

Submission to EPC 2026 in Bologna

Policy Issues Theme

## **Extended abstract**

### **Varieties of reproduction regimes a comparative perspective on policies regulating reproductive processes over the life course**

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#### **Background and research questions**

Welfare state scholarship has long shown that state institutions shape demographic life-courses. Yet one important domain — the direct regulation of reproduction — has received surprisingly little systematic comparative attention beyond abortion legislation. Reproduction here denotes the processes of having and not having children across the life course (Almeling, 2015), and reproduction policy comprises formalized statutory statements (laws, regulations, guidelines) through which governments seek to promote, permit or prevent particular reproductive processes (Zagel, 2024). Research on abortion suggests a wide liberalization, but also shows that countries take diverging paths of regulation given the anti-feminist movements of conservative activists (Cole, 2025), and governments' interest in countering fertility decline (Cook et al., 2022) in the past decades. Two core questions guide this study: What are the international patterns of reproduction policy across countries with mature welfare states? How many and what empirical types of 'reproduction regimes' can be identified today?

#### **Conceptual framework: reproductive risks, political motives and policies**

In this study, I adopt a typology-building approach that adapts the logic of welfare regime research to the domain of reproduction. A reproduction regime is defined as a set of institutional arrangements that share similarities in the scope and structural design of regulation of reproductive processes.

In comparative welfare-state research, regime differences are described along dimensions, which reflect policy aims that follow from policymakers' specific definitions of 'problems' and 'risks' (Esping-Andersen, 1999). For example, scholars assess how welfare states relieve individuals' dependence on selling their labor on the market (decommodification), how strongly social rights are tied to particular statuses (stratification), how the state relies on families to provide care (familialism), and the degree to which policies actively reduce dependencies between family members (defamilization).

In the domain of reproduction, risk definitions are also neither neutral nor fixed but contingent on time and place. What counts as a "reproductive risk" depends on historical and geographic context and is

shaped by both structural-economic conditions and cultural-normative frameworks that are often explicitly gendered. For example, economic structures determine whose reproductive outcomes are treated as matters of social policy, while prevailing moral codes and gender norms influence which and whose reproductive decisions are perceived as problematic, manageable, or legitimate.

In order to map heterogeneity in reproduction regimes, I distinguish two analytically and empirically useful dimensions of reproduction policy: Permissiveness, i.e. the statutory conditions under which reproductive services (e.g., abortion, contraception, assisted reproductive technologies) can be accessed; and cost compensation, i.e. the extent to which public provisions reduce out-of-pocket payments for reproductive services. These dimensions capture distinct policy choices: permissiveness speaks to rights, eligibility, and conditionality; cost compensation captures redistributive commitments and the financial de-facto accessibility of services. Both dimensions can politically be driven by different motives. I distinguish four main ideal-typical motives, pronatalist, eugenic, clientelist and emancipatory. Policymakers pursuing the pronatalist motive aim to install policies to increase birth rates. Those pursuing the eugenic motive follow racist ideology and seek to install policies to prevent transmission of certain genetic or social traits. Policymakers with clientelist motives want to permit reproductive decisions to particular groups, and only under specific social or moral circumstances. Emancipatory-oriented policymakers aim to install policies that enhance individuals' ability to realize reproductive decisions. These motives are not mutually exclusive in practice; historical and contemporary mixtures are common. Broadly, the field has shifted over time from state-directed pronatalist and eugenic projects toward more emancipatory orientations, although recent policy attention to low fertility has again foregrounded pronatalist arguments in some contexts.

## **Data and methods**

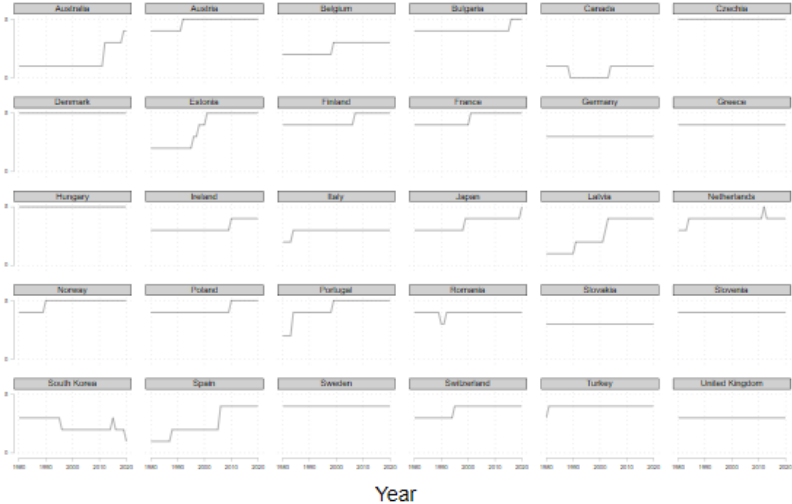
To map cross-national variation in how states regulate reproduction, I draw on the International Reproduction Policy Database (IRPD) compiled in an ongoing research project (Zagel et al., 2024). The IRPD systematically codes national-level reproduction policy for 33 high- and middle-income countries from 1980 to 2020 (including the German Democratic Republic 1980-1990 for historical comparison). The present analysis focuses first on the most recent cross-section (2019; 30 countries), and second, the development over time (not included in abstract). The analysis covers five core policy fields (abortion, contraception, medically assisted reproduction (MAR), pregnancy care, sex education), recording for each field whether national regulation exists, what is the scope of that regulation, and how access and cost compensation is structured. I operationalize permissiveness and cost compensation by selecting standardized indicators in each of the five policy fields. For permissiveness the indicators capture legal conditions (e.g., gestational limits, grounds for lawful abortion), eligibility rules (e.g., marital status, sexual orientation), and administrative barriers. For cost compensation the indicators capture whether, and to what extent, public insurance or subsidies cover services and associated expenses.

The indicators were scaled to comparable metrics within and across fields. Principal component analysis (PCA) confirms that indicators cluster into the two hypothesized latent dimensions (permissiveness and cost compensation) across fields. Field-specific composite indices were constructed (additive and weighted variants tested) to summarize permissiveness and cost compensation per field and in aggregate. I then used hierarchical clustering (Ward’s method) and k-means clustering to identify groups of countries with similar profiles on the two dimensions, testing solutions with different numbers of clusters and validating robustness with silhouette coefficients and stability checks.

**Preliminary Findings**

Most countries in the sample have some form of national regulation across the five policy fields; variation is primarily about scope and design rather than absence versus presence. Lower scores of national regulation may indicate countries’ subnational regulation of the policy fields.

**Figure 1: Additive score showing whether countries had national regulation in MAR, contraception, abortion, pregnancy care and sex education, 1980-2020**



Source: IRPD v1.0.0

**Figure 2: Countries’ positions on permissiveness and cost compensation, 1995, 2020**

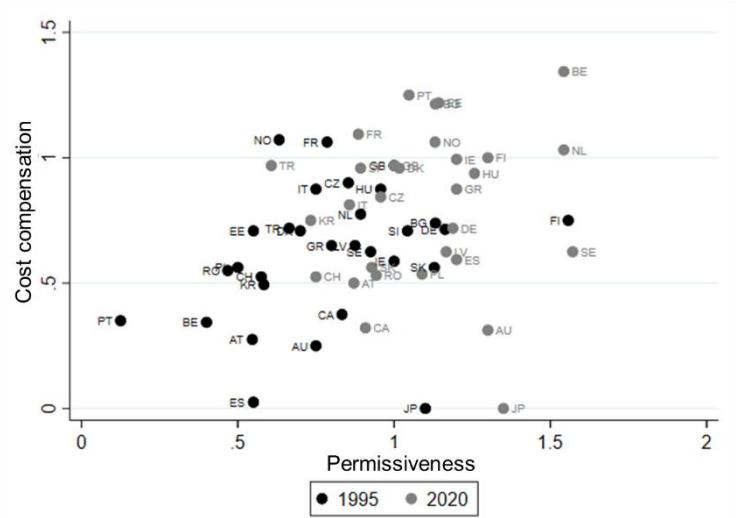


Figure 2 plots the countries on the two dimensions of permissiveness and cost compensation in 1995 and 2020. The dimensions are only moderately correlated, indicating that permissive access does not necessarily imply generous public financing, and vice versa. Some country positions resemble broader welfare state patterns, but there is also

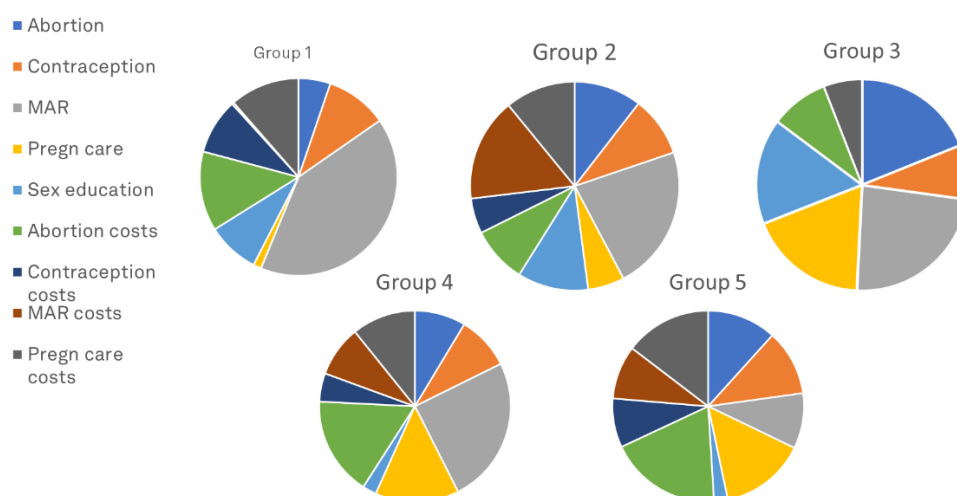
clear divergence. Change over time is pronounced in most countries. The cluster analysis identifies five empirically distinct clusters. Table 1 shows the country groupings.

**Table 1: Country groupings from cluster analysis on policy field scores**

1	2	3	4	5
Australia	Austria	Japan	Belgium	France
Canada	Czechia	Sweden	Bulgaria	Italy
Ireland	Estonia		Denmark	Slovenia
United Kingdom	Finland		Germany	Switzerland
	Hungary		Greece	Turkey
	Portugal		Latvia	
	Slovakia		Netherlands	
	South Korea		Norway	
			Poland	
			Romania	
			Spain	

As shown in Figure 3, the groups differ in whether they privilege fertility promotion (focus on MAR and pregnancy care) or individual reproductive autonomy (access to abortion, contraception, sex education).

**Figure 3: Policy emphasis by cluster**



## Literature

Almeling, R. (2015). Reproduction. *Annual Review of Sociology*, 41(1), Article 1. <https://doi.org/10.1146/annurev-soc-073014-112258>

Cole, W. M. (2025). Abortion Policies in a Polarizing World Society, 1970 to 2020. *American Sociological Review*. <https://doi.org/10.1177/00031224251335964>

Cook, L. J., Iarskaia-Smirnova, E. R., & Kozlov, V. A. (2022). Trying to Reverse Demographic Decline: Pro-Natalist and Family Policies in Russia, Poland and Hungary. *Social Policy and Society*, 22(2), 355–375. <https://doi.org/10.1017/S1474746422000628>

Esping-Andersen, G. (1999). *Social Foundations of Postindustrial Economies*. Oxford University Press.

Zagel, H. (2024). The case for comparative reproduction policy research. In *Reproduction Policy in the Twenty-First Century* (pp. 1–17). Edward Elgar Publishing. <https://www.elgaronline.com/edcollchap-oa/book/9781035324163/book-part-9781035324163-7.xml>

Zagel, H., Khan, R., Kluge, A. E., Tamakoshi, M., & Gädecke, M. (2024). Conceptualizing and measuring state regulation of reproductive processes: The international reproduction policy database. *Journal of European Social Policy*, 09589287241302962. <https://doi.org/10.1177/09589287241302962>