Stockholm Research Reports in Demography | no 2024:12



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ISSN 2002-617X | Department of Sociology

Divorce among high and low divorce-prone populations following unilateral divorce laws

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Abstract

Objective: This study analyzes heterogeneity in divorce rates after the 1987 transition from mutual consent to unilateral no-fault divorce in Finland.

Background: Marriage and divorce legislation can impact divorce rates. Some groups may be more responsive to changes in legal context than others. We propose that unilateral no-fault divorce laws either (a) increase divorce more in high or low-divorce-prone groups, or (b) increase divorce equally across these groups.

Methods: We use population-wide register individual-level data from Finland to identify salient social groups with different divorce propensity, including ethno-linguistic and religious affiliations with divergent divorce propensity, and couples of different parental status, marriage length, marital history. We use piece-wise constant exponential survival models to estimate the association with divorce proneness before and after the introduction of mutual consent divorce laws.

Results: Divorce rates increase in all studied subgroups by about 60 percent in the years following unilateral divorce. We found no support for the hypotheses that high or low divorce-prone groups are particularly responsive to divorce liberalization.

Conclusions: The findings speak towards a universal rather than heterogeneous effect of divorce law liberalization.

Stockholm Research Reports in Demography 2024:12 ISSN 2002-617X © Linus Andersson, Jan Saarela and Caroline Uggla



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Introduction

The process of divorce often entails emotional and financial hardships (Amato, 2001; Leopold, 2018). In contrast, obtaining the legal termination of marriage through divorce in most contemporary developed countries is relatively straightforward. Most countries today practice unilateral and no-fault divorce, often considered the final precipice toward fully liberalized divorce laws. However, this was not always the case (Therborn, 2004). Nationwide transitions from mutual consent to unilateral divorce laws occurred between the 1950s and the late 1980s, and the legal framework during this transitional period required significant effort to obtain a divorce (Smith, 2002).

While a plethora of empirical research has examined whether the liberalization of divorce laws influence average divorce rates (González & Viitanen, 2009; Kneip & Bauer, 2009; Wolfers, 2006), we know little about whether different groups are differentially affected by changes in divorce laws. The diversity in responses to unilateral divorce has been challenging to study empirically because most data permit only aggregate regional or country-level analysis, or come from survey materials that provide limited sub-categorization at the individual level (but see Fallesen, 2021). This lack of knowledge is unfortunate because understanding systematic patterns behind the heterogeneous effects of divorce laws is of both theoretical and practical significance. Heterogeneity in divorce behavior is essential for understanding family dynamics (Sassler & Lichter, 2020). To efficiently complement divorce liberalization with social policies and institutions that mitigate the negative impact of union dissolution for children and parents, it is valuable to know what social groups are influenced by divorce liberalization (Nieuwenhuis & Maldonado, 2018). Illuminating patterns of heterogeneous effects provide guiding priors for designing research to answer whether divorce law has a causal impact on long-term average divorce rates (Fallesen, 2021).

The aim of this study is to contribute to the understanding of the relationship between family legislation and demographic behavior by exploring the heterogeneous effects of divorce law. In particular, we aim to understand whether high or low divorce-prone groups increase their divorce risk in the years following divorce liberalization. Drawing on the unique features of Finnish administrative registers, we can overcome bottlenecks in the empirical literature and present statistically robust estimates from a full population, using data on both spouses and across qualitative spectra that are otherwise confined to surveys, including religion and ethnolinguistic groups.

We describe heterogeneity in the divorce response following the 1987 shift in Finland from mutual consent divorce, where both spouses needed to agree, to unilateral divorce law, where a single spouse could initiate divorce. This major policy change (the shift from mutual consent to unilateral divorce law (UDL), presents a useful case study as a critical juncture. The divorce process became considerably easier and entirely independent of the non-initiating spouse, with all clauses requiring a reason for divorce being dropped. While it before 1987 was technically possible to achieve divorce against the expressed will of the other spouse, it required substantial legal work and deliberations between spouses. After UDL implementation, divorce became both legally and practically guaranteed, and divorce initiation became far less time-consuming and required less effort.

We synthesize from the literature on the causal effect of divorce law (Stevenson & Wolfers, 2007) and on the antecedents of divorce (Lyngstad & Jalovaara, 2010) to identify key groups for which the effects of UDL on divorce may differ. A key feature of UDL is the increased ease of the divorce procedure. With standardized access and predictability of process and outcome, divorce becomes a more readily available default option in marital affairs. ULD thus nudges divorce rates across the board. This nudging perspective predicts a homogenous increase in divorce across social groups after the 1987 divorce law. It is reasonable to suggest that initially divorce-prone groups should be particularly influenced by the ease of the process provided by UDL, as the prospect of ever divorcing was high in this group. It is equally plausible, however, to propose that low-divorce-prone groups should react more strongly to UDL, as UDL will make divorce feasible for many in this category, who previously considered it unfeasible. Given that evidence is scarce about the underpinnings of divorce under various divorce law regimes, we take an exploratory approach to examine heterogeneity across high and low divorce-prone groups in changes in divorce following UDL.

We use individual-level Finnish register data on the full stock of couples married before unilateral divorce (N = 1,203,131). We then observe their divorce rates before and after unilateral divorce, covering the period 1983 to 1993 (105,375 divorces). We explore the divorce proneness perspective using a rich set of information unique to Finnish register data. Divorce propensity is strongly correlated with the level of investment in the marriage (Boertien & Härkönen, 2018), such as the duration of the marriage and whether couples have children or not. Childbearing marriages and long marriages have far lower divorce risk (Lyngstad & Jalovaara, 2010). In Finland, the Swedish-speaking minority has a markedly lower divorce rate

than the Finnish-speaking majority, and the population without religious denominational affiliation has a significantly higher divorce rate than those adhering to a denomination (Saarela, Kolk, & Uggla 2023; Trent & South 1992). Hence, we compare the response to UDL among (high-risk) Finnish-speaking couples with (low-risk) Swedish-speaking couples, among (high-risk) non-denominational couples with (low-risk) denominational couples, among (high-risk) childless marriages with (low-risk) parental marriages, among marriages of different durations, and between spouses with different educational levels.

Literature review

The Legal Framework of Divorce

Most countries had established legal recognition of divorce by the early twentieth century (Goode, 1993). The next significant development was the introduction of no-fault divorce, allowing couples to divorce without specifying a reason. The most recent wave of divorce liberalization, which is the central focus of this study, pertains to the right to divorce without the mutual agreement of both spouses, commonly known as unilateral divorce. Unilateral divorce laws were adopted by most countries before the turn of the millennium (Therborn, 2004). However, these laws were often preceded by doctrines of precedence that enabled courts to grant divorces against a partner's wishes, although this could entail a significant time and effort in the legal process. Therefore, it is important to distinguish between periods of de facto, de jure, and the ease of obtaining unilateral divorce (Kneip & Bauer, 2009).

In a Nordic context, Finland's divorce legislation remained restrictive for a long time, with liberalization occurring at a later stage than in neighboring countries (Sandström & Garðarsdóttir, 2018, Rosenbeck 2018). The Marriage Act of 1929 was widely considered outdated when Finland adopted mutual consent divorce in 1948 (Savolainen, 2002). Under this system, divorce required both spouses to submit a joint application citing the permanent breakdown of their marriage. Once the divorce application was accepted, divorce became effective after (and contingent upon) a one-year period of actual separation. The 1988 divorce law introduced several radical changes to this framework. The concept of establishing an "irretrievable breakdown" or any other fault of the marriage was abandoned, and there were no legal grounds for rejecting a divorce application. The requirement of a separation period was eliminated, and following the principle of divorce on demand, every divorce became effective

six months after the request was processed upon the signature of the divorcee. The principle of mutual consent was also discarded, with a written document signed by one spouse being sufficient, and this service was provided free of charge without the need for legal representation, such as a lawyer. The law went into effect in January 1988, and as the divorce process was finalized by confirming the divorce application six months after its filing, the first registered divorces under the new law took place in July 1988. The reform had garnered media attention and public debate in Finland before its enactment, but once enacted, it has remained unchanged and not subjected to commissions.

The Dynamics of Divorce Law and Divorce Behavior

Early perspectives on unilateral versus consent divorce laws rejected the idea that UDL or most other laws that liberalize the legal divorce processes, would increase divorce rates. Divorce was viewed as the outcome of negotiations between two parties (Coase, 2013). If one spouse wishes to divorce and the other does not, they will bargain for their position by means of for example alimony, property, access or restriction to children, and any other conceivable condition that apply to a continued marriage or post-divorce scenario, until the decision which fits both parties the most are achieved. UDL only changed the dynamics of bargaining, by shifting power to the divorce initiator. However, UDL did not remove the underlying bargaining dynamics, and so does not necessarily lead to a different outcome (Becker et al., 1977). However, this reasoning has been criticized for its limited contextual reliability. Many bargaining exchanges or consent to demands, such as those related to financial transactions or infidelity, may simply not be considered feasible by many spouses. Therefore, it is reasonable to hypothesize that under mutual consent or fault divorce laws, several marriages may not end in divorce simply because one party has no feasible means to convince the other to agree to a divorce.

There are several arguments for why divorce law liberalization such as UDL can increase divorce rates. Even if divorce is achievable under mutual consent laws, the effort and indirect costs involved in pursuing a joint divorce process, rather than an independent one, may hinder divorce. While UDL often require a re-affirmation of divorce decisions after an incumbent period (often six to twelve months), UDL allows pursuit of divorce filing instantaneously, shortening the distance between thought to action. The certainty of outcome provided by UDL allows the potential divorce initiator to plan for life after divorce. Moreover, UDL may shift

the default option for legal procedure away from bargaining with a spouse and towards initiating divorce. The role of default options in legal procedure is often overlooked, but can be non-negligible (Currie 2016). For example, prenuptial agreements are legally available in most countries, but they are rarely set as the default option in the legal process of establishing a marriage. Therefore, in many countries, prenuptial agreements are rarely considered (Alemanno & Sibony, 2015). Post-divorce custody arrangements are impacted by how legislation and legal practice steer, nudge, and influence presumptions about the parents' default custodian options as part of the divorce process (DiFonza 2014). Similarly, UDL presents individuals with an accessible default option to marital strain. A related mechanism is cost reduction. UDL increases ease of access to divorce by unifying, standardizing, and simplifying the procedure for initiating divorce. The costs of divorce initiation, in terms of time and money, are significantly reduced. Finally, UDL, as other liberalizing divorce laws, may operate on a macro level by making attitudes towards divorce more lenient (Martin & Parashar 2006; Andersson 2016).

These processes can, in principle, be applied to the entire population to explain the increase in divorce rates following UDL universally. However, it is not necessary that everyone is equally impacted by UDL. UDL may, for example, affect the high divorce-prone population differently than the low divorce-prone population. A key objective of policy evaluation and associated methods for causal identification is to identify the groups for which "treatment" has an effect. Whether it concerns schemas to increase pension savings or uptake of paternal leave, policies that increase access or extend the right to pursue a behavior, sometimes end up reinforcing the behavior among those already practicing it (Heckman & Vytlacil 2007). Alternatively, legal changes expand the behavior to groups who previously did not practice it. Therefore, the distinction based on divorce-propensity – whether UDL spreads divorce to new groups or intensity it among those already frivolously practicing divorce – constitutes a core and unanswered question for understanding the societal role of divorce law liberalization.

What are, then, the salient predictors of divorce? One significant source of group variation is cultural (Wang & Schofer, 2018). Divorce rates tend to differ across ethnicities, religiosity levels, and degree of religious affiliation within the same country (de Graaf & Kalmijn, 2006; Furtado et al., 2013). A second dimension of group variation involves the characteristics of the marriage itself. Divorce propensity decreases with the effort and joint investments in a marriage and over time as couples have common children and property (Boertien & Härkönen, 2018). A

third dimension of divorce is demographic behavior preceding selection into marriage. The two most well-documented factors in this category are age at marriage and previous divorce (Lyngstad and Jalovaara, 2010). Finally, socioeconomic characteristics tend to correlate with divorce. In recent decades, the general pattern is a higher divorce risk associated with relatively disadvantaged positions and a rather salient negative correlation between divorce and wealth, income, education, and health. A significant portion of the correlation between divorce and these factors is confounded by genetic and individual differences (Salvatore et al. 2018, Wolfinger 2011), which, for example, affect both educational attainment, age at first marriage, and divorce.

The (Heterogeneous) Effect of Divorce-law Liberalization on Divorce

The majority of studies to date have focused on trends in population averages following divorce law liberalization. Early correlational studies, all conducted in the U.S., showed a discontinuous increase in divorce rates following legislative changes, with some cases even indicating a lingering effect over time (Gallagher, 1973; Glenn, 1997, 1999; Goddard, 1972; Nakonezny et al., 1995; Rodgers et al., 1997, 1999; Schoen et al., 1975; Stetson & Wright, 1975; Wright & Stetson, 1978). Typically, the primary focus has been on the long-term changes and the causal impact of divorce laws. This is because an endogenous relationship between divorce legislation and divorce rates is plausible, as periods and regions with increasing divorce rates may be more likely to liberalize divorce laws. As a result, most of the evidence relies on difference-in-difference research designs that leverage variations in the adoption of divorce laws across different states and regions.

The first study to apply a causal design to this issue concluded that divorce laws had no significant effect on divorce rates in the US (Peters 1986). Subsequent to this finding, a methodological debate and a series of conflicting empirical studies emerged, with the consensus largely based on studies from North America shifting from supporting a causal effect (Allen, 1998; Friedberg, 1998; Hoehn-Velasco & Penglase, 2021; Parkman, 1992) and then returning to the conclusion that divorce laws only had a spurious influence on divorce rates (Wolfers, 2006, p. 200). Likely, substantial part of effects of divorce laws on divorce rates are due to changing attitudes and behaviors regarding divorce which preceded legal change (e.g. Kneip & Bauer, 2009). Studies from European countries, however, have found that no-fault and unilateral divorce legislation have a long-term impact by increasing divorce rates (Coelho

& Garoupa, 2006; Fahey, 2012; González & Viitanen, 2009; Kneip & Bauer, 2009). Additionally, other aspects of divorce liberalization, including expediated processing times and the abolishment of mandatory separation periods, have also been found to increase divorce rates (Bracke & Mulier, 2017; Fallesen, 2021).

Empirical research that focuses on whether divorce propensity mediates the effect of UDL on actual divorce outcomes is limited. Nakonezny and colleagues (1995) utilized variation in implementation of divorce laws across US states to study its effect on divorce rates, and found state religiousity to have a positive mediating effect of divorce laws on divorce. In an individual level sample of eleven EU countries, the enforcing effect of divorce law liberalization was found to increase with the duration of marriage and with the presence of children (Kneip, Bauer & Reinholt 2014). Among the few studies designed to specifically analyze heterogeneous effects of divorce laws, Fallesen (2021) founds that removing mandatory separation as a condition for divorce in Denmark increased divorce rates most among the less educated. In sum, the bulk of knowledge on heterogeneous effects are auxiliary findings from studies that focus on identifying average effects, and are often under-powered for modelling interaction effects.

This study uses population covering individual level data to explore heterogeneity in the effects of UDL in Finland across a number of known dimensions of divorce characteristics: religious denomination, ethnicity, marital duration, marriage order, the presence of children in the household, and age at marriage. Our null hypothesis is that there is no systematic correlation between group divorce-risk and change in divorce rates after the 1987 UDL act in Finland. We evaluate the presence of four potential patterns: (i) a systematically divorce-increasing effect the lower the pre-UDL divorce risk, (ii) a divorce-decreasing effect the lower the pre-UDL divorce risk, and (iv) a divorce-decreasing effect the higher the pre-UDL divorce risk, (iv).

Data and Methods

Data

Our analyses use individual-level Finnish registers derived from various administrative records, which are linked using anonymized personal identification numbers. Vital events, including marriages, divorces, deaths and moves abroad are measured in half-year intervals;

January-June (H1) and July-December (H2), respectively. The civic records encompass all recorded marriages and divorces. Our primary unit of analysis is marital couples, and the population of interest comprises all marital unions.

We are specifically interested in understanding the heterogeneous effects of the introduction of unilateral divorce on the divorce behavior of marriages that were formed under a bilateral divorce regime. We therefore restrict our analyses to marriages in place from January 1983 until December 1987, that is, just before the implementation of unilateral divorce in 1988. Included are thus all marriage cohorts observed during this period. We observe divorce risks in the period 1983-1993, that is, five years before the implementation of unilateral divorce, and five years after the implementation in 1988. These data include 1,203,131 couples and 105,375 divorces. Table 1 gives the inter-quantile range, mean, and median of marriage cohort, birth cohort of the husband and wife, respectively, and marriage duration by end of 1987; because we cover all marriages amassed up to 1987 the total sample contain more high than low duration marriages by 1987.

	Marriage cohort	Birth cohort (men)	Birth cohort (women)	Marriage- duration by end-1987
IQR	1953; 1977	1926; 1950	1928; 1952	10.5; 34.5
Mean	1964.5	1937.5	1939.8	23.0
Median	1966	1940	1942	21.5

Table 1. Descriptive statistics of marriage cohorts, birth cohorts, and marriage duration.

Analytical strategy

We employ discrete-time survival analysis to estimate changes in the conditional probability of divorce before and after the implementation of unilateral divorce law. Our dependent variable is time until divorce. Couples who experience the death of a spouse or emigration are right-censored at the time of the event, and so are also those who remain married until the end of the observation period. Our setup, in which couples are observed from entry into the observation window in 1983-1987, implies an overrepresentation of long marriage durations. We have therefore aggregated marital duration into four time-intervals: zero to five years, six to ten years, eleven to fifteen years, and sixteen years and above.

To examine heterogeneity in the response to divorce liberalization, we draw on previous research on divorce predictors to identify characteristics that consistently and significantly have been found to influence divorce risks. We rank these factors based on the risk of divorce in the pre-UDL period of 1983-1987. We then compare the divorce risk associated with these predictors before and after the introduction of UDL. Specifically, we consider marital duration (referred to as *predictor a* below), presence and age of children in the household (*predictor b*), spouses' religious denomination (*predictor c*), spouses' ethnolinguistic group (*predictor d*), wife's age at marriage (*predictor e*), and spouses' educational level (*predictor f*).

The primary independent variable of interest is calendar time before and after the introduction of unilateral divorce law. This variable, referred to as *period* below, is grouped into six periods in order to fit the data best: 1983H1 to 1986H2 (preceding the divorce law), 1987H1 to 1987H2, 1988H1, 1988H2, 1989H1 (adjacent to the divorce law), and 1989H2 to 1993H2.

We model group heterogeneity in the log hazard of divorce, $log\lambda_{ij}$, for couple *i* in period *j* before and after unilateral divorce as a piece-wise exponential function, where α_j is the intercept and $\delta period_{ij} \times predictor x_{ij}$ represent the interaction between period and a predictor variable:

$$log\lambda_{ij} = \alpha_j + \beta period_{ij} + \gamma predictor a_{ij} + \delta period_{ij} \times$$

predictor $a_{ij} + \theta predictors b$ to $f_{ij} + \theta education + \mu urbanization$. (Eq. 1)

For each predictor variable, the category with the highest pre-UDL divorce risk is set as baseline. The estimates for the effects on the log hazard of divorce are thus allowed to vary over *period*. With regard to each predictor variable *predictor x*, we estimate a model that includes the interaction between the given predictor variable (*a* for the first set, *b* for the second set, etc) and period, plus main effects of the other predictor variables (*b* to *f* for the first set, *a* and *c* to *f* for the second set, etc). We adjust also for main effects of couples' educational composition and degree of urbanization. We exponentiate the estimates to present the results as hazard ratios. In alternative specifications, we fit our models without adjusting for educational composition and degree of urbanization, and without main effects of the other predictors (Appendix Tables A2 and A3). We present the exponentiated covariates (hazard

ratios) of the interaction effects in the result section, and report full output in the supplemental material.

The predictor variables are defined as follows. Marital duration groups the current marriage into four categories based on its length: (i) zero to five, (ii) six to nine, (iii) ten to fifteen, and (iv) sixteen years or more. Children in household measures whether the spouses have children and the age of the youngest child in the household in five categories: (i) no children, and whether the youngest child is (ii) at most three years old, (iii) four to seventeen, or (iv) eighteen years or older. *Marriage history* distinguishes between whether (i) both spouses are in their first marriage or (ii) one or both had been married before. Wife's age at marriage is a categorical variable that separates women who married at (i) age 20 years or younger, (ii) 21-23 years, (iii) 24-27 years, and (iv) 28 years or older. Denomination measures the religious denomination of both spouses. Some denominations have very few members. We distinguish between five categories: (i) couples where both belong to the Evangelic-Lutheran state church, (ii) couples where neither has a denomination, (iii) couples where both had other religion, and (iv) couples where spouses had discordant religious affiliation (including non-affiliation). Ethnolinguistic group is based on each spouse's unique mother tongue. Finnish and Swedish are the two official languages of Finland. Swedish-speaking Finns form a minority in number. We group couples into four categories: (i) both are Finnish-speaking, (ii) both are Swedishspeaking, (iii) one is Finnish-speaking and the other is Swedish-speaking, and (iv) any other combination (including other mother tongue). Descriptive statistics of all variables can be found in Appendix Table A1.

The estimation of interest pertains to whether positive or negative predictors of divorce systematically change towards higher or lower divorce risk following the introduction of unilateral divorce laws. For example, each increase in the wife's age at marriage may lead to a lower divorce risk, with the youngest marital age as the baseline. In the model, a heterogeneous effect could be demonstrated as an increase or decrease in the divorce risk at each category for age at marriage after the introduction of UDL. Conversely, the absence of an additive effect of age at marriage following the introduction of UDL suggests a universal effect or non-effect.

Results

Figure 1 displays the divorce rate per half-year for the study population. In the five years leading up to the implementation of Unilateral Divorce Law (UDL), the divorce rate remained stable at approximately 0.007 divorces per thousand couple-years. Following a minor spike in 1987 (coinciding with the announcement of the impending divorce law change), the divorce rate rapidly surged to 0.016. After the first year of UDL implementation in 1988, the divorce rate decreased but plateaued at around 0.011 for the subsequent four years. In summary, the short-term overall impact of the UDL law on divorce rates appears to be substantial, corresponding to a 60% increase in divorce rates from the pre-UDL period.



Figure 1. Divorce rate per half-year in Finland in 1983 to 1993.

Table 2 provides crude divorce rates from the aggregate period before and after UDL, broken down by marriage cohort characteristics. Almost all groups experienced an increase in divorce rates.

Table 2.	Crude separatio	on rates before a	and after the	implementation	n of universal	divorce
laws, sel	lected character	istics.				

	Separ	Separation rate		
	1983-1987	1988-1993		
Language group				
Both Finnish	0.0063	0.0072		

Both Swedish	0.0028	0.0033
Swedish & Finnish	0.0077	0.0097
Any other combination	0.0148	0.0144
Denomination		
Both Evangelic-Lutheran	0.0056	0.0064
Both no religion	0.0091	0.0106
Both other religion	0.0035	0.0035
Discordant	0.0093	0.0110
Marriage order		
Neither previously married	0.0056	0.0064
One or both previously married	0.0138	0.0164
Age at marriage (wife)		
20 years or less	0.0076	0.0105
21-23 years	0.0061	0.0069
24-27 years	0.0055	0.0054
28 or more years	0.0058	0.0057
Marriage duration		
0-5 years	0.0132	0.0122
6-9 years	0.0123	0.0134
10-15 years	0.0093	0.0096
16 or more years	0.0039	0.0042
Children in household		
No children	0.0074	0.0081
Ages 0-3	0.0074	0.0080
Ages 4-17	0.0095	0.0101
Age 18 or higher	0.0029	0.0032

Figure 2 gives the pre-ULD hazard ratio of divorce, categorized by each divorce predictor, and ordered from the most divorce prone to the least divorce prone category for each predictor. For the ethno-linguistic predictor, the most divorce prone are mixed marriages of Swedish and Finnish speakers, followed by couples where at least one spouse has a mother tongue other than Finnish or Swedish, then unilingual Finnish couples, and finally unilingual Swedish couples. For religion, couples with discordant religious affiliation are the most divorce prone, followed by couples in which both spouses have no affiliation. Evangelic-Lutheran couples have lower divorce rate, and the lowest is found for couples in which both have other religion. Couples in which at least one of the spouses had been previously married have much higher divorce risk than those consisting of couples in their first marriage. Age at marriage and divorce are inversely related, and so are also marriage duration and divorce. Couples with children aged at least 18 years, and those with small children.

In summary, the divorce risk varied considerably across marital and social groups before the implementation of UDL. Our research question is whether UDL increased the divorce risk across the board, or was it primarily raised among high prone or low prone subpopulations?



Figure 2. Pre-UDL divorce hazards (1983-1986). Estimates come from a model with main effects of all six variables, plus educational level and degree of urbanization.

Figure 3 presents the exponentiated coefficients from interactions between predictors and calendar periods on the risk of divorce, with the calendar period 1983-1986 serving as the baseline. In all predictor categories, the category with the highest (pre-UDL) divorce risk (as seen in Figure 2) is the baseline. Brighter colors indicate a lower level of pre-UDL divorce risk (as seen in Figure 2).

If the impact of UDL on divorce behavior was consistent across major sub-populations, we would expect all categories to overlap and hover around HR = 1. If the effect of UDL on divorce behavior was linked to (pre-UDL) divorce propensity for a given group, we would anticipate a systematically increasing or decreasing coefficient in line with that group's pre-UDL divorce risk. Specifically, one would expect the following. (i) For a systematically divorce-increasing effect the lower the pre-UDL divorce risk, point estimates should line up above HR = 1 in the order dark-red to bright yellow. (ii) For a systematically divorce-decreasing effect the lower the pre-UDL divorce risk, point estimates should line up below HR = 1 in the order dark-red to bright-yellow. (iii) For a systematically divorce-increasing effect the higher the pre-UDL divorce risk, point estimates should line up below HR = 1 in the order dark-red to bright-yellow. (iii) For a systematically divorce-increasing effect the higher the pre-UDL divorce risk, point estimates should line up above HR = 1 in the order dark-red to bright-yellow. (iii) For a systematically divorce-increasing effect the higher the pre-UDL divorce risk, point estimates should line up above HR = 1 in the order bright-yellow to dark-red. (iv) For a systematically divorce-decreasing effect the higher the pre-UDL divorce risk, point estimates should line up above HR = 1 in the order bright-yellow to dark-red. (iv) For a systematically divorce-decreasing effect the higher the pre-UDL divorce risk, point estimates should line up above HR = 1 in the order bright-yellow to dark-red.

Across all plots in Figure 3, none of the patterns that would suggest systematic heterogeneity in effects of UDL (described above as pattern i-iv) appear as statistically significant interaction effects. An partial exception to this is marital history. First marriages have a higher increase in the divorce risk compared to higher-order marriages across the periods 1986-1988 and 1986-1988, but not for periods after that. Even if solely focus on point averages and disregard confidence intervals, there is no sign of lasting systematic heterogeneity. Divorce risk increased with lower marital duration-related risk in 1986-1988 only; divorce risk increasing with lower age at marriage-related risk in the first half of 1989 only; divorce risk increasing with higher denomination-related risk in 1986-1988 only.

No pattern suggesting heterogenous effects was found when interacting period with the two control variables educational level and urbanization (Appendix Figure A1). The lack of systematic responses to divorce law in terms of divorce proneness where further supported in different model specifications, where the interaction effects were specified either without adjusting for control variables, or without adjusting for main effects of other predictors (Appendix Table A2-A3).

In summary, across the six predictors examined for the complete populations of marital cohorts in Finland, there was no support for the hypotheses that the effect of UDL would differ by group-average divorce-proneness.



Figure 3. Coefficients (hazard ratios) from interactions between divorce predictors and calendar period (baseline = Jan 1983-Dec 1986). N = 1,203,131 couples, divorces = 105,375. Adjusted for Educational level, Region, and main effects of covariates a-f: marital duration, children in household, age at marriage, marriage history, religious denomination and ethnolinguistic group.

Discussion

Divorce and marriage laws have liberalized in slow but decisive steps across the twentieth and twenty-first centuries. In parallel, divorce has become salient. It is today generally considered that divorce laws, particularly laws that regulate spousal consent of divorce, indeed result in higher divorces in the short term and may also increase divorce intensity in the long run. A common caveat in these studies has been that divorce laws – just as most policy changes – can influence the behavior of some but not all. The knowledge of the heterogeneity in response to divorce laws is, however, limited. This study has examined the general premise of universal group-level response to divorce law liberalization. In particular, we consider whether divorce behavior following divorce liberalization differed across group- and couple-level characteristics correlated with high or low divorce risk. To examine this, we used the case of Finland, one of the last countries in the Western world to implement unilateral divorce laws.

Informed by previous research on divorce predictors, we used Finnish register data to operationalize group characteristics with markedly different divorce risks for complete population marriage cohorts and observed their divorce risk after the implementation of the 1987 divorce acts, which implemented unilateral divorce in Finland. Our measures of group-level divorce-proneness included different dimensions, from religious and ethnolinguistic affiliation to couple experiences and household composition.

In agreement with much previous research, we found a strong general increase in divorce after the new law took place (Kneip & Bauer, 2009). However, we did not find any indications that divorce laws would result in systematically higher, or lower risk of divorce for high or low divorce-prone groups. Despite drawing on more than one million marriages and over one hundred thousand divorces, there were rarely any significant differences across groups of different divorce proneness.

The conclusions from study are informative in respect to policy concerned about the effects of divorce laws. For example, one argument for rolling back unilateral no-fault divorce is that unilateral divorce mainly affects "weak" marriages. This is not what we find, however. Rather the findings speak to the general tendency of divorce: regardless of religion or length of the marriage, divorces increase when the need for spouses to consent is no longer required.

It is important to note that while our findings do not support the notion that divorces are affected differently across groups, the increased number of divorces may very well have both heterogeneous and substantial implications. For example, even if divorce liberalization would cause a large number of divorces evenly distributed in the population, its causal effect on child poverty would be highly heterogeneous, because couples at risk of poverty are likely to be overrepresented among those who surpass the poverty threshold following divorce. Another important consideration is the heterogeneous consequences of divorce law liberalization in the long run. It may, for example, be that divorce laws propel a culture of divorce, influencing the future context of marital and divorce decisions. These particular effects might leave ripples that are stronger for, say, those of religious denomination than denomination-less in our data. Relatedly, future work would benefit from identifying divorce propensity from individual rather than group-level characteristics. For these ventures, our study provides a first overview of the net effects of heterogeneity in responses to divorce law.

Acknowledgements

We acknowledge support from the Swedish Research Council (grant number 2020–06426). This research was supported by the Åbo Akademi University Foundation's funding of the DemSwed Internal Centre of Excellence 2019-2024.

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Appendix

Language group 975,139 91,43 10,272,847 Both Finnish 52,342 4,91 556,582 Swedish & Finnish 34,414 3,23 359,852 Any other combination 4,685 0,44 44,594 Denomination 871,995 81,76 9,161,446 Both no religion 53,149 4,98 578,220 Both other religion 8,894 0,83 88,334
Banguage group 975,139 91,43 10,272,847 Both Finnish 52,342 4,91 556,582 Swedish & Finnish 34,414 3,23 359,852 Any other combination 4,685 0,44 44,594 Denomination 871,995 81,76 9,161,446 Both no religion 53,149 4,98 578,220 Both other religion 8,894 0,83 88,334
Both Finnish 57,155 10,272,077 Both Swedish 52,342 4,91 556,582 Swedish & Finnish 34,414 3,23 359,852 Any other combination 4,685 0,44 44,594 Denomination 871,995 81,76 9,161,446 Both no religion 53,149 4,98 578,220 Both other religion 8,894 0,83 88,334 Discordant 122,542 12,43 1,405,876
Swedish 32,542 4,91 550,562 Swedish & Finnish 34,414 3,23 359,852 Any other combination 4,685 0,44 44,594 Denomination 871,995 81,76 9,161,446 Both no religion 53,149 4,98 578,220 Both other religion 8,894 0,83 88,334
Any other combination 4,685 0,44 44,594 Denomination 871,995 81,76 9,161,446 Both no religion 53,149 4,98 578,220 Both other religion 8,894 0,83 88,334 Discordant 122,542 12,43 1,405,876
Any other combination 4,085 0,44 44,394 Denomination Both Evangelic-Lutheran 871,995 81,76 9,161,446 Both no religion 53,149 4,98 578,220 Both other religion 8,894 0,83 88,334 Discordant 132,542 12,43 1,405,876
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Both no religion 53,149 4,98 578,220 Both other religion 8,894 0,83 88,334 Discordant 122,542 12,42 1,405,876
Both no religion 53,149 4,98 578,220 Both other religion 8,894 0,83 88,334 Discordant 132,542 12,43 1,405,876
Both other religion 0,094 0,05 00,554 Discordant 122,542 12,42 1,405,976
Discoluant 152,542 12,45 1,405,870
Marriage history
Neither previously married $983,573$ $92,22$ $10,402,302$
One or both previously married 83,007 7,78 831,574
Age at marriage (WITe)
20 years or less 240,093 22,51 2,555,696
21-23 years 340,443 31,92 3,610,004
24-27 years 276,855 25,96 2,910,578
28 or more years 209,189 19,61 2,157,598
Marriage duration
0-5 years 132,209 12,40 1,034,933
6-9 years 129,195 12,11 1,388,608
10-15 years 132,267 12,40 1,424,044
16 or more years672,90963,097,386,291
Age of youngest child in household
No children 123,503 11,58 1,139,368
Ages 0-3 184,763 17,32 1,775,420
Ages 4-17 362,118 33,95 3,926,959
Age 18 or higher 396,196 37,15 4,392,130
Couples educational level
Primary/Primary 387,701 36,35 4,123,641
Primary/Secondary 236,697 22,19 2,487,086
Both secondary 129,455 12,14 1,321,372
Primary/Tertiary 85,003 7,97 896,136
Secondary/Tertiary 114,327 10,72 1,193,070
Both Tertiary 113,397 10,63 1,212,570
Degree of urbanization
urban 573,210 53,74 6,053,706
semi-urban 141,804 13,30 1,592,064
rural 351,566 32,96 3,588,106

Table A1. Descriptive statistics of included variables.

	HR	95%	ó CI
Language group (reference = Swedish & Finnish)			
Both Finnish	0,77	0,73	0,82
Both Swedish	0,41	0,37	0,45
Any other combination	1,40	1,21	1,60
Denomination (reference = Discordant)			
Both Evangelic-Lutheran	0,64	0,62	0,66
Both no religion	0,95	0,91	1,00
Both other religion	0,32	0,26	0,40
Marriage history (reference = One or both previously married)			
Neither previously married	0,44	0,43	0,45
Age at marriage (wife) (reference = 20 years or less)			
21-23 years	0,61	0,59	0,62
24-27 years	0,46	0,44	0,47
28 or more years	0,50	0,48	0,52
Marriage duration (reference = $0-5$ years)			
6-9 years	1,11	1,07	1,15
10-15 years	0,80	0,77	0,83
16 or more years	0,37	0,36	0,38
Age of youngest child in household (reference = Ages 4-17)			
No children	0,83	0,80	0,86
Ages 0-3	0,78	0,76	0,81
Age 18 or higher	0,34	0,33	0,35

Table A2. Calendar period and predictor effect from models without adjusting for main effects of other predictors. Separate models per predictor variable. 95% confidence intervals.

	HR	95%	6 CI
Language group (reference = Swedish & Finnish)			
Both Finnish	0,82	0,80	0,85
Both Swedish	0,50	0,47	0,52
Any other combination	1,04	0,97	1,12
Denomination (reference = Discordant)			
Both Evangelic-Lutheran	0,63	0,62	0,64
Both no religion	0,92	0,90	0,95
Both other religion	0,35	0,32	0,38
Marriage history (reference = One or both previously married)			
Neither previously married	0,47	0,46	0,48
Age at marriage (wife) (reference = 20 years or less)	1		
21-23 years			
24-27 years	0,67	0,66	0,68
28 or more years	0,47	0,47	0,48
Marriage duration (reference = $0-5$ years)	0,32	0,31	0,33
6-9 years			
10-15 years	0,85	0,84	0,87
16 or more years	0,49	0,48	0,50
Age of youngest child in household (reference = Ages 4-17)	0,26	0,26	0,27
No children			
Ages 0-3	0,79	0,77	0,80
Age 18 or higher	0,45	0,44	0,46
Language group (reference = Swedish & Finnish)	0,46	0,45	0,47

Table A3. Calendar period and predictor effect from models without adjusting for main effects of education or degree of urbanisation. Separate models per predictor variable. 95% confidence intervals. Hazard ratios.



Figure A1. Coefficients (hazard ratios) from interactions between divorce predictors and calendar period (baseline = Jan 1983-Dec 1986). Marriage cohorts of 1971 to 1987. N = 1,203,131 couples, divorces = 105,375. Adjusted for main effects marital duration, children in household, age at marriage, marriage history, religious denomination and ethnolinguistic group.

Stockholm Research Reports in Demography Stockholm University, 106 91 Stockholm, Sweden www.su.se | info@su.se | ISSN 2002-617X



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