Article

The Inclusiveness of Maternity Leave Rights over 120 Years and across Five Continents

Keonhi Son * and Tobias Böger

CRC 1342 Global Dynamics of Social Policy, SOCIUM—Research Center on Inequality and Social Policy,
University of Bremen, 28359 Bremen, Germany; E-Mails: son@uni-bremen.de (K.S.), tobias.boeger@uni-bremen.de (T.B.)

* Corresponding author

Abstract

Even though paid maternity leave was the earliest form of social protection specifically aimed at women workers and is fundamental in securing their economic independence vis-à-vis employers and spouses, it has received scant scholarly attention. Neither the traditional historical accounts of welfare state emergence nor the more recent gendered analyses of developed welfare states have provided comparative accounts of its beginnings and trajectories. Employing the newly created historical database of maternity leave, we provide the first global and historical perspective on paid maternity leave policies covering 157 countries from the 1880s to 2018. Focusing on eligibility rather than generosity, we construct a measure of inclusiveness of paid maternity leaves to highlight how paid maternity leave has shaped not only gender but also social inequality, which has, until recently, largely been ignored by the literature on leave policies. The analyses of coverage expansion by sector and the development of eligibility rules reveal how paid maternity leave has historically stratified women workers by occupation and labor market position but is slowly evolving into a more universal social right across a broad range of countries. Potential drivers for this development are identified using multivariate analysis, suggesting a pivotal role for the political empowerment of women in the struggle for gender and social equality. However, the prevalence of informal labor combined with insufficient or non-existing maternity benefits outside the systems of social insurance still poses significant obstacles to the protection of women workers in some countries.

Issue

This article is part of the issue "The Inclusiveness of Social Rights: The Case of Parental Leave Policies" edited by Sonja Blum (University of Hagen, Germany) and Ivana Dobrotić (University of Oxford, UK / University of Zagreb, Croatia).

1. Introduction

Paid maternity leave was the earliest social protection policy explicitly aimed at women workers, serving decommodification as well as defamilization (Bambra, 2007). To this day, it shapes women's economic empowerment by enabling mothers to maintain paid employment (Htun, Jensenius, & Nelson-Nuñez, 2019). Despite this fundamental role in providing social protection for women workers, little is known about the historical development of paid maternity leave policies. It played a negligible role in historical accounts of welfare state emergence, which mainly focused on social protection programs for the risks of old-age, unemployment, and sickness (Esping-Andersen, 1990; Flora & Heidenheimer, 1981). This blind spot is due not only to the comparatively small role paid maternity leave policies played in financial terms but reflects the fact that the unit of analysis in early comparative welfare research is an average production worker in the manufacturing industry with a dependent spouse and two children, assuming, if not reflecting, the gendered division of labor. While later

research launched forceful critiques against this male breadwinner-centered conceptualization and measurement of social rights, the expansion of paid maternity leave policies was associated with reinforcing the role of women as caregivers (Daly & Ferragina, 2018; Dobrotić & Stropnik, 2020), especially compared to more recent childcare and parental leave policies, which potentially could reshape gender relations (Leitner, 2003; Saraceno, 2011). Focusing on industrialized democracies after the 1970s, they inquired which countries went beyond this 'maternalist minimum,' taking the fundamental protection of women as workers and mothers for granted (Blofield & Franzoni, 2015). However, the development of paid maternity leave becomes salient once one broadens the historical and geographical scope of inquiry. The 'maternalist minimum' has been historically contentious in European welfare states (Jenson, 1986; Lewis, 1992) and is yet to be achieved in much of the global South (Addati, 2015). A deeper understanding of the developmental patterns of paid maternity leave policies throughout the world thus extends across existing accounts of the gendered development of established welfare states. It showcases the extent and limitations of social protection geared towards women workers in developing countries.

Comparative leave policy literature usually analyses the development of leave policies in the global North (Ciccia & Verloo, 2012; Gauthier, 1996) and the global South (Fallon, Mazar, & Swiss, 2017; Htun & Weldon, 2018) using measurements of benefit scope such as the duration of leave and the benefit amount. However, more recently, a growing number of authors have emphasized the significance asking who is eligible for leave rights. Given the recent changes in labor market structure in the global North toward an increase of precarious jobs and the diversification of contract forms (Moss, Duvander, & Koslowski, 2019), the current constellation of leave policies does not provide leave benefits equally among social strata as it tightly links access to leave rights to paid employment (Ghysels & Van Lancker, 2011). In the context of the global South, the generous welfare system provisions often benefit only the privileged classes, implying that the generosity level of welfare policies may not be correlated with the actual coverage of welfare policies (Haggard & Kaufman, 2008). The findings of recent publications support this line of reasoning, showing that the access to leave policies in the global South is significantly determined by stratification in the labor market as well (Lee & Baek, 2014; Sorj & Fraga, 2020; Stumbitz, Lewis, Kyei, & Lyon, 2018). While useful and important, these existing empirical studies cover only a small number of advanced economies or focus on regions or countries in the global South.

This article aims to provide the first global overview of women workers' access to paid maternity leave policies over 120 years and explore its determinants based on newly collected data (Son et al., 2020). Our contribution presents the general expansionary patterns of

access to paid maternity leaves globally and identifies the drivers of long-term developments. The new historical database of maternity leave (HDML) policy measures entitlement principles, eligibility criteria, as well as benefit scope based on the major sources of information about the early development of leave policies (Gauthier & Koops, 2018, p. 12): the International Labour Organization (ILO) Legislative Series, the ILO reports to monitor implementation of the three ILO Maternity Protection Conventions (C003, C103, and C183), and the US Labor Department's Social Security Programs Throughout the World reports.

Dobrotić and Blum's (2020) index of parental leave eligibility in European countries provides a useful reference for building an index to measure access to paid maternity leaves. The authors conceptualize the inclusiveness of leave policies to consist of two dimensions: entitlement principles (i.e., to whom leave rights are granted) and eligibility criteria (i.e., under which conditions a person is qualified for the 'granted' leave rights). While their index focuses on the comparison of eligibility criteria of leave policies with identical entitlement principles, namely employment-based or citizenship-based benefits, we put more weight on the overall inclusiveness of leave policies. Thus, we first operationalize the entitlement index as a composition of the legal coverage of employment-based maternity benefits by employment sectors/forms and the existence of complementary programs for women who are not qualified for the employment-based program. Then, we develop an eligibility index that measures the strictness of employment-based benefits but unfortunately omits the features of complementary programs due to the ambitious scope of this research.

We begin by briefly reviewing the literature dealing with (maternity) leave policies and highlighting the relevance of a new and developing body of comparative leave policy literature that attends to the issue of social inequalities in access to leave benefits. We thus situate the expansion of paid maternity leave in the logic of both gender and social equality. We then present the details of the HDML and the operationalization of our inclusiveness indicator built on Dobrotić and Blum's (2020) eligibility index. In the fourth section of the article, we trace the historical expansion of paid maternity leave in terms of entitlement and eligibility conditions using descriptive statistics by regions. In the fifth section, we employ multivariate models to explore potential drivers of expanding inclusiveness. Finally, we summarize the findings and present the limits of our article.

2. The Historical Development of Paid Maternity Leave as a Struggle for Gender and Social Equality

The institutionalization of paid maternity leave is the first and essential step to achieving gender equality in the labor market. Without paid maternity leave, women encounter the risk of losing their economic indepen-

dence during or after confinement (Htun et al., 2019). Contrary to other protective legislation such as the prohibition of night work, the diverse streams of the women's movement agreed on the necessity of paid maternity leave regardless of whether or not they believed that gender equality in the labor market could be achieved through women-specific labor laws or the enforcement of equal treatment (Boris, 2019). Women's movements struggled to introduce and extend the rights to maternity benefits by lobbying international organizations (e.g., the ILO) to adopt the Maternity Protection Convention (Berkovitch, 1999) as well as by pressuring trade unions and policymakers (Bock & Thane, 1991; Sainsbury, 2001). The increasing political representation of women also contributed significantly to promoting the expansion of family policies as female politicians tend to be more interested in family-related policies than male politicians (Atchison & Down, 2009; Kittilson, 2008).

At the same time, the establishment of paid maternity leave as a part of social protection policies exhibits a specific logic of class politics, which aims to promote social equality among women of different strata (Htun & Weldon, 2018). While middle-class feminists in the early twentieth century focused on the introduction of family allowances compensating for women's unpaid labor (Bock & Thane, 1991), female trade unionists encountered a more pressing necessity for paid maternity leave. Not only did policy preferences differ between strata of women but paid maternity leave policies themselves often entail social stratification as well. As Ghysels and Van Lancker (2011) have shown, leave policies in Europe are not redistributive, but rather reproduce social stratification. Scholars in the global South also find that access to leave policies is significantly determined by stratification in the labor market. Workers in Brazil have unequal access to the contributory leave insurance scheme among different strata, defined by an individual's position in the labor market, job category, gender, race, income, and educational level (Sorj & Fraga, 2020). African countries do not provide statutory maternity leave benefits to workers in the informal labor market, leaving a large proportion of female labor forces with no option other than to rely on the employer's discretionary support or kinship-based support (Stumbitz et al., 2018). The exclusion of women workers in non-standard employment from leave benefits in East Asian countries also limits the access of many women workers to leave rights (Lee & Baek, 2014).

The protection of economic independence for working women thus seems to hinge on two interrelated struggles: gender and social equality. However, this distinction also raises the question of whether the development of paid maternity leave can be understood as a result of a broader movement of social protection expansion, reflecting the struggle for social equality, and/or whether it needs to be traced back to the political empowerment of women. Thus, understanding the history and development of the inclusiveness of maternity leave benefits also allows for the assessment of the historical progress of both struggles (for gender and social equality). The identification of its drivers, on the other hand, enables us to gauge how much these struggles are distinct from one another or can overlap.

3. Operationalization of the Inclusiveness of Paid Maternity Leave Policies

To systematically capture the patterns of the development of paid maternity leave entitlements, we introduce an inclusiveness indicator of paid maternity leave policies based on our new HDML, which covers paid maternity leave policies in 157 independent nation-states with a population of over 500,000 during the period from 1884 to 2018. Existing databases like the Social Policy and Law Shared Database (MEA, 2021), the Mutual Information System on Social Protection of the Council of Europe (Council of Europe, 2021), the OECD Family Database (OECD, 2021), and the International Network on Leave Policies and Research (LP&R, 2021) are used for verifying the accuracy of the HDML. The HDML includes variables that help our understanding of the legal conditions of paid maternity leave policies across the world such as the benefit amount, benefit duration, legal coverage, eligibility conditions, and method of financing. Since the unit of the HDML is a country per year, in the case that multiple parallel maternity protection programs exist in a country (e.g., one for wage earners and the other for salaried employees), we coded the legal conditions of the program that presumably covers the largest share of the population. Also, we coded the coverage of maternity protection in that country as the aggregate coverage of all maternity protection programs.

The HDML defines paid maternity leave as a public paid leave program that is available to mothers during the period "before and after childbirth," functioning as social protection measure that guarantees the income to individuals during this period (Son et al., 2020). If a country combines maternity leave and childcare leave into one program without any additional maternity leave programs existing, we include these parental leave programs as a maternity leave program. We exclude corporate-based private paid maternity leave programs or public paid maternity leave programs at the sub-national level as in the US, the only country that has not introduced any public paid maternity leave policies at the federal level among the 157 countries included. Disagreements about the definition of maternity leave policy cause the divergence between the existing indicators and the HDML. Some databases do not acknowledge paid parental leave that provides benefits to both fathers and mothers as maternity leave. For instance, Gauthier (2011) codes only maternity leave programs that exclusively target women as maternity leave in her dataset. Her coding indicates that Sweden has not had paid maternity leave since 1974, while the OECD Family Database and the HDML recognize that the paid parental leave in Sweden functions

as paid maternity leave. The HDML opted for a more generous definition because we expect that without any comprehensive information on parental leave, a generous definition of maternity leave will provide a better overview of the historical development of maternity leave.

Borrowing from Dobrotić and Blum's (2020) conceptual framework, we score the institutional traits coded in the HDML regarding two dimensions: (1) entitlement principles (who is granted paid maternity leave benefits), and (2) eligibility criteria (under which conditions a person is qualified for the 'granted' leave rights). Since both dimensions are partly complementary and should be assessed together to fully capture the inclusiveness of paid maternity leave protection, we aggregate both dimensions through addition. For instance, Jordan

extended the coverage of maternity benefits in 1988 to all employed mothers including those in the industrial, commercial, and agricultural sectors as well as family workers and domestic servants, but kept the eligibility threshold high; a minimum of 180 days of contribution period in the last 12 months from the same employer in a workplace where at least five workers are employed. This stands in marked contrast to China, which provides maternity benefits only to female employees in urban areas, excluding workers in the agricultural sector and atypical employment, but provides easy access demanding no contribution period.

Table 1 shows the details of the operationalization of the index of inclusiveness of maternity leaves. To capture the entitlement principles, we constructed two variables: a categorical variable for the legal coverage

Table 1. Operationalization of index of inclusiveness of maternity leaves.

Sub-Index I	Sub-Index II	Score
Entitlement principles	Coverage of social insurance + the existence of complementary programs	0–6
	Coverage of social insurance programs for women in different employment forms and sectors (aggregated score)	
	No program	0
	Public sector/civil servants	1
	Industrial sector	1
	Non-industrial sector (commercial sector)	1
	Agricultural sector	1
	Atypical sector	1
	Existence of social assistance programs or citizenship-based benefits for women who are not qualified for social insurance programs	
	No	0
	Yes	1
Eligibility criteria	(Employment/contribution period needed + employment period can be accumulated with different employers + minimum number of workers to be obliged to provide maternity benefit)/2	0–5
	Employment/contribution period needed	
	12 or more months	0
	7–11 months	1
	3–6 months	2
	1–2 months	3
	0 months	4
	Employment period can be accumulated with different employers	
	Employment condition must be fulfilled with the same employer	0
	Employment condition can be fulfilled with different employers	1
	Minimum number of workers to be obliged to provide maternity benefit	
	100	0
	51–99	1
	31–50	2
	11–30	3
	1–10	4
	No condition	5

of employment-based programs by employment sector, and a dummy variable for the existence of social assistance/citizenship-based programs providing monetary benefits to mothers with newborn children. Following the ILO Maternity Protection Conventions (C003, C103, and C183), coverage is aggregated into five sectors: public, industrial, non-industrial (commercial), agricultural, and atypical. Final coverage scores are generated through addition yielding a variable ranging from 0 to 5, 0 indicating the absence of a maternity insurance program and 5 indicating full coverage of the five sectors. Since most national legislation mirrors the language of the ILO Maternity Protection Conventions, the classification of sectoral coverage by the ILO conventions helps to grasp an overview of legal coverage across the globe. However, a special problem arises when coding the coverage of atypical employment. While most legislation covers all employees in industrial, commercial, and agricultural sectors without disaggregating them into a detailed list of occupations, none of the legislation covers all types of atypical employment, because atypical employment is a complex terminology based on types of employment as well as a sectoral classification encompassing informal employees, casual and part-time workers, and homeworkers in disguised self-employed. Reforms expanding the coverage of atypical workers have always been very gradual, extending from one group (e.g., the self-employed) to another group (e.g., domestic workers). In this article, if a country covers at least one type of atypical employment, we treat it as an extension of maternity benefit to atypical employment. Citizens who are not eligible for the insurance scheme must rely on social assistance/citizenship-based programs that provide less generous benefits than typical social insurance programs. Thus, we added 1 to entitlement score if there are complementary programs that increase the accessibility of maternity benefit.

Regarding eligibility criteria, we differentiate between those that regulate the required employment/contribution history and those that restrict the size of firms obliged to provide maternity benefits. Nation-states use both to either reduce their financial burden or implicitly target privileged groups. The long employment/contribution period significantly hinders the access of most women workers to maternity benefits, whose access to regular jobs with high job stability is limited. In the 1950s, the ILO noted that a qualifying period excluded a large proportion of women from maternity benefits and demanded the introduction of social assistance schemes for women who are not qualified for social insurance benefits in the provisions of the second Maternity Protection Convention (C103; ILO, 1952). The increase of eligibility thresholds has also been a common strategy to reduce nation-states' financial burden in the retrenchment era (Clasen & Siegel, 2007; Pierson, 1996). Additionally, eligibility conditions can be restricted by imposing contribution requirements that must be achieved at the same employer.

The minimum number of employees in workplaces for employers to be obliged to provide maternity benefits is an additional component of eligibility criteria that Dobrotić and Blum (2020) did not include when studying the inclusiveness of parental leave in European countries since this type of eligibility criterion is much more prevalent in the global South than in the global North. In East Asian countries such as Japan and Korea, social insurance systems covered only large-scale firms for a long time. These so-called developmental states implemented a 'trickle-down' strategy in social protection policies and economic policies, expecting that the adoption of social protection measures in large-scale firms would be eventually expanded to smaller working places in an incremental fashion (Kwon, 1997). Latin American social insurance systems also targeted only large-scale firms at the initial stage due to low state capacity to regulate and inspect labor environment and relations (Bosch, Melguizo, & Pagés, 2013).

The aggregated eligibility measure includes the period of eligibility, whether the employment period could be accumulated with different employers, and the minimum number of employees to be obliged to provide maternity benefits. A paid maternity leave program that requires no employment/contribution period receives the highest score (4), while a paid maternity leave program with 12 or more months of eligibility period is coded as 0 following the thresholds of Dobrotić and Blum's (2020) index of parental leave eligibility, implying that a longer eligibility period would hinder the access to paid maternity leave policies for women workers. Since nation-states use contribution or/and employment periods as eligibility conditions, we used whichever of the two eligibility period conditions were stricter. If a paid maternity leave program allows for the accumulation of the employment or contribution periods from different employers, 1 is added to the eligibility period score. In a similar vein, the higher minimum number of employees in a workplace to be obliged to provide maternity benefits receives a lower score since the threshold of the scale of enterprise decreases the access to maternity benefits. To balance the weight of entitlement principles and eligibility criteria, we divided the aggregated scores of eligibility criteria by two. The inclusiveness index is the aggregation of entitlement principle scores and eligibility criteria scores, ranging from 0 to 11.

4. Descriptive Evidence: Patterns of the Historical Development of Maternity Protection Policies

Table 2 presents the sequence of coverage expansion by world region. Women employed in the industrial and commercial sectors gained access to maternity protection first with little time passing between the inclusions of both groups. Agricultural workers followed later. The length of the gap between the inclusion of commercial and agricultural workers varies between regions: While it took a relatively long time in Eastern

and Western Europe as well as Latin America, regions that introduced protection for industrial and commercial workers later took less time to extend provisions to the agricultural sector. Average introduction times of provisions for all three sectors are only three years apart in sub-Saharan Africa. The Middle East and North Africa stand out as laggards in this regard: Not only there are fewer countries with extended protection to agricultural workers in these areas, but it has also taken them considerably longer than sub-Saharan African countries to undertake this expansion.

While paid maternity leave is approaching universal 'maternity insurance' for working women in some parts of the world, women in atypical employment and the agrarian sector are still largely excluded from social insurance schemes in others. These exclusions originate from two interrelated factors. First, they reflect the labor market structure. While countries in the global North had only minimal proportions of atypical employment left when they universalized coverage after World War II through the inclusion of the self-employed in social insurance (Flora & Heidenheimer, 1981), employment in the atypical sector still accounts for a large proportion of the labor force today in the global South (Bosch et al., 2013; van Ginneken, 1999; Yang, 2017). This renders the inclusion of atypical employment in maternity

Table 2. The sequence of coverage expansion of paid maternity leave.

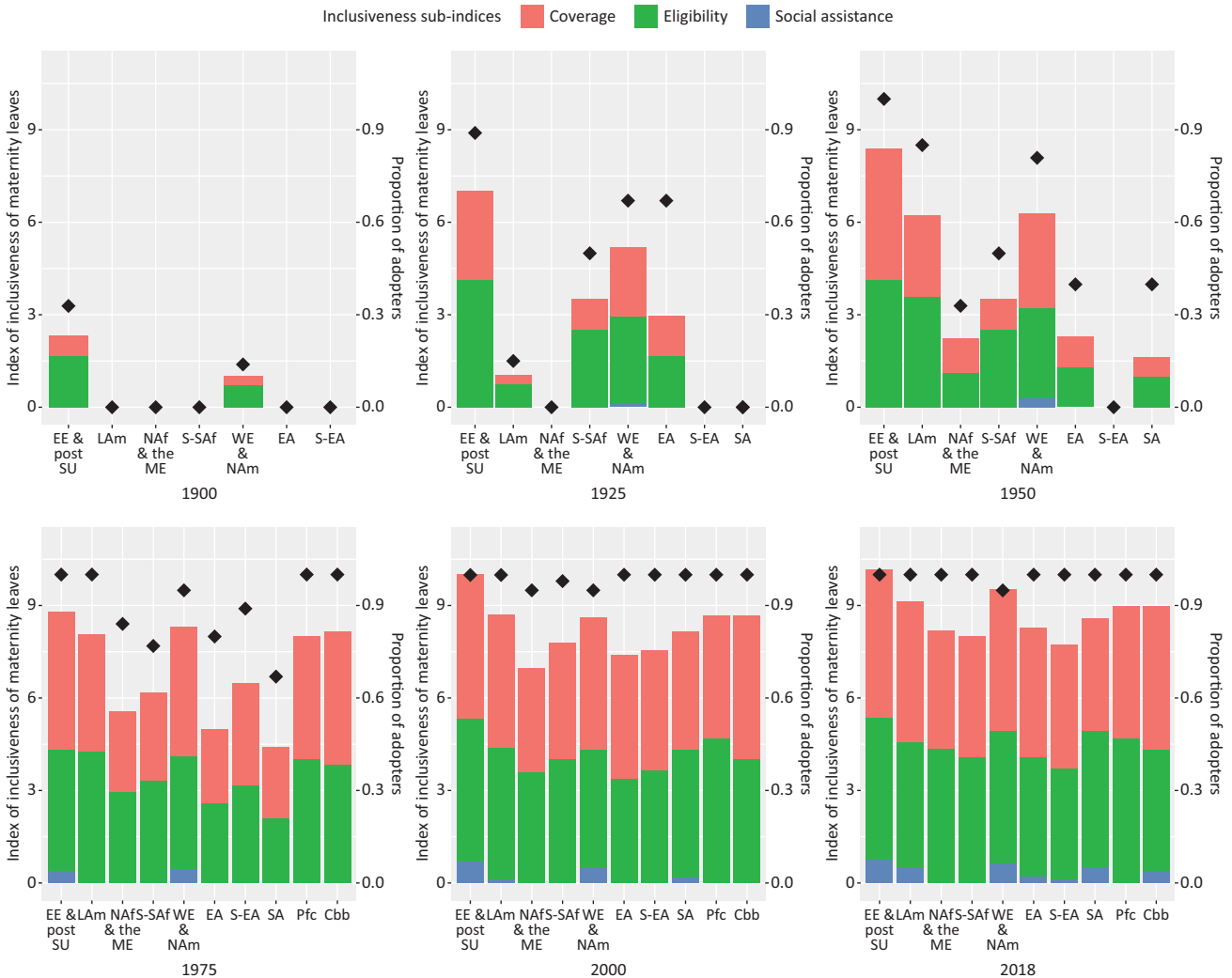|	Industrial	Commercial	Agricultural	Atypical
Eastern Europe and (Post) Soviet Union (n = 26)				
Number of Adopters	26	26	25	23
Average Year	1919	1924	1943	1959
Regional Pioneer	Austria-Hungary (1891)	Austria-Hungary (1907)	Bulgaria (1924)	Poland (1920)
Latest Adopter	Albania (1947)	Albania (1947)	Yugoslavia (1971)	Belarus (2002)
Latin America and the Caribbean (n = 23)				
Number of Adopters	23	23	19	17
Average Year	1942	1944	1965	1978
Regional Pioneer	Mexico (1917)	El Salvador (1927)	Uruguay (1935)	Peru (1936)
Latest Adopter	Trinidad & Tobago (1971)	Trinidad & Tobago (1971)	Cuba (2009)	Cuba (2009)
North Africa and the Middle East (n = 20)				
Number of Adopters	20	20	12	7
Average Year	1967	1967	1978	1982
Regional Pioneer	Turkey (1936)	Turkey (1936)	Lebanon (1946)	Cyprus (1964)
Latest Adopter	Oman (2011)	Oman (2011)	Oman (2011)	Turkey (2008)
Sub-Saharan Africa (n = 43)				
Number of Adopters	43	43	41	6
Average Year	1969	1970	1972	1994
Regional Pioneer	South Africa (1920)	Guinea (1958)	Guinea (1958)	Djibouti (1977)
Latest Adopter	Sierra Leone (2015)	Sierra Leone (2015)	Sierra Leone (2015)	Tanzania (2013)
Western Europe, North America, Australia, and New Zealand (n = 22)				
Number of Adopters	20	20	20	20
Average Year	1928	1931	1941	1958
Regional Pioneer	Germany (1884)	Norway (1909)	Norway (1909)	Germany (1911)
Latest Adopter	New Zealand (2003)	New Zealand (2003)	New Zealand (2003)	New Zealand (2006)
Asia and the Pacific (n = 23)				
Number of Adopters	23	23	18	7
Average Year	1965	1972	1974	1981
Regional Pioneer	Japan (1922)	China (1930)	Philippines (1952)	Taiwan (1958)
Latest Adopter	Solomon Islands (1996)	Taiwan (2001)	Solomon Islands (1996)	Vanuatu (2016)

Source: Built based on the HDML (Son et al., 2020). Notes: The classification of countries is based on the politico-geographic classification of world regions by Hadenius and Teorell (2007), which reflects geographical proximity as well as political-economic factors. For instance, Australia and New Zealand are categorized as the same group as Western Europe and North America rather than their immediate neighbors.

protection insurance more salient and much harder to achieve in the global South. Second, the exclusion of atypical employment from maternity insurance schemes could also be seen as a highly path-dependent result of the history of political incorporation in many countries. Social protection privileges were first accorded only to certain occupational groups seen as vital to regime survival (Mares & Carnes, 2009). In any case, the existing institutions of paid maternity leave prevent access to large parts of the working female population.

The entitlement principles and the eligibility criteria, altogether, determine the inclusiveness of paid maternity leaves. Even if employment sectors have been included in paid maternity leave legislation, the high thresholds of eligibility criteria, such as long contribution periods or firms' size, restrict mothers' access to maternity protection benefits. Most countries aim to mitigate these restrictions by providing social assistance or citizenship-based benefits tied to confinement in

addition to paid maternity leave insurance. Although these likely provide only minimal benefits, they are often the only way to guarantee financial support to underprivileged mothers, especially in the context of the global South.

To gauge regional patterns and disaggregate the developmental patterns of the sub-indices, Figure 1 shows the regional pattern of adopters and inclusiveness of maternity benefits. Since the number of independent states varies over time from 35 (1884) to 155 (since 1993), to provide a better overview, we also present a relative measure of the number of adopters, whose denominator is the number of independent states (black dots). The inclusiveness scores provide an overview of how entitlement principles (i.e., coverage of employment-based maternity benefits and the existence of complementary programs) and eligibility criteria (i.e., the aggregated score of eligibility index) have changed over time in different regions. It shows that paid maternity leave

Figure 1. Regional pattern of adoption and index of inclusiveness of maternity leaves.

Notes: EE & post SU stands for Eastern Europe and Post-Soviet Union; LAm stands for Latin America; NAf & the ME stands for North Africa and the Middle East; S-SAf stands for sub-Saharan Africa; WE & NAm stands for West Europe, North America, Australia, and New Zealand; EA stands for East Asia; S-EA stands for South-East Asia; Pfc stands for the Pacific; and Cbb stands for the Caribbean.

programs emerged before 1900 in Europe, namely in Denmark, Germany, and Austria-Hungary. Other countries in Europe steadily followed the path of early adopters and, by 1925, all European countries except for Albania, Finland, Ireland, the Netherlands, and the United Kingdom had adopted paid maternity leave programs. Early adopters in other regions, such as China and Japan in East Asia, Chile, Peru, Mexico in Latin America, and South Africa in sub-Saharan Africa, also introduced their first paid maternity leave policies by 1925.

The proportion of countries that institutionalized maternity protection increased steadily between 1925 and 1950. Many Latin American countries began to offer maternity protection that coincided with the first phase of social protection expansion in these countries (Haggard & Kaufman, 2008). One outstanding regional trajectory can be observed in the Eastern European countries: Starting from the 1950s, all countries provided paid maternity leave to most of their populations as part of the 'maternalist' policy orientation (Mitsuyoshi, 2012) enacted by socialist regimes. Interestingly, in this initial phase of the extension of maternity benefits, the coverage of maternity protection was limited to industrial and commercial workers, but eligibility conditions were generous. For instance, 50 of 74 independent states provided paid maternity leave in 1950. Paid maternity leave programs in 32 of those 50 countries scored between 4 and 5 on the index for eligibility conditions (maximum 5), while 25 of 50 countries scored 3 or less on the entitlement index (maximum 6). In the early phases of development, the paid maternity leave programs tended to have generous eligibility conditions and limited legal coverage.

By 1975, a large majority of independent nation-states (116 among 134 countries) had completed the task of institutionalizing the provision of social protection to women workers before and after confinement as latecomer states, such as Nigeria and South Korea, introduced the maternity protection policies shortly after their independence. However, the degree of accessibility to maternity protection still varied widely among regions. European countries and a few Latin American countries extended the coverage of maternity benefits to female employees in atypical sectors, e.g., the self-employed. Some European countries also adopted social assistance programs to complement social insurance systems. Nearly half of the countries that introduced paid maternity leave policies in Asia, Africa, and Latin America provided maternity benefits to female employees in public, industrial, and commercial sectors, while excluding employees in the agricultural and atypical sectors. East Asia shows an interesting pattern regarding a balance between entitlement principles and eligibility criteria. While other regions tended to provide paid maternity leave without strict eligibility criteria in the early phase of paid maternity leave development, East Asian countries had employed strict eligibility criteria since the introduction of paid maternity leave. For instance, China

obliged workplaces that employed more than 100 workers to provide paid maternity leave benefits, and Taiwan required women workers to be insured for longer than 10 months to be eligible for the maternity protection provision. While Latin American and African countries have largely neglected employees in the atypical sectors, East Asian countries have neglected workers in small-scale firms that account for a large proportion of the labor force. Since social insurance contributions impose a huge financial burden on employers in small enterprises and nation-states lacked the capacity to enforce social protection policies in these places, the extension of legal coverage to small firms stalled in this region (Yang, 2017).

The extension of access to maternity benefits became stagnant after the year 2000 once all regions established a similar level of access to paid maternity leave. However, countries in the global South continued to converge toward universal coverage of maternity insurance, extending the coverage of maternity benefits to atypical workers, albeit at a slow pace and with considerable gaps.

5. Testing the Logic of Gender and Social Equality in the Historical Development of Paid Maternity Leave Policies

Section two highlighted how the inclusiveness of paid maternity leave relates to struggles for gender and social equality. Its global expansion should directly reflect the expanding organizational or institutional power resources of actors engaged in these struggles (Korpi, 1985). As previously discussed, earlier research has found support for both the influence of female political representation (Kittilson, 2008) and left-wing parties (Htun & Weldon, 2018), but these studies were limited in geographical and temporal scope as well as mostly focused on generosity rather than inclusiveness. To identify the drivers of paid maternity leave inclusiveness, we employ a random-effects model with between and within estimators as proposed by Bartels (2008) and Bell and Jones (2015). Compared to earlier approaches of dealing with time-series cross-sectional data in macro-comparative research, this approach allows for the separation of within-case effects that reflect variation over time and between-case effects that capture cross-sectional differences. Standard fixed-effect approaches control out all between-case variation and thus do not allow for making inferences about the substantive relationships that researchers are interested in, especially concerning slow-moving institutional variables (Plümper, Troeger, & Manow, 2005). The between-country effects serve to elucidate long-lasting differences, such as the various economic and political trajectories over the twentieth century. Since our dependent variable captures institutional variation and thus exhibits a high degree of path dependency, we include a within estimator of the lagged dependent variable (Bartels, 2008) to account for the first-order autocorrelation. Overall, our analysis cov-

ers 157 distinct countries either since 1900 or since their independence until 2018, yielding 11,363 country-years.

5.1. The Variables

The broad geographical and historical scope of our analysis precludes measuring the logic of gender and social equality directly. Thus, we account for several domestic and international factors alongside our main variables.

First, we include an index of women's political empowerment (Sundström, Paxton, Wang, & Lindberg, 2017) that captures the degree to which women are guaranteed civil citizenship rights, organized within civil society, and participate in governmental decision-making to test the logic of gender equality. Second, we use two indirect measures that typically correlate with class politics, namely, democratization and social insurance development. We could not directly test the logic of class politics due to the lack of data on left-wing parties' strength around the world. We use the V-Dem polyarchy score (Teorell, Coppedge, Lindberg, & Skaaning, 2019), which measures the responsiveness to voter's needs and preferences as well as the extent of suffrage. The Social Policy around the World dataset (Knutsen & Rasmussen, 2018) is used to capture the scope of social risks, namely old-age, sickness, unemployment, work injury, and family poverty, already covered by social insurance.

Third, the degree of economic modernization, industrialization, is captured by a measure of gross domestic product per capita in constant international dollars (Gapminder, 2020). Industrialization and urbanization led to widespread fear of 'family decline' in early twentieth-century Europe, which triggered governmental responses, including, but not limited to, paid maternity leave (Gauthier, 1996). These fears were also compounded by falling birth rates (Gapminder, 2020). Lower fertility rates should be associated with more inclusive paid maternity leave policies either because governments try to reduce the economic burdens of childbearing to increase fertility, or because governments are unable to implement and finance inclusive paid maternity leave under conditions of high fertility. Finally, earlier literature has emphasized the role of global policy models (Schmitt, Lierse, Obinger, & Seelkopf, 2015). The ILO has consistently pushed for the expansion of maternity protection since its inception and has devoted multiple conventions and recommendations to it. We thus control for ILO membership.

To account for possible issues of reverse causality, we employ one-year lags for all political variables (women's political empowerment, polyarchy, insurance coverage of social risks, ILO membership) as well as the fertility rate.

5.2. Analysis

The first model in Table 3 includes only standard variables without accounting for women's political empowerment, while the second model includes it. We turn first to our indicators of economic development, societal modernization, regimes, and women's political empowerment because they display intriguing differences between models.

The results show that differences in the political empowerment of women are decisive for the inclusiveness of paid maternity leave. This relationship holds for the differences between our set of countries and the (within country) dynamics of inclusiveness expansion over nearly 120 years. It is thus unlikely to be driven by some unobserved characteristic. While the political empowerment of women has the expected effect on inclusiveness, the between-country effect of democracy defies expectations of standard welfare-state theory. Yet, our earlier descriptive analysis already hinted at cases that could be driving this result: The socialist countries in Eastern Europe combined political disenfranchisement with the establishment of generous social rights, especially for women workers. The effect of social insurance institutions is largely consistent across models. Countries that cover more social risks also feature more inclusive paid maternity leave coverage.

The first model supports classical functionalist accounts of social protection extension: The inclusiveness of paid maternity leave is driven by the within-country effect of economic development and the between-country effect of the fertility rate. Between-country differences in fertility reflect the relative timing of the demographic transition. Even though this effect is substantial, it becomes much weaker and insignificant once the index of women's political empowerment is included in our model, indicating that most of the effects of economic and societal modernization are, in fact, indirect. Regarding the effect of ILO membership, it is interesting that both between and within effects seem to operate, while the within effect represents the effect of joining the ILO, the between effect can be understood as the effect exerted by long-standing membership. Given that the ILO's main channel of influence besides adopting recommendations and conventions lies in its technical expertise and continuous dialogue with national governments, it seems natural that its effect unfolds slowly and accumulates over time.

6. Discussion and Conclusion

Over the twentieth century, the inclusiveness of paid maternity leave has, with few exceptions (notably the US), increased across countries and regions. The timing and speed of expansion have differed, but the sequence and trajectory are surprisingly uniform and directed towards ever more inclusive 'maternity insurance.' Especially in the last 30 years, countries across the global South have converged toward the standards set in Eastern and Western Europe. Our analysis also indicated that this convergence is largely driven by a parallel trajectory of the political empowerment of women.

Table 3. Regression results.

	Inclusiveness	
	Model 1	Model 2
Lagged DV	0.922***	0.921***
	(0.00699)	(0.00698)
Logged GDP/cap (i$) (between)	−0.327	−0.0661
	(0.189)	(0.179)
Logged GDP/cap (i$) (within)	0.0402	0.0254
	(0.0211)	(0.0226)
Total fertility rate (between)	−0.478**	−0.182
	(0.154)	(0.146)
Total fertility rate (within)	−0.00177	0.00818
	(0.00945)	(0.0110)
Democracy (between)	−1.097	−3.986***
	(1.009)	(1.010)
Democracy (within)	0.0683	−0.0742
	(0.0543)	(0.0879)
Women's political empowerment (between)		6.339***
		(1.123)
Women's political empowerment (within)		0.290*
		(0.132)
Social insurance risk coverage (between)	0.556***	0.444**
	(0.162)	(0.161)
Social insurance risk coverage (within)	0.0368*	0.0337
	(0.0182)	(0.0182)
ILO membership (between)	4.279***	3.509**
	(1.256)	(1.132)
ILO membership (within)	0.249***	0.248***
	(0.0478)	(0.0478)
Constant	6.532*	1.794
	(2.603)	(2.272)
Observations	11,363	11,363
Number of groups	157	157

Notes: Robust standard errors in parentheses. DV: Dependent variable. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

In this regard, it substantiates earlier research (Kittilson, 2008; Sainsbury, 2001), which consistently finds that the descriptive representation of women matters for the extension of policies, which allow women to combine labor market participation and motherhood. Given data constraints, our results are more ambiguous regarding the question of whether the extension of leave policies follows a specific pattern of 'class politics' driven by left-wing parties, as has been suggested (Htun & Weldon, 2018) by earlier research. However, typical correlates of 'class politics,' especially democratization, seem to have little bearing on the expansion of leave inclusiveness. More comprehensive data on the strength of left-wing parties around the world is needed to answer whether this is due to the logic of inclusiveness as opposed to generosity, or whether the 'class politics' of leave policies vary over time and place, not always aligning perfectly with economic cleavages.

In some circumstances, the extension of legal access to paid maternity leave policies as measured by our indicator may prove shallow due to limited state capacity, many countries of the global South struggle to put all regulations into practice; especially in contexts that are naturally hard to regulate, such as small enterprises, domestic servants, and the whole informal sector. For instance, India adopted the Beedi and Cigar Worker Act in 1966 and its supplementary act in 1974 to provide social insurance benefits, including maternity protection, to female employees. However, employers did not comply with the legislation and the courts also challenged the laws (Boris, 2019). The absence of strong trade unions makes it difficult to inspect and enforce labor protection laws in the middle—and low-income countries. This also increases the salience of alternative entitlements such as social assistance/citizenship-based benefits tied to confinement on which our data and analysis provided only

minimal information. Further development and analysis of the HDML data will help to close these gaps and identify and explain the remaining gaps in paid maternity leave coverage.

Conflict of Interests

The authors declare no conflict of interests.

References

Addati, L. (2015). Extending maternity protection to all women: Trends, challenges, and opportunities. *International Social Security Review*, *68*(1), 69–93.

Atchison, A., & Down, I. (2009). Women cabinet ministers and female-friendly social policy. *Poverty & Public Policy*, *1*(2), 164–186.

Bambra, C. (2007). Defamilisation and welfare state regimes: A cluster analysis. *International Journal of Social Welfare*, *16*(4), 326–338.

Bartels, B. L. (2008). Beyond fixed versus random effects: A framework for improving substantive and statistical analysis of panel, time-series cross-sectional, and multilevel data. *The Society for Political Methodology*, *9*, 1–43.

Bell, A., & Jones, K. (2015). Explaining fixed effects: Random effects modelling of time-series cross-sectional and panel data. *Political Science Research and Methods*, *3*(1), 133–153.

Berkovitch, N. (1999). *From motherhood to citizenship*. Baltimore, MD: Johns Hopkins University Press.

Blofield, M., & Franzoni, J. M. (2015). Maternalism, co-responsibility, and social equity: A typology of work family policies. *Social Politics*, *22*(1), 38–59.

Bock, G., & Thane, P. (1991). *Maternity and gender policies: Women and the rise of the European welfare states, 1880s–1950s*. London: Routledge.

Boris, E. (2019). *Making the woman worker: Precarious labor and the fight for global standards, 1919–2019*. Oxford: Oxford University Press.

Bosch, M., Melguizo, Á., & Pagés, C. (2013). *Better pensions, better jobs: Towards universal coverage in Latin America and the Caribbean*. New York, NY: Inter-American Development Bank.

Ciccia, R., & Verloo, M. (2012). Parental leave regulations and the persistence of the male breadwinner model: Using fuzzy-set ideal type analysis to assess gender equality in an enlarged Europe. *Journal of European Social Policy*, *22*(5), 507–528.

Clasen, J., & Siegel, N. A. (2007). *Investigating welfare state change: The "dependent variable problem" in comparative analysis*. Cheltenham: Edward Elgar Publishing.

Council of Europe. (2021). Mutual information system on social protection of the Council of Europe. *Council of Europe*. Retrieved from https://www.coe.int/en/web/european-social-charter/missceo-database

Daly, M., & Ferragina, E. (2018). Family policy in high-income countries: Five decades of development. *Journal of European Social Policy*, *28*(3), 255–270.

Dobrotić, I., & Blum, S. (2020). Inclusiveness of parental-leave benefits in twenty-one European countries: Measuring social and gender inequalities in leave eligibility. *Social Politics: International Studies in Gender, State & Society*, *27*(3), 588–614.

Dobrotić, I., & Stropnik, N. (2020). Gender equality and parenting-related leaves in 21 former socialist countries. *International Journal of Sociology and Social Policy*, *40*(5/6), 495–514.

Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Princeton, NJ: Princeton University Press.

Fallon, K. M., Mazar, A., & Swiss, L. (2017). The development benefits of maternity leave. *World Development*, *96*, 102–118.

Flora, P., & Heidenheimer, A. J. (1981). *The development of welfare states in Europe and America*. London: Transaction Books.

Gapminder. (2020). *Babies per woman (total fertility rate) & GDP per capita in constant PPP dollars: Data* [Data set]. Retrieved from https://www.gapminder.org/data

Gauthier, A. H. (1996). *The state and the family: A comparative analysis of family policies in industrialized countries*. Oxford: Oxford University Press.

Gauthier, A. H. (2011). A brief history of maternity, parental, and childcare leave schemes in selected OECD countries. *Comparative Family Policy Database*. Retrieved from https://www.demogr.mpg.de/cgi-bin/databases/fampoldb/index.plx

Gauthier, A. H., & Koops, J. C. (2018). The history of family policy research. In G. B. Eydal & T. Rostgaard (Eds.), *Handbook of family policy* (pp. 11–23). Cheltenham: Edward Elgar Publishing.

Ghysels, J., & Van Lancker, W. (2011). The unequal benefits of activation: An analysis of the social distribution of family policy among families with young children. *Journal of European Social Policy*, *21*(5), 472–485.

Hadenius, A., & Teorell, J. (2007). Pathways from authoritarianism. *Journal of Democracy*, *18*(1), 143–157.

Haggard, S., & Kaufman, R. R. (2008). *Development, democracy, and welfare states: Latin America, East Asia, and Eastern Europe*. Princeton, NJ: Princeton University Press.

Htun, M., Jensenius, F. R., & Nelson-Nuñez, J. (2019). Gender-discriminatory laws and women's economic agency. *Social Politics: International Studies in Gender, State & Society*, *26*(2), 193–222.

Htun, M., & Weldon, S. L. (2018). *The logics of gender jus-

tice: State action on women's rights around the world. Cambridge: Cambridge University Press.

International Labour Organization. (1952). *Revision of the maternity protection convention 1919 (No. 3)*. Paper presented at the 35th International Labour Conference, Geneva, Switzerland.

Jenson, J. (1986). Gender and reproduction: Or, babies and the state. *Studies in Political Economy*, *20*(1), 9–46.

Kittilson, M. C. (2008). Representing women: The adoption of family leave in comparative perspective. *Journal of Politics*, *70*(2), 323–334.

Knutsen, C. H., & Rasmussen, M. (2018). The autocratic welfare state: Old-age pensions, credible commitments, and regime survival. *Comparative Political Studies*, *51*(5), 659–695.

Korpi, W. (1985). Power resources vs. action and conflict: On causal and intentional explanations in the study of power. *Sociological Theory*, *3*(2), 31–45.

Kwon, H. J. (1997). Beyond European welfare regimes: Comparative perspectives on East Asian welfare systems. *Journal of Social Policy*, *26*(4), 467–484.

Lee, S. S., & Baek, S. (2014). Why the social investment approach is not enough—The female labour market and family policy in the Republic of Korea. *Social Policy & Administration*, *48*(6), 686–703.

Leitner, S. (2003). Varieties of familialism: The caring function of the family in comparative perspective. *European Societies*, *5*(4), 353–375.

Lewis, J. (1992). Gender and the development of welfare regimes. *Journal of European Social Policy*, *2*(3), 159–173.

LP&R. (2021). Annual review and reports. *International Network on Leave Policies & Research*. Retrieved from https://www.leavenetwork.org/annual-review-reports/country-reports

Mares, I., & Carnes, M. E. (2009). Social policy in developing countries. *Annual Review of Political Science*, *12*(1), 93–113.

MEA. (2021). Social policy archive for SHARE. *SPLASH*. Retrieved from https://splash-db.eu

Mitsuyoshi, Y. (2012). Maternalism, soviet-style: The working 'Mothers with Many Children' in postwar Western Ukraine. In M. van der Klein, R. Jo Plant, N. Sanders, & L. R. Weintrob (Eds.), *Maternalism reconsidered motherhood, welfare and social policy in the twentieth century* (pp. 205–226). New York, NY: Berghahn Books.

Moss, P., Duvander, A.-Z., & Koslowski, A. (2019).

Parental leave and beyond recent international developments, current issues and future directions. Bristol: Policy Press.

OECD. (2021). OECD family database. *OECD.* Retrieved from http://www.oecd.org/social/family/database.htm

Pierson, P. (1996). The new politics of the welfare state. *World Politics*, *48*(2), 143–179.

Plümper, T., Troeger, V. E., & Manow, P. (2005). Panel data analysis in comparative politics: Linking method to theory. *European Journal of Political Research*, *44*(2), 327–354.

Sainsbury, D. (2001). Gender and the making of welfare states: Norway and Sweden. *Social Politics*, *8*(1), 111–142.

Saraceno, C. (2011). Childcare needs and childcare policies: A multidimensional issue. *Current Sociology*, *59*(1), 78–96.

Schmitt, C., Lierse, H., Obinger, H., & Seelkopf, L. (2015). The global emergence of social protection. *Politics & Society*, *43*(4), 503–524.

Son, K., Böger, T., Tonelli, S., Buhr, P., Drobnič, S., & Huinink, J. (2020). *Codebook of Historical database on maternity leave (HDML)*. Bremen: Global Dynamics of Social Policy, University of Bremen. Retrieved from https://www.socialpolicydynamics.de/crc-publications/crc-1342-technical-paper-series

Sorj, B., & Fraga, A. (2020). Leave policies and social inequality in Brazil. *International Journal of Sociology and Social Policy*, 40(5/6), 515–526.

Stumbitz, B., Lewis, S., Kyei, A. A., & Lyon, F. (2018). Maternity protection in formal and informal economy workplaces: The case of Ghana. *World Development*, *110*, 373–384.

Sundström, A., Paxton, P., Wang, Y. T., & Lindberg, S. I. (2017). Women's political empowerment: A new global index, 1900–2012. *World Development*, *94*, 321–335.

Teorell, J., Coppedge, M., Lindberg, S., & Skaaning, S.-E. (2019). Measuring polyarchy across the globe, 1900–2017. *Studies in Comparative International Development*, *54*(1), 71–95.

van Ginneken, W. (1999). Social security for the informal sector: A new challenge for the developing countries. *International Social Security Review*, *52*(1), 49–69.

Yang, J. J. (2017). *The political economy of the small welfare state in South Korea*. Cambridge: Cambridge University Press.

About the Authors

Keonhi Son is a Doctoral Researcher in the project "Formation and Diffusion of Family Policy in a Global Perspective" in the CRC 1342 "Global Dynamics of Social Policy" at the University of Bremen. She worked at the Institute of Political Science at Heidelberg and the Mannheim Centre for European Social Research (MZES) as a research assistant.

Tobias Böger is a Post-Doctoral Researcher in the project "Formation and Diffusion of Family Policy in a Global Perspective" in the CRC 1342 "Global Dynamics of Social Policy" at the University of Bremen.