and Prskawetz 2004, 41; England 2001; Kalist 2004). This does not necessarily create a sole demand for the legal opportunity

to opt for or against children as such during life. What is also (or perhaps even more crucial) is the demand for a right when to have children during life course — that is, at an optimal point considering economic constraints and ambitions.

Second, women's economic empowerment breaks with traditional gender roles that had been prevalent in states (Bergman 2005, 41–43; England 2001; Rau and Wazienski 1999). Abandoning the male breadwinner model might not necessarily imply that economically active women refrain from having children (albeit this is an empirical reality for an ever larger share of women in Western societies during the last decades). But, working for wages certainly diminishes the option to have many children for the vast majority of women who cannot afford costly child care services. At the same time, this should work toward women's demand for less restrictive abortion regulation.

First and foremost, economic empowerment is expressed as economic independence and closing the salary gap to men (see above). Labor market participation (wage work) of women is a prerequisite for this. We formulate the hypotheses accordingly:

 $H_{2a}$ : As female labor force participation rates increase, the degree of abortion regulation restrictiveness decreases.

 $H_{2b}$ : As the difference between men's and women's labor force participation decreases, the degree of abortion regulation restrictiveness decreases.

#### **Political Empowerment**

The third crucial element of gender empowerment is political empowerment. The link to abortion regulation is quite straightforward. When more women are directly represented in the (decisive) decisionmaking bodies, the chances are higher that their interests will be advanced and finally pushed through (by taking them into account on all stages of the decision-making process). In that regard, a "critical mass" argument is often raised, meaning that reaching a certain numerical threshold is a prerequisite for effective female interest representation at all the stages (e.g., Celis 2006; Schulze 2013; Swiss, Fallon, and Burgos 2012; also Johnson 2001, but see Lovendusky 2001 for a critical assessment).

Although the gender and politics literature discusses whether the simple descriptive representation of women is sufficient to advance substantive

representation (see as a brief summary Saward 2008; also Celis 2008; Lovendusky 2001; Mackay 2008; McBride and Mazur 2010, 13–16), we test this association in our third hypothesis:

 $H_3$ : As the participation of women in political decision making in a country increases, the degree of abortion regulation restrictiveness decreases.

#### METHODS

Abortion regulations vary over time and between countries. We are interested in both the cross-national variance as well as the variance within countries over time. The dataset and method we use reflect this theoretical interest. We collected data on abortion regulations in 16 countries over 50 years. Accordingly, we are dealing with time-series cross-sectional (TSCS) data. As this type of data typically violates some assumptions concerning the distribution of errors that form a precondition for an OLS regression to deliver an unbiased estimation, some corrections need to be specified. Our main model is a pooled regression with panel corrected standard errors (PCSE) combined with a Prais Winsten AR(1) transformation of the data. This main model will be complemented by two specifications that add either fixed-country effects (FE) or a time variable to the main model. The two additional model specifications serve to test the robustness of the results of the main models.

TSCS data<sup>3</sup> has several advantages. Through pooling, that is estimating the observations of all units and years by the same regression (Beck and Katz 1995, 636), a comparatively large N can be reached, thereby circumventing the common too small n problem of comparative policy research. Another merit of this type of data is that it enables us to investigate variance over time and between countries in the same model. A pure time series analysis or a pure cross-sectional analysis would each be able to analyze only one of these variances (Fink 2008, 73; Podestà 2002).

3. At first sight not dissimilar to panel data, TSCS differs from panel data in several important aspects. Panel data usually include a high number of cases and a low number of waves. These cases are drawn as a sample from a larger population. This means the individual unit is of no interest to the researcher, but the mean effects of a treatment for an underlying population is of main interest (Beck 2001, 273). For TSCS data the opposite is the case. Usually a limited number of cases is investigated over a relatively long period of time. The cases do not represent a random sample, and all inferential interest concerns the selected cases and not a population (ibid.). Therefore standard panel analysis methods are inappropriate for the use on TSCS data because the former are designed for a small T, but require a large N (Beck 2001, 274). An appropriate method for TSCS data has to cope with a large T and a small N.

However, the spatial and temporal dynamics characteristic for TSCS data bring some challenges to the statistical analysis. The usage of a simple pooled OLS regression is impeded by the frequent occurrence of serially and temporally correlated errors and (panel) heteroscedasticity (Beck 2001, 275; Plümper, Troeger, and Manow 2005, 329). The typical error structure of TSCS data needs to be taken into account in the model specification because a simple OLS would yield inefficient estimates and incorrect standard errors (Beck 2001, 275).

There is no standard procedure for dealing with the challenges of TSCS data. Instead the researcher needs to carefully choose between several possible pathways, often balancing a trade-off between an optimal specification and an econometric versus a substantive point of view. We account for serially correlated errors through a Prais-Winsten AR(1) correction as suggested by Plümper, Troeger and Manow (2005). Another common procedure for freeing the data from serial autocorrelation is the inclusion of the lagged dependent variable (LDV) in the model (Beck 2001; Beck and Katz 1995; Keel and Kelly 2006). However, the inclusion of a LDV has been criticized recently (Achen 2000; Plümper, Troeger, and Manow 2005). In our case the decision is clear because our dependent variable exhibits a trend, which means an LDV would absorb large parts of the variance of the dependent variable (Wenzelburger, Jäckle, and König 2014, 135). We opt for the Prais Winsten transformation because "... whenever the dependent variable is trend-ridden and the researcher beliefs that the explanatory variables can explain the trend," this procedure is preferable to including a LDV (Plümper, Troeger, and Manow 2005, 349).

We complement the Prais-Winsten transformation with PSCE to account for heteroscedasticity. This is a widely accepted approach in time-series cross-sectional analysis (Beck and Katz 1995).

Additional to the Prais-Winsten model with PCSE, we report the results of two other specifications, in which either fixed-country effects (FE) or a time-count variable are added to the main model. FEs absorb the crossnational difference, and, as a result, the model examines only changes over time within countries (Plümper and Troeger 2007, 124). The opposite is the case for the inclusion of a time-count variable, which absorbs most of the variance between countries over time, leaving only cross-national difference to be analyzed. Both specifications taken alone would be inappropriate in our case, as the theoretical interest is not limited to only one type of variance. Therefore the models including FEs and a time trend serve as a robustness check and for separating

#### WOMEN MATTER

longitudinal from cross-sectional variance, whereas the main inferential weight lays on the specification without them.

#### CONCEPTS, OPERATIONALIZATION, AND DATA

This study includes all Western European OECD countries, except smaller states with less than one million inhabitants (see Table 1).

#### Dependent Variable

There are various options for conceptualizing and measuring national abortion regulations. This is due to the complex or multifaceted nature of the subject (as legally expressed) that could hardly be adequately captured with simplistic classifications like "legal" or "illegal" (see references in the second section).

Hence, the first challenge is finding an acceptable compromise between, on the one hand, a too complex and, on the other hand, a too simplistic, "light-weighted" conceptualization and measurement. Second, an adequate conceptualization and measurement should encapsulate all regulatory facets considered relevant from a conceptual perspective into a single dimension — that is, the restrictiveness-permissiveness axis. Finally, to employ the concept as a dependent variables' measurement in statistical models, one also needs to have one single figure (only).

Taking all these challenges into account, it becomes obvious that a "perfect" approach is inconceivable. However, existing approaches leave vast room for improvements. Tackling the subject from the perspective of an adult woman who pursues a legal termination of her pregnancy, there are three main levels of state legal intervention regarding a woman's wish to have her pregnancy terminated that, if combined, express the overall restrictiveness of a national regulation. In that, we define abortion restrictiveness as the intensity of state legal interference in a women's decision to abort.<sup>4</sup>

First, the most crucial regulatory aspect and in that "first" level (Level 1) to consider is whether an abortion is indeed completely illegal, whether it is bound to reasons, which means indication-based, or whether it is available upon the pregnant woman's request (choice) — the latter at least during

<sup>4.</sup> More information on the construction of the index, including a Table 4 with details, is provided in the supplementary materials.

Austria	Germany	Norway
Belgium	Greece	Portugal
Denmark	Ireland	Spain
Finland	Italy	Sweden
France	Netherlands	Switzerland
France	Netherlands	Switzerland United Kingdom (England and Wales only)

Table 1. Countries included in the analysis

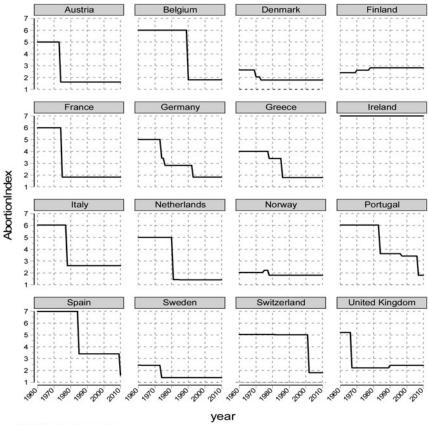
the first gestation weeks. This forms a "natural" order from less to more restrictive.

The second relevant regulatory aspect to consider, which forms Level 2, is the time component, or the time limit expressed as maximum gestation week up to which an abortion could legally be performed, given the most liberal basic form available at Level 1 is a certain indication or choice.<sup>5</sup> We opt for four different stages of time-stringency based on abortion trimesters. Definite time limits earlier in the pregnancy are more restrictive than later ones.

Level 3 — that is, the one with the least intensive intervention — could be termed procedural requirements or more general further hurdles for a woman. Several aspects, such as medical expert approval, are equally (i.e., unweighted) taken into account here forming four major blocs at Level 3. The more aspects that are present within each bloc, the more restrictive the regulation.

All three levels make up a three-digit/decimals additive index in which the information for each of the three levels forms the basis for one of the ciphers reaching from left to right. The value for Level 1 (being the digit) counts more than the one for Level 2 while the figure for Level 2 is mathematically more important than the one for Level 3 (the latter being the decimals). Overall, we end up with a figure that captures the intensity of state interference in a woman's decision to abort a pregnancy. Table 4 in the supplementary materials summarizes the concept and measurement of the dependent variable and provides the respective figures that range from 1 (abortion completely unrestricted) to 7 (abortion totally prohibited). Figure 1 visualizes the development of the abortion index in our sample of 16 European countries over time.

<sup>5.</sup> Obviously, the time period aspect is irrelevant when a total prohibition of abortion exists.



Graphs by country

FIGURE 1. Abortion regulation's restrictiveness: State intervention intensity in a women's decision to abort in 16 countries from 1960 to 2010.

*Note:* 0 represents no state intervention whatsoever (i.e., no legal restrictions on abortion). 7 represents the strongest state intervention (i.e., a total prohibition of abortion).

Source: Own data collection as part of the Comparative Analysis of Moral Policy Change (MORAPOL) project, see Knill, Adam, and Hurka 2015.

### **Independent Variables**

The most important independent variables in our analysis are the three aspects of women's empowerment we focus on: educational, political and economic empowerment.

As a measure of educational empowerment, we employ the *share of the female population (over the age of 25 years) that has completed tertiary education* (Barro and Lee 2013).<sup>6</sup> If we think of female empowerment as the advancement of women in relation to men, an alternative operationalization for educational empowerment is the percentage difference of completed tertiary education between men and women. A straightforward and established way of operationalizing women's political empowerment is using the *share of seats held by women in national parliaments* (IPU 2015; McBride and Mazur 2011; The World Bank 2015; UN Data 2015). Economic empowerment is operationalized as *female labor force participation* rate (Brady, Huber, and Stephens 2014; OECD Statistics 2015; The World Bank 2015). Labor force participation is an adequate proxy for economic empowerment since it is essentially a measure of the degree of departure from the traditional male breadwinner model that kept women financially dependent on men.

We also include several variables in our models as controls. We control for economic development, various aspects of religion, partisan difference, and institutional hurdles (political constraints). In the two additional model specifications we also control for a time trend via the inclusion of a time count variable and for country differences via the inclusion of country dummies (fixed country effects).

*GDP per capita* (Heston, Summers, and Aten 2012) is included in order to ensure that our results are not driven by simple economic development (modernization). Religion is often argued to be crucial for abortion regulation's restrictiveness. Catholic countries have been shown to regulate more restrictively than Protestant countries (Castles 1998; Minkenberg 2002, 2003). Therefore, we include the *yearly share of the population belonging to the Catholic denomination* (Maoz and Henderson 2013). This is a significant improvement to previous research, operationalizing Catholicism as a dummy variable (Castles 1998, 56) or a time invariant measure (Minkenberg 2002, 2003). Since we use yearly data on the national share of Catholics (five-year intervals, linearly imputed), this figure is also an admittedly crude measure of secularization.<sup>7</sup> Additionally, religious influence is controlled for by including a measure of the *state-religion relationship* (Fox 2008, 32–61).

<sup>6.</sup> For exact data sources, see also the supplementary materials.

<sup>7.</sup> Often researchers use "church attendance rates" derived from the European Value Survey (EVS) as a measure for secularization. However, time coverage of the EVS is insufficient for our analysis.

It indicates whether state and church are completely separated, cooperate, or if there is a state religion. Since the relationship between the state and religions has been argued to mediate the ability of the Catholic Church to influence regulation (e.g., Minkenberg 2003), we also include an interaction term of Catholicism and the state-religion relationship.

Partisan influence, being a "classical" variable in comparative policy scholarship (e.g., Schmidt 2002), is controlled for via the inclusion of a variable representing *left and liberal parties' strength in national governments*, because parties belonging to left and liberal party families tend to have socially progressive stands on issues such as abortion (Gindulis 2002, 318). Data come from Heichel, Rinscheid, and Knill (2015).

Furthermore, the measure of partisan influence is complemented by a measure of *political constraints*, a variable taken from Henisz (2002, 2013). Institutional constraints can limit the room for maneuver of political actors (Schmidt 2002). Therefore, an interaction term of left and liberal parties in government and political constraints is included in the analysis (see also Fink 2008, 79–80 for this interaction).

#### EMPIRICAL ANALYSES AND RESULTS

In all models reported in Tables 2 and 3, the abortion index serves as the dependent variable. As independent variables, all models include the share of women in parliament and measures for tertiary education and labor force participation.<sup>8</sup> These focal variables are complemented by the full set of control variables in each model.<sup>9</sup>

Overall we report three model blocs. Each bloc contains three models labeled as "a," "b," and "c," that differ from each other only in terms of the concrete operationalization of the focal independent variables. While the "a" models include the operationalization of educational and economic emancipation using only figures on the female sex, "b" models include the difference between men and women in terms of

<sup>8.</sup> For all three of our focal independent variables, the natural logarithms were used. The log transformation was performed in order to make the positively skewed distributions more normal. A resulting improved model fit confirms that the relationship is better modeled this way.

<sup>9.</sup> Although it seems like a viable option, we refrained from inserting a uniform time lag for independent variables. Since no exact (correct) time delay for the independent variables to have an impact on the dependent variable can be deducted theoretically, introducing, for example, a uniform time lag of one year for all independent variables would be at least as questionable as refraining from introducing one. Only for the share of women in parliament we use a two year time lag to capture the length of parliamentary sessions.

Variable	l(a)	l(b)	l(c)
Women in parliament (ln, lag2)	-0.266**	-0.289**	-0.213*
Tertiary education, women (ln)	$(0.097) - 0.257^+$	(0.097)	(0.099) - 0.093
Female labor force Participation (ln)	(0.153) -1.245*	-1.423**	(0.164)
• • • •	(0.503)	(0.495)	0.000
PPP converted GDP per capita	0.000 (0)	-0.000 (0)	0.000 (0)
Share of Catholics	0.165** (0.056)	0.173** (0.057)	0.157** (0.056)
Church-State: Hostility or separation	0.000	0.000	0.000
Church-State: Cooperation	$^{(0)}_{11.685^{**}}$	(0) 12.292**	(0) 10.704*
State religion	(4.177) 11.748**		(4.164) 10.879**
Ű	(4.180)	(4.241)	(4.166)
Hostility or Separation × Share of Catholics	0.000 (0)	0.000 (0)	0.000 (0)
Cooperation × Share of Catholics	-0.148** (0.056)	-0.156** (0.057)	-0.138* (0.056)
State Religion × Share of Catholics	-0.136*	-0.145*	-0.128*
Share of cabinet seats of left & liberal parties	$(0.056) - 0.005^+$	(0.057) - 0.005	(0.056) - 0.005
Institutional constraints	(0.003) - 0.836*	$(0.003) - 0.797^*$	(0.003) - 0.793*
Share of cabinet seats of left & liberal	$(0.381) \\ 0.008$	$(0.381) \\ 0.008$	$(0.379) \\ 0.008$
parties $\times$ institutional constraints	(0.005)	(0.005)	(0.008)
Gender gap tertiary education		-0.030 (0.034)	
Gender gap labor force participation		( )	0.033*** (0.009)
Constant	-2.872	-2.611	$-8.268^{+}$
Observations	(4.585) 744	(4.666) 744	(4.219) 744
$R^2$	0.388	0.378	0.393

*Table 2.* Determinants of abortion regulation's restrictiveness in 16 European countries

Standard errors in parentheses.  ${}^{+}p < 0.10$ ,  ${}^{*}p < 0.05$ ,  ${}^{**}p < 0.01$ ,  ${}^{***}p < 0.001$ .

educational attainments, and in "c" models the sex difference in labor force participation is reported.

The model blocs themselves differ in the econometric means that are used to account for the peculiarities of our data. In bloc two (Table 3),

Variable	2. FE (a)	2. FE (b)	2. FE (c)	3. TC (a)	3. TC (b)	3. TC (c)
L2. Women in parliament (ln)	$-0.183^{+}$ (0.099)	$-0.257^{**}$ (0.099)	$-0.178^{+}$ (0.100)	$-0.175^{+}$ (0.098)	$-0.181^{+}$ (0.098)	$-0.164^{+}$ (0.099)
Tertiary education, Women (ln)	$-0.915^{***}$	(0.077)	$-0.849^{***}$	$0.330^+$	(0.070)	0.346+
	(0.185)	1 500**	(0.209)	(0.199)		(0.197)
Female labor force participation (ln)	-0.732 (0.537)	$-1.589^{**}$ (0.522)		-0.824 (0.501)	-0.707 (0.506)	
PPP converted GDP per capita (Laspeyres), derived from	0.000**	-0.000	0.000**	(0.901) $0.000^+$	0.000*	0.000
growth rates of c, g, i	(0)	(0)	(0)	(0)	(0)	(0)
Share of Catholics	0.151***	0.166***	0.148***	0.129*	0.126*	0.128*
	(0.043)	(0.047)	(0.043)	(0.055)	(0.055)	(0.054)
Hostility or separation	0.000	0.000	0.000	0.000	0.000	0.000
	(0)	(0)	(0)	(0)	(0)	(0)
Cooperation	0.904	5.194+	0.000	8.543*	8.600*	8.322*
	(2.717)	(2.734)	(.)	(4.120)	(4.152)	(4.081)
State religion	0.926	$5.279^{+}$	0.019	8.621*	8.606*	8.464*
	(2.734)	(2.756)	(0.381)	(4.122)	(4.156)	(4.084)
Hostility or separation $\times$ Share of Catholics	0.000	0.000	0.000	0.000	0.000	0.000
	(0)	(0)	(0)	(0)	(0)	(0)
Cooperation $\times$ Share of Catholics	-0.092*	-0.100*	-0.087*	$-0.105^{+}$	$-0.105^{+}$	$-0.104^{+}$
	(0.045)	(0.049)	(0.044)	(0.055)	(0.056)	(0.055)
State religion $\times$ Share of Catholics	-0.089*	-0.096*	$-0.084^{+}$	$-0.093^{+}$	$-0.092^{+}$	$-0.093^{+}$
	(0.045)	(0.049)	(0.044)	(0.055)	(0.056)	(0.055)
Share of cabinet seats of left & liberal parties	-0.006*	$-0.005^{+}$	-0.006*	$-0.005^{+}$	$-0.006^{+}$	$-0.005^{+}$
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Institutional constraints	-0.850*	$-0.715^{+}$	-0.829*	$-0.721^{+}$	-0.795*	$-0.707^{+}$
	(0.378)	(0.380)	(0.377)	(0.378)	(0.376)	(0.378)

Table 3. Determinants of abortion regulation's restrictiveness in 16 European countries

Continued 49

#### Table 3. Continued

Variable	2. FE (a)	2. FE (b)	2. FE (c)	3. TC (a)	3. TC (b)	3. TC (c)
Share of cabinet seats of left & liberal	$0.009^+$	0.008	$0.009^{+}$	0.008	$0.009^+$	0.008
parties $\times$ institutional constraints Gender gap tertiary education	(0.005)	$(0.005) - 0.068^+$	(0.005)	(0.005)	$(0.005) - 0.060^+$	(0.005)
Gender gap ternary education		(0.039)			(0.034)	
Gender gap labor force participation		(00077)	0.014		(0.07.1)	$0.019^{+}$
			(0.010)			(0.010)
Time				-0.067***	-0.054***	-0.059***
	0.000			(0.015)	(0.012)	(0.016)
Constant	0.000	0.000	-2.620	-1.666	-1.773	-5.459
	(.)	(.)	(1.640)	(4.465)	(4.498)	(4.156)
Observations	744	744	744	744	744	744
$R^2$	0.540	0.494	0.539	0.410	0.407	0.415

Standard errors in parentheses.  ${}^{+}p < 0.10$ ,  ${}^{*}p < 0.05$ ,  ${}^{**}p < 0.01$ ,  ${}^{***}p < 0.001$ .

fixed-country effects were added, and the models of bloc three (Table 3) include a time-count variable to control for a time trend.

The results of model 1a show a statistically significant association in the expected direction between all three focal variables and the abortion index. The share of women in parliament has a negative influence on abortion regulation restrictiveness. On a 95% significance level, an increase of ten percentage points of women in parliament results, on average, in a  $0.027^{10}$  decrease of the abortion index. Even though significance levels fall to 90% in the second and third model block, the consistency of the direction of influence reported in all nine models lead us to confirm  $H_3$ : "As the participation of women in political decision making in a country increases, the degree of abortion regulation restrictiveness decreases."

Despite pointing in the expected direction, the coefficients for women's tertiary education do reach low statistical significance only in model 1a and fail to do so in model 1c. In the FE specifications (model 2a and 2c), however, the results suggest a highly significant negative influence of women's tertiary education on regulation restrictiveness, whereas the direction of influence is opposite as expected in the time trend controlled models (3a and 3c). What can we make of this at-first-sightcontradictory finding? The key is differences in national education systems. For example, Ireland, by far the most restrictive abortion regulator in our sample, has one of the highest rates of women's tertiary education, as higher education can be obtained there free of charge. Therefore, in a context of heterogeneous education systems, the differences in women's tertiary education between countries cannot explain cross-national variance. However, as the results of model bloc 2 suggest, women's rising education levels within countries drive the country's internal revision of restrictive regulations over time. Concerning  $H_{1a}$ , we can only confirm an influence of tertiary education within countries, but have to reject women's tertiary education to be of explanatory value for cross-national differences in abortion regulation.

The picture is different when only the differences between men and women in terms of tertiary education are inserted into the regression. In the main model specification (1b) the result for educational differences do not become significant, and in the two additional models (2b and 3b) significance levels reach only 90%. Other than for the actual level of female education, the results are too weak to confirm that educational

<sup>10.</sup> Because the natural logarithm of the independent variables were employed, the reported coefficients need to be divided by 100 for interpretation.

differences between men and women influence abortion legislation, which is why we reject  $H_{1b}$ .

Regarding economic empowerment, female labor force participation outperforms all other focal independent variables in terms of effect size. On a 95% significance level, results of model 1a show a 10 percentage point increase in the female labor force rate to effect a 0.125 decrease on the abortion index. Overall, this result suggests that female labor force rates are a good predictor for abortion regulation restrictiveness, which is why we can confirm  $H_{2a}$ . However, the coefficients in the time trend controlled specification (3a, 3b) not reaching statistical significance indicate that this overall effect is mainly driven by developments within countries over time rather than differences between countries.

The coefficients for the sex differences in labor force participation rates are highly significant in the main model (1c) and reach low (3c) or no (2c) conventional significance levels in the complementary specifications. As expected, model 1c suggests that a larger difference between men and women in terms of participating in the labor force is associated with restrictive abortion regulation. Dissimilar to the education variables, the results for the labor force suggest that sex differences do exert an influence. We confirm  $H_{2b}$ .

Overall, the results suggest that measures of female empowerment translate into the sphere of reproductive rights, explaining part of abortion regulations' degree of restrictiveness between countries as well as within countries over time.

#### CONCLUSION AND DISCUSSION

In this article and by employing the method of time series cross-sectional analysis we assessed if measures of female empowerment can account for the variance in the restrictiveness of abortion regulation between countries as well as within countries over time. Relying on a very finegrained index for the dependent variable and by including 16 Western European states covering their legal developments over 50 years, we generated a broad overview of the association between female empowerment and abortion regulation.

We found that women's political empowerment and female labor force participation explains differences in abortion restrictiveness between and within countries over time. Rising women's tertiary education, however, is associated only with abortion regulation becoming less restrictive within countries. We could not find an effect from differences in tertiary education levels between countries to account for cross-national abortion regulation variance. Furthermore, our results suggest that average differences between men and women are not as decisive for restrictiveness as absolute measures of women's empowerment. While we found the difference in labor force participation between men and women to exert a significant but rather small influence on abortion restrictiveness, we did not find an impact on the dependent variable for gender difference in tertiary education.

In a broader context, the results suggest that, at least in the sphere of reproductive rights, the descriptive (numerical) representation of women in politics does indeed have an effect on substantive representation. In our analysis, female labor force participation outperformed all other variables suggesting that women working and earning an income is a key factor when it comes to diminishing state intervention in bodily autonomy matters. Working for wages probably not only creates the functional necessity of access to family planning methods (i.e., including abortion), but can also produce shifts in female self-perception and societal gender norms. Women becoming less dependent on men, entering the public sphere of politics and the economy, have also greater chances of achieving autonomy in matters regarding their own body.

Qualitative studies (McBride Stetson 2001; McBride and Mazur 2010, 71–99; Outshoorn 1996; Outshoorn and Lovendusky 1986; Woliver 2002) have demonstrated the tremendous importance of gender agency in the forms of social mobilization and interest group action for the passage of less restrictive abortion regulations in Western countries. Our study, however, indicates that this was embedded to function within or even driven by overarching structural developments and especially gender empowerment. In that, we do not question the findings of previous qualitative research, but we lend credibility to the argument that gender empowerment was a precondition for women's agency to become effective.

#### SUPPLEMENTARY MATERIAL

To view supplementary material for this article, please visit https://doi.org/ 10.1017/S1743923X16000556

Emma Budde is Doctoral Candidate at the Ludwig-Maximilians-Universität München, Munich, Germany: emma.budde@gsi.unimuenchen.de; Stephan Heichel is Postdoctoral Researcher at the LudwigMaximilians-Universität München, Munich, Germany: stephan.heichel@ gsi.uni-meunchen.de

#### REFERENCES

- Achen, Christopher H. 2000. "Why Lagged Dependent Variables Can Suppress the Explanatory Power of Other Independent Variables.", The Society for Political Methodology Working Paper, Washington University, St. Louis, MO. http://polmeth.wustl.edu/media/Paper/achen00.pdf (accessed September 25, 2015).
- Asal, Victor, Mitchell Brown, and Renee Gibson Figueroa. 2008. "Structure, Empowerment and the Liberalization of Cross-National Abortion Rights." *Politics & Gender* 4 (2): 265–84.
- Barro, Robert J., and Jong Wha Lee. 2013. "A New Data Set of Educational Attainment in the World, 1950–2010." *Journal of Development Economics* 104: 184–98.
- Beck, Nathaniel. 2001. "Time-Series-Cross-Section Data: What Have We Learned in the Past Few Years?" Annual Review of Political Science 4: 271–93.
- Beck, Nathaniel, and Jonathan N. Katz. 1995. "What to Do (and Not Do) with Time-Series Cross-Section Data." *American Political Science Review* 89 (3): 634–47.
- Bergman, Barbara R. 2005. *The Economic Emergence of Women*, 2nd ed. Basingstoke: Palgrave Macmillan.
- Brady, David, Evelyne Huber, and John D. Stephens. 2014. Comparative Welfare States Dataset [data file]. University of North Carolina and WZB Berlin Social Science Center. http://www.unc.edu/~jdsteph/documents/common/data/CWS\_2014-02-25\_ data.xlsx (accessed September 25, 2015).
- Brooks, Joel E. 1992. "Abortion Policy in Western Democracies: A Cross-National Analysis." Governance 5 (3): 342–57.
- Calloni, Marina. 2001. "Debates and Controversies on Abortion in Italy." In Abortion Politics, Women's Movements, and the Democratic State: A Comparative Study of State Feminism: A Comparative Study of State Feminism, ed. Dorothy McBride Stetson. Oxford: Oxford University Press, 181–203.
- Castles, Francis G. 1998. Comparative Public Policy: Patterns of Post-War Transformation. Cheltenham: Edward Elgar.
- Celis, Karen. 2001. "The Abortion Debates in Belgium 1974–1990." In Abortion Politics, Women's Movements, and the Democratic State: A Comparative Study of State Feminism: A Comparative Study of State Feminism, ed. Dorothy McBride Stetson. Oxford: Oxford University Press, 39–61.
  - ----. 2006. "Substantive Representation of Women: The Representation of Women's Interests and the Impact of Descriptive Representation in the Belgian Parliament (1900–1979)." *Journal of Women, Politics & Policy* 28 (2): 85–114.
- 2008. "Studying Women's Substantive Representation in Legislatures: When Representative Acts, Contexts and Women's Interests Become Important." *Representation* 44 (2): 111–23.
- Cook, Rebecca J., Bernard M. Dickens, and Mahmoud F. Fathalla 2003. *Reproductive Health and Human Rights: Integrating Medicine, Ethics, and Law.* Oxford: Oxford University Press.
- Corrêa, Sonia 2001. "Reproductive Rights in Developing Nations." In International Encyclopedia of the Social & Behavioral Sciences, ed. Neil J. Smelser and Paul B. Baltes. Oxford: Elsevier, 13188–93.
- Engelhardt, Henriette, and Alexia Prskawetz. 2004. "On the Changing Correlation between Fertility and Female Employment over Space and Time." *European Journal of Population* 20 (1): 35–62.

- Engeli, Isabelle, Christoffer Green-Pedersen, and Lars Thorup Larsen, eds. 2012. *Morality Politics in Western Europe: Parties, Agendas and Policy Choices.* Basingstoke: Palgrave Macmillan.
- Engeli, Isabelle, and Frédéric Varone. 2011. "Governing Morality Issues through Procedural Policies." Swiss Political Science Review 17 (3): 239–58.
- England, Paula 2001. "Gender and Feminist Studies." In *International Encyclopedia of the Social & Behavioral Sciences*, ed. Neil J. Smelser and Paul B. Baltes. Oxford: Elsevier, 5910−15.
- Fink, Simon. 2008. Forschungspolitik zwischen Innovation und Lebensschutz: Die Determinanten von Embryonenforschungspolitiken im internationalen Vergleich [Research Policy between Innovation and Protection of Life: Embryonic Research Policies in International Comparison]. Baden-Baden: Nomos.
- Fox, Jonathan. 2008. A World Survey of Religion and the State. Cambridge: Cambridge University Press.
- Galston, William R. 2001. "Political Knowledge, Political Engagement and Civic Education." Annual Review of Political Science 4 (2001): 217-34.
- Githens, Marianne, and Dorothy McBride Stetson, eds. 1996. Abortion Politics: Public Policy in Cross-Cultural Perspective. New York and London: Routledge.
- Gindulis, Edith. 2002. "Abtreibungsregime der OECD-Länder und ihre Bestimmungsfaktoren im Vergleich" [The Abortion Regimes of OECD-Countries and their Determinants]. Österreichische Zeitschrift für Politikwissenschaft 31 (3): 315–36.
- Gindulis, Edith. 2003. Der Konflikt um die Abtreibung: Die Bestimmungsfaktoren der Gesetzgebung zum Schwangerschaftsabbruch im OECD-Ländervergleich [The Conflict of Abortion: The Determinants of Pregnancy Termination Legislation in OECD-Countries]. Wiesbaden: Westdeutscher Verlag.
- Glendon, Mary Anne. 1987. Abortion and Divorce in Western Law. Cambridge and London: Harvard University Press.
- Halfmann, Drew. 2011. Doctors and Demonstrators: How Political Institutions Shape Abortion Law in the United States, Britain, and Canada. Chicago: The University of Chicago Press.
- Heichel, Stephan, Adrian Rinscheid, and Christoph Knill. 2015. Classifying Political Parties beyond the OECD World: An Expanded Concept and a New Dataset on Party Family Representation (PARFAM). Unpublished manuscript.
- Henisz, Witold. 2002. "The Institutional Environment for Infrastructure Investment." Industrial and Corporate Change 11 (2): 355–89.
- 2013. Political Constraint Index (POLCON) Dataset [data file and codebook]. https://mgmt.wharton.upenn.edu/profile/1327 (accessed September 25, 2015).
- Heston, Alan, Robert Summers, and Bettina Aten. 2012. *Penn World Table Version* 7.1. [data file and codebook]. https://pwt.sas.upenn.edu/php\_site/pwt\_index.php (accessed June 1, 2015).
- Htun, Mala. 2003. Sex and the State: Abortion, Divorce and the Family under Latin American Dictatorships and Democracies. Cambridge: Cambridge University Press.
- Inter-Parliamentary Union (IPU). 2015. Women in National Parliaments [data file]. http:// www.ipu.org/wmn-e/classif.htm (accessed September 25, 2015).
- Ismail, Maimunah, Roziah Mohd Rasdi, and Akhmal Nadirah Abd. Jamal. 2011. "Gender Empowerment Measure in Political Achievement in Selected Developed and Developing Countries." *Gender in Management: An International Journal* 26 (5): 380–92.
- Jejeebhoy, Shireen J., and K.G. Santhya. 2014. "Women's Empowerment and Gender Equity." In *Population and Reproductive Health in India*, ed. Shireen J. Jejeebhoy, P. M. Kulkarni, K. G. Santhya, and Firoza Mehrotra. Delhi: Oxford University Press, 247–90.

- Johnson, Carol. 2001. "Gender and Feminist Studies in Political Science." In International Encyclopedia of the Social & Behavioral Sciences, ed. Neil J. Smelser and Paul B. Baltes. Oxford: Elsevier, 5933–39.
- Kalist, David E. 2004. "Abortion and Female Labor Force Participation: Evidence Prior to Roe v. Wade." *Journal of Labour Research* 25 (3): 503–14.
- Keele, Luke J., and Nathan J. Kelly. 2006. "Dynamic Models for Dynamic Theories: The Ins and Outs of Lagged Dependent Variables." *Political Analysis* 14 (2): 186–205.
- Knill, Christoph, Christian Adam, and Steffen Hurka, eds. 2015. On the Road to Permissiveness? Change and Convergence of Moral Regulation in Europe. Oxford: Oxford University Press.
- Köpl, Regina. 2001. "State Feminism and Policy Debates on Abortion in Austria." In Abortion Politics, Women's Movements, and the Democratic State: A Comparative Study of State Feminism: A Comparative Study of State Feminism, ed. Dorothy McBride Stetson. Oxford: Oxford University Press, 17–38.
- Kreitzer, Rebecca J. 2015. "Politics and Morality in State Abortion Policy." State Politics & Policy Quarterly 15 (1): 41–66.
- Levels, Mark, Roderick Sluiter, and Adriana Need. 2014. "A Review of Abortion Laws in Western-European Countries. A Cross-National Comparison of Legal Developments between 1960 and 2010." *Health Policy* 118 (1): 95–104.
- Lovenduski, Joni, 2001. "Women and Politics: Minority Representation or Critical Mass." Parliamentary Affairs 54 (4): 743–58.
- Lovenduski, Joni, and Joyce Outshoorn, eds. 1986. The New Politics of Abortion. London: Sage.
- Mackay, Fiona. 2008. "Thick' Conceptions of Substantive Representation: Women, Gender and Political Institutions." *Representation* 44 (2): 125–39.
- Maoz, Zeev, and Errol A. Henderson. 2013. "The World Religion Dataset, 1945–2010: Logic, Estimates, and Trends." *International Interactions* 39 (3): 265–91. Data retrieved from: http://www.correlatesofwar.org/data-sets/world-religion-data (accessed September 25, 2015).
- Mazur, Amy G. 2002. Theorizing Feminist Policy. Oxford: Oxford University Press.
- McBride, Dorothy E., and Amy G. Mazur. 2010. *The Politics of State Feminism: Innovation in Comparative Research*. Philadelphia, PA: Temple University Press.
- 2011. Women's Movements and Women's Policy Offices in Western Postindustrial Democracies, 1970–2001 [data file and codebook] (ICPSR 30681). Ann Arbor, MI: Inter-university Consortium for Political and Social Research (ICPSR) [Distributor]. http://doi.org/10.3886/ICPSR30681.v1 (accessed June, 1 2015).
- McBride Stetson Dorothy, ed. 2001. Abortion Politics, Women's Movements, and the Democratic State: A Comparative Study of State Feminism: A Comparative Study of State Feminism. Oxford: Oxford University Press.
- Minkenberg, Michael. 2002. "Religion and Public Policy: Institutional, Cultural, and Political Impact on the Shaping of Abortion Policies in Western Democracies." *Comparative Political Studies* 35 (2): 221–47.
- 2003. "The Policy Impact of Church–State Relations: Family Policy and Abortion in Britain, France, and Germany." West European Politics 26 (1): 195–217.
- Nossif, Rosemary. 2007. "Gendered Citizenship: Women, Equality, and Abortion Policy." New Political Science 29 (1): 61–76.
- OECD Statistics. 2015. Dataset: LFS by Sex and Age Indicators [data file]. http://stats.oecd. org/Index.aspx?DataSetCode=LFS\_SEXAGE\_I\_R (accessed September 25, 2015).
- Outshoorn, Joyce. 1996. "The Stability of Compromise: Abortion Politics in Western Europe." In Abortion Politics: Public Policy in Cross-Cultural Perspective, ed. Marianne Githens and Dorothy McBride Stetson. New York and London: Routledge, 145–64.

- Petchesky, Rosalind P. 1990. Abortion and Woman's Choice: The State, Sexuality, and Reproductive Freedom. Boston, MA: Northeastern University Press.
- Plümper, Thomas, and Vera E. Troeger. 2007. "Efficient Estimation of Time-invariant and Rarely Changing Variables in Finite Sample Panel Analyses with Unit Fixed Effects." *Political Analysis* 15 (2): 124–39.
- Plümper, Thomas, Vera E. Troeger, and Philipp Manow. 2005. "Panel Data Analysis in Comparative Politics: Linking Method to Theory." European Journal of Political Research 44 (2): 327–54.
- Podestà, Frederico. 2002. Recent Developments in Quantitative Comparative Methodology. The Case of Pooled Time Series Cross-Section Analysis. Discussion paper, University of Brescia.
- Rau, William, and Robert Wazienski. 1999. "Industrialization, Female Labor Force Participation, and the Modern Division of Labor by Sex." *Industrial Relations* 38 (4): 504–21.
- Rolston, Bill, and Anna Eggert. 1994. Abortion in the New Europe: A Comparative Handbook. Westport, CT: Greenwood Press.
- Saward, Michael. 2008. "The Subject of Representation." Representation 44 (2): 93-97.
- Schmidt, Manfred G. 2002. "The Impact of Political Parties, Constitutional Structures and Veto Players on Public Policy." In *Comparative Democratic Politics*: A *Guide to Contemporary Theory and Research*, ed. Hans Keman. London: Sage, 166–84.
- Schulze, Corina. 2013. "Women, Earmarks, and Substantive Representation." Journal of Women, Politics & Policy 34 (2): 138–58.
- Swiss, Liam, Kathleen M. Fallon, and Giovani Burgos. 2012. "Does Critical Mass Matter? Women's Political Representation and Child Health in Developing Countries." Social Forces 91 (2): 531–58.
- Staggenborg, Suzanne 2001. "Reproductive Rights in Affluent Nations." In International Encyclopedia of the Social & Behavioral Sciences, ed. Neil J. Smelser and Paul B. Baltes. Oxford: Elsevier, 3184–88.
- Superson, Anita M. 2014. "The Right to Bodily Autonomy and the Abortion Controversy." In Autonomy, Oppression, and Gender, ed. Andrea Veltman and Mark Piper. Oxford: Oxford University Press, 301–25.
- The World Bank. 2015. World Development Indicators: Women in Development [data file]. http://wdi.worldbank.org/table/1.5 (accessed September 25, 2015).
- Tong, Rosemarie. 2001. "Feminist Theory." In International Encyclopedia of the Social & Behavioral Sciences, ed. Neil J. Smelser and Paul B. Baltes. Oxford: Elsevier, 5484–91.
- Tribe, Laurence H. 1992. Abortion: The Clash of Absolutes. New York: W. W. Norton & Company.
- UN Data. 2015. Seats Held by Women in National Parliament, Percentage. http://data.un. org/Data.aspx?d=MDG&f=seriesRowID%3A557 (accessed September 25, 2015).
- Warren, Mary Anne. 2000. Moral Status: Obligations to Persons and Other Living Things, Oxford: Oxford University Press.
- Wenzelburger, Georg, Sebastian Jäckle, and Pascal König. 2014. Weiterführende statistische Methoden für Politikwissenschaftler: Eine anwendungsbezogene Einführung mit Stata [Advanced Statistical Methods for Political Scientists: An Applied Introduction for Stata]. München: De Gruyter Oldenbourg.
- Woliver, Laura R. 2002. The Political Geographies of Pregnancy. Urbana and Chicago: University of Illinois Press.