

The Role of Family Law in Shaping Variation in Family Behavior Insights from the Swiss-French Border Region around Geneva

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Abstract

It is usually difficult to separate the impact of family legislation from other factors that affect family formation behavior. This paper deals with a quasi-natural experiment setting that potentially allows to demonstrate that family legislation can indeed influence the decision whether to have children within or outside marriage. We look at the Swiss-French border region around the Swiss city of Geneva. This area is not only economically, but also linguistically highly integrated as French is the dominant language on both sides of the border. Nevertheless, the border line between Switzerland and France in this region has since the 1970s emerged as a clear non-marital fertility divide. In the 1990s, the non-marital birth ratio in the French border regions was with 40% four times higher than in the Swiss canton of Geneva. It has been argued that the conservative Swiss family law plays an important role for understanding this divide, as it puts particularly Swiss fathers of children born outside marriage at a legal disadvantage. We use individual-level register data for the Swiss canton of Geneva to study family formation shifts after a recent Swiss family law reform that strengthened the rights of such fathers. Our analysis shows that after the reform particularly among couples with a Swiss father the likelihood of a first birth outside marriage increased. This supports the view that family legislation can indeed influence family formation behavior and can contribute to our understanding why Switzerland is lagging behind in the recent surge of non-marital fertility in Europe.

Introduction

In country-level comparative studies it is usually very difficult to disentangle the impact of family law on family behavior from other factors such as social (cultural) norms or economic circumstances. To this contributes that the development of family law is usually strongly linked to prevailing social norms in the respective societies (Friedman 1969). This study aims to make use of a quasi-natural experiment setting potentially allowing us to get a clearer understanding of how family legislation can affect family formation behavior. We focus on the border region between Switzerland and France around the Swiss city of Geneva. Since non-marital fertility started to surge in France in the 1970s, France and Switzerland have been characterized by stark differences in non-marital fertility levels (see Figure 1). In the late 1990s about 40% of all children in France were born outside of marriage, while in Switzerland non-marital fertility was still marginal with less than 10% of all births being to non-married mothers. Over the last decades, also Switzerland registered a rising non-marital birth ratio - but with slightly above 20% this ratio is still quite low in a European-wide comparison (Klüsener, Perelli-Harris, and Sánchez Gassen 2013). In the scientific discussion it has been argued that peculiarities of the Swiss family law are likely to be highly relevant for understanding why non-marital fertility levels are still rather low in Switzerland. For a long time, Swiss family law discouraged childbearing within cohabitation, as it created for unmarried fathers administrative hurdles to establish parental authority over their children and to pass down their surname (see, e.g., Le Goff and Ryser 2010). These aspects were substantially eased in the 2014 Swiss family law reform. In France, on the other hand, policies might have unintentionally encouraged non-marital childbearing. It has been suggested that the introduction of single mother benefits in 1976 may have been the initial starting point for the increase of non-marital fertility in France (see, e.g., Knijn et al. 2007).

[Fig. 1 about here]

In our study we make use of the fact that the non-marital fertility differences between France and Switzerland are not just differences in national averages, but also manifest themselves in a clear non-marital fertility divide running along the Swiss-French border. If we focus on the Swiss-French border region around the Swiss city of Geneva, the trends in the French regions Ain and Haute-Savoie largely followed the national development in France (see Fig. 1). In the late 1970s, when non-marital fertility started to increase in France, also the Swiss canton Geneva¹ experienced a slight upward trend which brought its non-marital fertility ratio above the Swiss national average. However, since then it has rather developed in parallel to the ratio registered for Switzerland as a whole, but just at a slightly higher level. While we have witnessed the emergence of a stark non-marital fertility divide along the Swiss-French border, Geneva and the neighboring French departments are overall highly integrated. The canton of Geneva almost constitutes a Swiss exclave inside France. Only in the northeast of the canton there is a small corridor connecting it to the other Swiss cantons. Geneva belongs to the French-speaking part of Switzerland. This implies that language is not a barrier for social change processes that affect social norms and attitudes in the bigger Geneva region which includes both Swiss and French territories. Also in economic terms,

¹ When we refer in the following to Geneva, we talk about the canton. This canton comprises next to the city of Geneva 44 other municipalities that are all part of the metropolitan area Geneva-Lausanne (French: *Métropole lémanique*). If we discuss aspects directly related to the city of Geneva, this is explicitly mentioned.

Switzerland and France are highly integrated in this border region. Several ten thousand people commute from France to Geneva for work on a daily basis (see Kouti and Ramirez 2009: 4). This makes it highly unlikely that ideational changes occurring in the French border region would not also reach the population of Geneva. Related to this it is also relevant to point out that over the last decades many citizens of Geneva have moved to the French border regions to benefit there from lower housing costs (INSE 2010). Religious differences are as well unlikely to be an important determinant, as despite the Calvinist history of Geneva Catholics form today by far the biggest religious group in the canton. This makes it very likely that the differences in French and Swiss family law are of high relevance for understanding the long-standing non-marital fertility divide along the Swiss-French border that surrounds most of Geneva. This is also underlined by data from the European Social Survey. The third wave of 2006 included the question whether it is alright for parents to have children outside of marriage. The share of people who approve or strongly approve this behavior were in France (44,9%, N=1,986) not much different from the Swiss *Region Lemannique* (39.2%, N=340), which includes next to the canton of Geneva also the canton Vaud and the more conservative canton Valais/Wallis. The share who disapprove or strongly disapprove are somewhat higher in the *Region Lemannique* (25.4%) compared to France (14.4%), but these differences are still relatively small in contrast to the differences we witness in behavior.

Another reason why our study area is particularly well-suited to investigate the impact of family legislation on family formation decisions stems from peculiarities both of the family legislation and of the population of the canton of Geneva. Particularly Swiss nationals were and are disadvantaged by the Swiss family legislation as at least for nationals of EU countries also the legislation of the home country could apply. This provided us with motivation to look at family formation variation dependent on the nationality of the father or the mother, and how patterns changed after the implementation of the 2014 reform. Here we benefit from the fact that more than two fifths of Geneva's adult population are foreigners, and another fifth naturalized citizens. Also double nationalities are quite wide-spread. The individual-level Swiss register data, to which we have access to for the period 2011-2015, allow us to conduct such analyses. In addition, we have individual-level information on marital status, age, income, and duration of residence, among other aspects. The results of our analysis provide strong support for the view that family legislation can affect family formation behavior, and that the Swiss family law is highly relevant for understanding why Switzerland is rather lagging behind in the recent surge in non-marital fertility in Europe.

Background

Across Europe, non-marital fertility had rather been on a downward trajectory in the second half of the 19th and first half of the 20th centuries (Shorter et al. 1971, Klüsener 2015). This trend led to the "Golden Age of Marriage" in the 1950s and 1960s, where almost all births were to married parents. But since the 1960s most European countries registered stark rises in childbearing outside marriage, typically driven by increases in childbearing in cohabitation (Perelli-Harris et al. 2012). However, we witness stark variation across Europe in this trend (Klüsener et al. 2013), and it has been argued that differences in family legislation might contribute to existing disparities between countries (e.g. Perelli-Harris and Sánchez Gassen 2012). However, even though research on the interplay between family legislation and family formation behavior has a long history (e.g., Leggingwell 1892; Knodel 1967), it is frequently difficult to pinpoint the

exact role of family legislation. To this contributes that family formation processes which comprise union formation and the decision to have a(nother) child are affected by a multitude of processes both at the individual and contextual level (see, e.g., Shorter 1971; Perelli-Harris and Sánchez Gassen 2012; Klüsener and Goldstein 2016; Kok and Leinarte 2015). In the political sphere, also other policies including those which strengthen the economic independence of women can play a role (Lappegård et al. 2018). Neyer and Andersson (2008) have argued that effects can probably best be isolated if analyses focus on periods in which drastic changes in family legislation occur. To such periods they refer to as “critical junctures”. But also such a research design might face limitations if one is interested in disentangling the role of social norms and policies on family formation behavior. Changes in family legislation usually do not occur in isolation of social change. Thus, for example, the introduction of more liberal family legislation in a country might not only spur changes in behavior, but might also reflect that views on appropriate family formation behavior had recently started to change in a particular country (Perelli-Harris and Sánchez Gassen 2012). The 2014 Swiss family law reform, which is in the focus of this paper, extended parental authority to both parents independent of their marital status. Before the reform, only married fathers automatically received parental authority, which also lasted in the event of a divorce. For children born outside marriage, just the mothers received automatically parental authority even if the fathers had been recognized as fathers by the Swiss authorities. To extend the parental authority to the father, non-married parents had to submit an application to the child protection authority. This application depended upon the goodwill of the mother, who could refuse granting parental authority to the father. If fathers have parental authority, they can also pass their surname to a child born outside of marriage.

Next to contextual aspects also individual-level characteristics play an important role for understanding variation in non-marital fertility. These include the age of the mother and the father, where the likeliness of a non-marital birth frequently follows a U-shaped pattern. The risk of a non-marital birth is usually the highest at very young ages where predominantly first births are occurring. Then the risk decreases and is lowest in those ages where most of the childbearing is concentrated, before it slightly increases again at the end of the reproductive life span (e.g., Lappegård et al. 2018). Whether and how social status is associated with childbearing outside of marriage has been subject to dispute. Based on the Second Demographic Transition framework it has been argued that the high educated might be at the forefront of increases in non-marital childbearing as they are most likely to develop higher order needs and high levels of individualization (Lesthaeghe and Surkyn 2002). Contrary to this, the pattern of disadvantage argument suggests that particularly low educated people and individuals with few resources might be the ones who first adopt the new behavior (Upchurch et al. 2001; Perelli-Harris et al. 2012). For many high-income countries, a negative social status gradient in non-marital childbearing has been reported (see Perelli-Harris et al. 2010), so that the available individual-level evidence rather leans towards a pattern of disadvantage perspective. This, however, does not imply that the Second Demographic Transition framework is completely irrelevant, as e.g. less-religious people tend to be forerunners (Thornton et al. 1992).

The role of nationality is heavily related to the interplay with the county context in which persons of a specific nationality are embedded. The degree to which non-marital childbearing is perceived as a deviating behavior varies across populations around the globe. This might drive to some degree variation in the risk of having a child outside of marriage. However, for people living abroad there exist a number of motivations to be married. Foreigners with nationalities that do not automatically grant them residence right

in the country they are living in, who are partnered with a national of that country, can usually get through marriage better access to residence and/or naturalization rights (Wallace Goodman 2010). Also for individuals in couples that just consist of foreigners it might be beneficial to be married, as this might allow transferring residence status rights from one partner to the other (e.g. through family reunion rights) (see also Koopmans et al. 2012). This causes a challenge in our analysis, as not only Swiss fathers are facing incentives to marry through the legal disadvantages they face in case their children are born outside marriage, but also non-Swiss nationals for other reasons. We thus took great care to develop a research design that allows us to control for this potential bias in our analysis.

Data and Methods

Our main analyses focus on data from the birth register of Geneva for the period 2011-2015. Our sample is limited to first births (of mothers) as the decision whether or not to marry is more relevant for these births compared to subsequent births. From the birth register we can obtain information on whether the birth occurred within or outside marriage. Next to the information on the parents provided in the birth register (nationality, age, date of marriage), we are able to add additional attributes from the population register. This latter information cannot be obtained exactly for the birth date, but for the end of the year prior to the year in which the birth occurred (31st of December). It includes annual income and date of arrival, among other aspects. As these additional characteristics are for most individuals unlikely to be subject to big fluctuations over time, we believe that the limitation to only be able to obtain them for the end of the prior year is unlikely to cause substantial bias in our analysis. After performing the matching, we excluded (1) all (first) births with no registered father or mother in the birth register (n=268), (2) those where the mother and/or the father could not be linked with the population register at the end of the previous year (n=2,139) (3) and all births where the father and/or the mother just arrived the previous year in Switzerland (n=1,255). This left us with a dataset with 8,834 births.

Next to some descriptive statistics, our multivariate analysis consists of two sets of four logistic regression models. The first set looks at all births, while with the second set we attempt to account for the challenge that not only Swiss fathers face incentives to have their children within marriage, but also foreign nationals. In order to address this, we decided to create a subsample which only includes those first births where the couples were not married six months before the birth of the first child. This reduces our sample from 8,834 to 3,731 births. As we exclude births in which the father/mother arrived in the previous year, we believe that for these births incentives to marry in connection with the move to Switzerland are less relevant. Or at least when we apply our interaction effects to contrast behavior before and after the 2014 reform, we do not expect the incentives to marry related to living as a foreigner in Switzerland (or the selectiveness of foreigners in terms of prior union formation trajectories) to differ before and after the reform.

The first model of each set of models contains all personal control variables (nationality, age, and income of both the mother and the father). In the second model we add a dummy controlling for whether the birth occurred before or after the 2014 reform. The Swiss family legislation reform was implemented in July 2014, and we expect that most prospective parents in Switzerland were informed about the upcoming changes beforehand. We thus assign the reform dummy to all births that occurred after the

implementation of the reform on the 1st of July 2014 a 1, and 0 otherwise. In the third model we implement an interaction between the nationality of the mother and the reform dummy, while in the fourth model we drop this interaction again and implement instead one with the nationality of the father. This will allow us to explore to what degree patterns shifted by nationality group for mothers or respectively fathers after the reform.

Results

As a first step we will look at some descriptive figures that contrast family formation behavior by nationality constellation of the parents before and after the reform. In Figure 2 we look at the non-marital birth ratio. Here we see that for first births the non-marital birth ratio was already quite high before the reform if both parents were Swiss nationals or if one was Swiss and the other from an EU country. The ratios were between 30 and 45%. If one of the partners was not from Switzerland or the EU, or if both were from the EU, the levels were substantially lower. However, as mentioned above, this might be related to incentives to marry to obtain residence rights. In addition, there might also be selective in-migration behavior of couples in which both are EU citizens. The latter might be older and rather of a higher socioeconomic status, aspects which are often linked with a higher likeliness to be married at the birth of the first child. We will look deeper into this in the multivariate analysis. If we contrast the levels before and after the reform, we see that among the six constellations displayed in Figure 2, only those where the father is Swiss national witnessed increases in the non-marital birth ratio.

[Fig. 2 about here]

In Figure 3 we restrict our sample to those births where the parents were not married six months before the birth. Here we see before the reform particularly among those couples where the father was Swiss a rush into marriage prior to the first birth. In such constellations 30-40% of those who conceived the first child outside marriage married in the six months prior to the birth of the child. Among couples in which both were Swiss, only 42% were married at conception of the first child, which underlines that non-marital sexual intercourse was already before the reform far from being an unusual behavior. After the reform, among couples with a Swiss father the share of “shotgun marriages“ where a marriage occurred between conception and the birth of the child are substantially reduced to about 20-25%. The increase in the share of shotgun marriages among couples with Swiss mothers and father that are neither Swiss nor EU citizen does not fit with our expectation. However, this is a rather small group (about 5% of all births), and the drastic increase might be driven by random noise or temporal changes in the nationality composition of the fathers.

[Fig. 3 about here]

In the multivariate part of our analysis, we again look first at the models on our complete dataset of first births (Table 1). In contrast to the descriptive analysis, where we studied the non-marital fertility ratio,

we code in these models marital births with 1 and non-marital births with 0. The motivation for this is to have in both sets of models marital births coded with 1. In the second set of models we restrict our sample to those first births among whom the parents were not married when the child was conceived. We consider all births in which the parents were not married six months prior to the birth to be definitely conceived non-marital.² Here we are analyzing the risk that such births occur within marriage (coded as 1) or outside marriage (coded as 0).

[Tab. 1 about here]

In the first model, which contains all parental characteristics for which we control for, age shows the expected inverse u-shaped pattern with lower probabilities of marital births at younger and older reproductive ages, both for women and men. This pattern is pretty stable across all four models. For income, we obtain for men the expected positive gradient so that the likeliness of a birth within marriage is highest among the highest income group. For women, on the other hand, such a pattern is not visible. These outcomes also stay rather stable across all four models. For our nationality variable, the descriptive findings are confirmed that persons from other countries than Switzerland and the EU are most likely to have a child inside marriage. Among nationals from the European Union, for mothers the risks are significantly higher compared to Swiss citizens, but not for fathers. These outcomes, which are stable across all models, point in the direction that for Swiss fathers it is more important to have the child within marriage compared to Swiss mothers. Also these outcomes are quite stable across the four models. In the second model we add the dummy whether the birth occurred after the reform, and indeed children born after the reform are less likely to be born within marriage. However, this might just be the result of a secular trend in which the share of non-marital births is continuously increasing. More interesting are the differential interactions in models three and four. Here we observe no significant differences for mothers, while for fathers we see a positive significant interaction between the reform dummy and being EU citizen. This suggests that after the reform EU citizens have compared to Swiss citizens been more likely to have a child inside marriage. However, for the interaction with other nationalities no significant interaction is found.

More clear are the outcomes which we obtain for our restricted sample that just includes births whose conceptions occurred outside marriage (Table 2). But before we look at the interaction effects, we will briefly discuss the outcomes for the other controls in comparison to our full sample. For mothers, we obtain in these models no longer significant differences over age, while for men we obtain an age pattern similar to the first set of models, though much less pronounced. This suggests that age is less of a determinant for the likeliness of a marital birth if the child is conceived outside marriage. For income we obtain again no clear patterns for mothers and a positive gradients for fathers. Turning to the nationality variables, we get now as expected very different patterns. For mothers, the odds ratios are still elevated for the non-Swiss nationality groups, but not significant. For fathers, we actually obtain an opposite pattern

² Often also seven months (e.g., Holland 2013; Baranowska-Rataj 2014) are used as the cut-off date. We, however, decided to use a more conservative definition in order to increase the likelihood that those parents who married between conception and the birth of the child were aware of the pregnancy when they arranged the date of their marriage with the civil registration office.

with both EU citizens and others displaying odds ratios smaller than one, though they are only significant for the European Union citizens. The reform dummy shows a similar expected pattern as in the other set of models. Also for the interaction with mother's nationality we get again no significant outcomes. But for the interaction of the reform dummy with the nationality of the father we obtain both for the European Union citizens and the other citizens the expected positive interaction effect, with births being significantly more likely to be marital compared to births to Swiss fathers. This differential effect is supportive of the view that the elimination of substantial legal disadvantages especially for Swiss fathers fostered increases in non-marital fertility among this group after the 2014 reform.

[Tab. 2 about here]

Robustness Checks

We performed several consistency checks to ensure the robustness of the results. First, we included in the models a covariate to measure for immigrants the length of stay in Switzerland. The idea was to control for the level of integration of the immigrants, which potentially affects their receptivity to a change of legislation. The variable did not add valuable information in terms of parsimony (AIC), nor did the interaction with the date of the reform. Second, we considered a larger sample for the models, including the recently arrived immigrants (less than a year of residency in Switzerland); in these models the results remained robust and did not evolve greatly (except for non-European mothers who were more prone to experience shotgun marriages). Third, we tested models which include in addition parents living in the adjacent canton Vaud. Canton Vaud also borders France in the north and has a 60% larger population than Geneva; it is also more diverse with large rural and peri-urban areas. However, the results were quite similar and no significant difference in marital fertility was found between Vaud and Geneva. Significant differences were detected according to the type of municipality as parents living in rural or peri-urban areas have higher odds of being married when having a first child and of getting married in the last six months of the pregnancy.

Discussion and Conclusion

Our results provide strong support for the view that family legislation can indeed affect family formation behavior. Particularly among couples in which the male was Swiss citizen the likeliness of a first birth being non-marital increased after the 2014 Swiss family law reform, which provided a stronger legal position to fathers of children born outside of marriage. In addition, our findings also stress the importance that marriage still has for foreigners in terms of providing access to residence rights. Among couples consisting solely of foreigners or where one of the partners was neither Swiss nor EU citizen, the share of non-marital births is still quite low. As long as marriage remains an important instrument for foreigners to obtain residence rights, this factor will contribute to affect the risk of a non-marital birth negatively. This would only change if cohabitation would get a similar status such as marriage, a tendency which is currently not visible in the legislation regulating residence rights of foreigners.

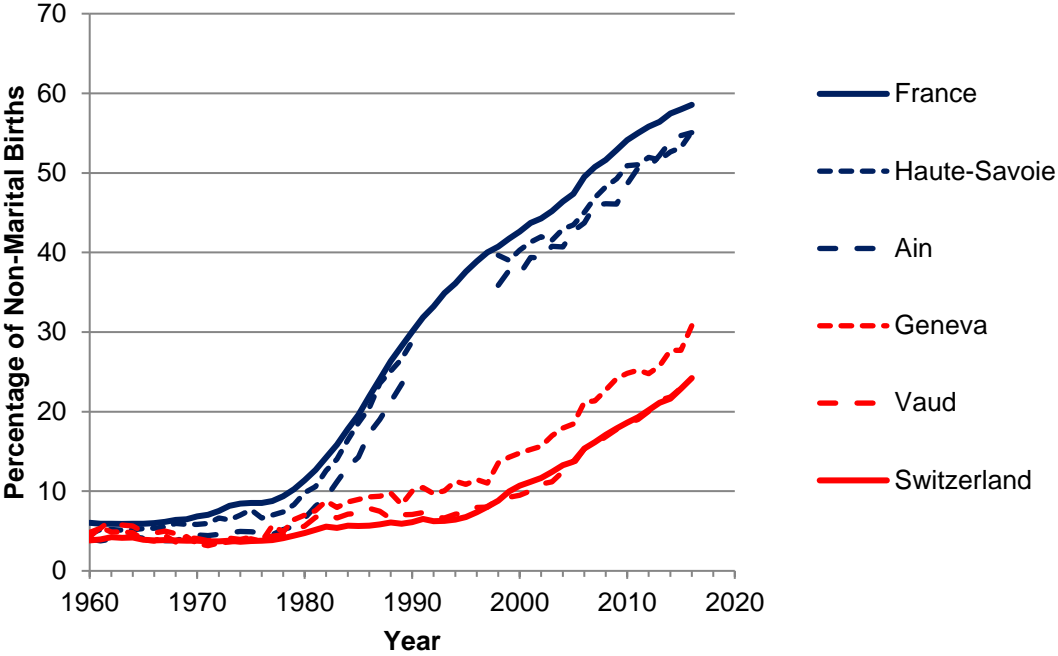
Switzerland seems to provide an example where the modernization of family legislation is lagging behind shifts in social norms related to childbearing outside marriage. A similar case has been described for Belgium, where until the 1970s mothers of children born outside of marriage had to adopt their own child in order to get custody rights (Goldhaber 2007). It is likely that the recent reform will increase the level of non-marital childbearing in Switzerland, and contribute to reduce the non-marital fertility divide between France and Switzerland along the Swiss-French border. However, the high share of foreigners in Switzerland in combination with traditional attitudes in some areas of Switzerland will likely keep Swiss non-marital fertility levels lower than in other European countries in the foreseeable future.

References

- Baranowska-Rataj, A. (2014). Decomposition of trends in non-marital childbearing in Poland. *Population*, 69(2), 239-253.
- Decroly, J. M., & Vanlaer, J. (1991). *Atlas de la population européenne* [Atlas of the European population]. Brussels: Editions de l'Université de Bruxelles.
- Friedman, L. M. (1969). Legal culture and social development. *Law and Society Review*, 4, 29-44.
- Goff, J. M. L., & Ryser, V. A. (2010). Meaning of marriage for men during their transition to fatherhood: The Swiss context. *Marriage & Family Review*, 46(1-2), 107-125.
- Goldhaber, M. (2007). *A people's history of the European Court of Human Rights*. Piscataway: Rutgers University Press.
- Holland, J. A. (2013). Love, marriage, then the baby carriage? Marriage timing and childbearing in Sweden. *Demographic Research*, 29(Art. 11), 275-306.
- INSE (2010). Migrations résidentielles de la Suisse vers Rhône-Alpes. *Observatoire statistique trans-frontalier*, fiche 01/06 10.
- Klüsener, S. (2015). Spatial variation in non-marital fertility across Europe in the twentieth and twenty-first centuries: recent trends, persistence of the past, and potential future pathways. *The History of the Family*, 20(4), 593-628.
- Klüsener, S., & Goldstein, J. R. (2016). A long-standing demographic East–West divide in Germany. *Population, Space and Place*, 22(1), 5-22.
- Klüsener, S., Perelli-Harris, B., & Gassen, N. S. (2013). Spatial aspects of the rise of nonmarital fertility across Europe since 1960: The role of states and regions in shaping patterns of change. *European Journal of Population/Revue européenne de Démographie*, 29(2), 137-165.
- Knijn, T., Martin, C., & Millar, J. (2007). Activation as a common framework for social policies towards lone parents. *Social Policy & Administration*, 41(6), 638-652.
- Knodel, J. (1967). Law, marriage and illegitimacy in nineteenth-century Germany. *Population Studies*, 20(3), 279-294.
- Kok, J., & Leinarte, D. (2015). Cohabitation in Europe: A revenge of history? *History of the Family* 20(4), 489-514.
- Koopmans, R., Michalowski, I., & Waibel, S. (2012). Citizenship rights for immigrants: National political processes and cross-national convergence in Western Europe, 1980–2008. *American Journal of Sociology*, 117(4), 1202-1245.
- Kouti, R., & Ramirez, J. (2009). *Mobility habits of the cross border commuters in Geneva*. Geneva: Haute école de gestion de Genève.

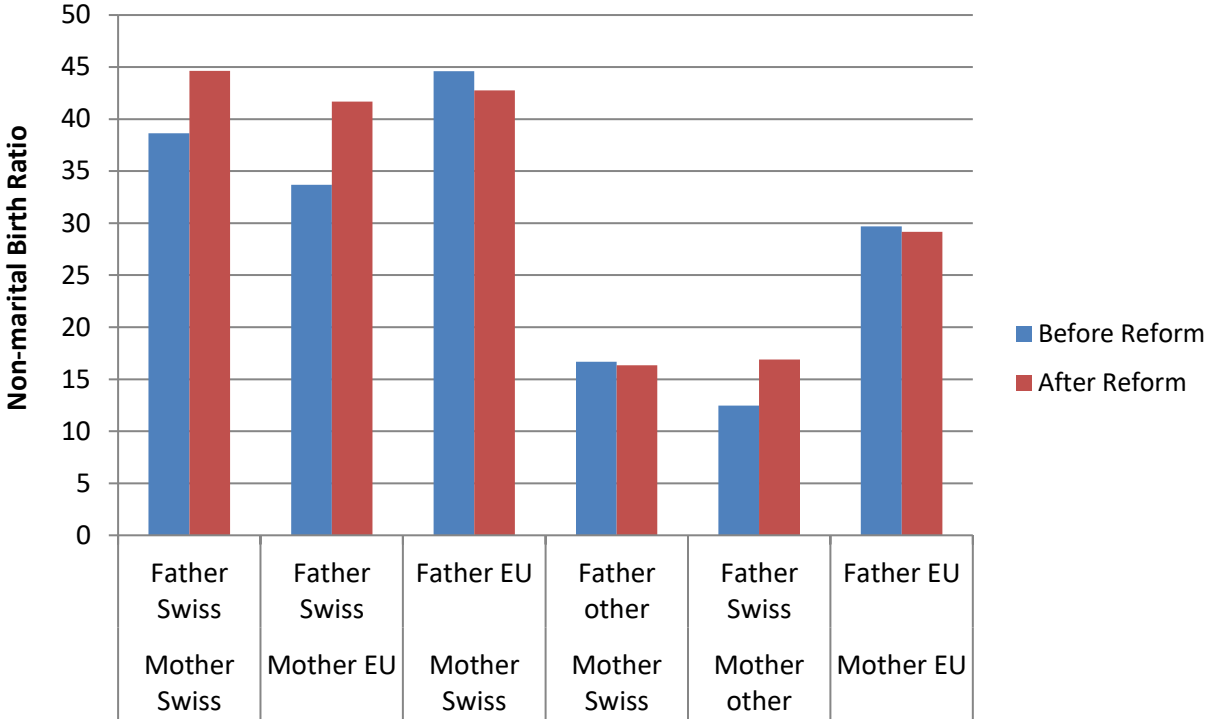
- Lappegård, T., Klüsener, S., & Vignoli, D. (2018). Why are marriage and family formation increasingly disconnected across Europe? A multilevel perspective on existing theories. *Population, Space and Place*, 24(2), e2088.
- Leffingwell, A. (1892). *Illegitimacy, and the influence of seasons upon conduct: Two studies in demography* (Vol. 49). New York: Charles Scribner's sons.
- Neyer, G., & Andersson, G. (2008). Consequences of family policies on childbearing behavior: Effects or artifacts? *Population and Development Review*, 34(4), 699-724.
- Perelli-Harris, B., Sigle-Rushton, W., Kreyenfeld, M., Lappegård, T., Keizer, R., & Berghammer, C. (2010). The educational gradient of childbearing within cohabitation in Europe. *Population and Development Review*, 36(4), 775-801.
- Perelli-Harris, B., & Gassen, N. S. (2012). How similar are cohabitation and marriage? Legal approaches to cohabitation across Western Europe. *Population and Development Review*, 38(3), 435-467.
- Perelli-Harris, B., Kreyenfeld, M., Sigle-Rushton, W., Keizer, R., Lappegård, T., Jasilioniene, A., ... & Di Giulio, P. (2012). Changes in union status during the transition to parenthood in eleven European countries, 1970s to early 2000s. *Population Studies*, 66(2), 167-182.
- Shorter, E., Knodel, J., & Van de Walle, E. (1971). The decline of non-marital fertility in Europe, 1880–1940. *Population Studies*, 25(3), 375-393.
- Wallace Goodman, S. (2010). *Naturalisation policies in Europe: Exploring patterns of inclusion and exclusion*. Florence: European University Institute.

Figure 1: Non-marital fertility in France, Switzerland, and the Swiss-French border region around Geneva



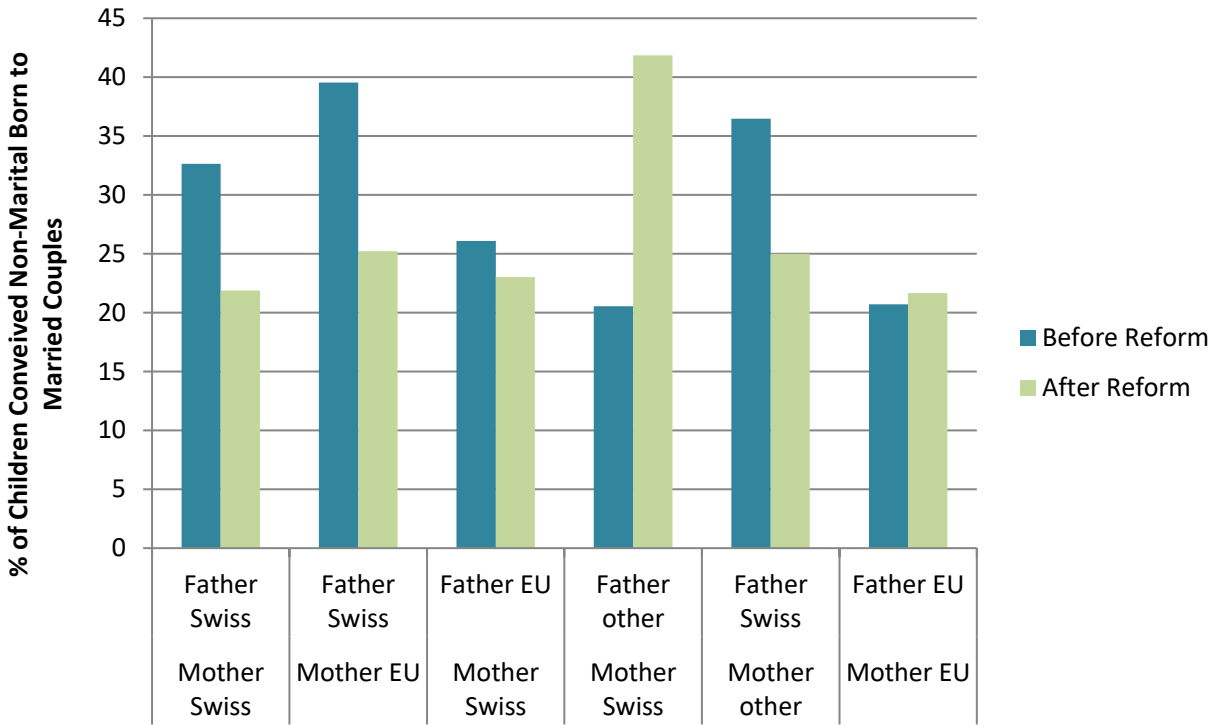
Source: Decroly and Vanlaer 1991; Statistical Offices

Figure 2: Non-marital birth ratio by nationality before and after the reform



Source: Birth register and population register data of the canton of Geneva, own calculations

Figure 3: Share of newborns that were conceived non-marital who are born within marriage



Source: Birth register and population register data of the canton of Geneva, own calculations

Table 1: Model results: Likelihood of a first birth being marital

	Model 1		Model 2		Model 3		Model 4	
	OR	AME	OR	AME	OR	AME	OR	AME
Nationality (Mother)								
Swiss (ref.)	-		-		-		-	
European Union	1.33***	0.220	1.33***	0.219	1.29***	0.219	1.33***	0.219
Other	3.70***	0.09	3.69***	0.059	3.75***	0.059	3.68***	0.058
Nationality (Father)								
Swiss (ref.)	-		-		-		-	
European Union	1.06	0.180	1.07	0.180	1.07	0.180	0.95	0.181
Other	3.01***	0.012	3.02***	0.013	3.02***	0.013	3.03***	0.013
Age (Mother)								
<24 (ref.)	-		-		-		-	
25-29	1.93***	0.130	1.95***	0.131	1.94***	0.131	1.94***	0.130
30-34	1.77***	0.114	1.78***	0.114	1.78***	0.114	1.77***	0.114
35-39	1.37*	0.064	1.37**	0.065	1.37*	0.065	1.36*	0.064
40+	1.20	0.038	1.21	0.040	1.21	0.040	1.20	0.038
Age (Father)								
<24 (ref.)	-		-		-		-	
25-29	2.29***	0.169	2.31***	0.171	2.31***	0.171	2.32***	0.172
30-34	2.38***	0.176	2.42***	0.179	2.42***	0.179	2.44***	0.180
35-39	2.02***	0.145	2.05***	0.149	2.06***	0.149	2.07***	0.150
40+	1.58**	0.097	1.60**	0.100	1.60**	0.100	1.62**	0.101
Income (Mother)								
First quartile (ref.)	-		-		-		-	
Second quartile	0.84*	-0.034	0.84*	-0.034	0.84***	-0.034	0.83*	-0.035
Third quartile	0.95	-0.010	0.95	-0.010	0.95	-0.010	0.95	-0.010
Fourth quartile	1.01	0.002	1.02	0.003	1.01	0.003	1.01	0.003
Missing	1.33**	0.051	1.34**	0.052	1.34**	0.052	1.33**	0.051
Income (Father)								
First quartile (ref.)	-		-		-		-	
Second quartile	1.34***	0.061	1.34***	0.061	1.34***	0.061	1.34***	0.060
Third quartile	1.90***	0.127	1.89***	0.126	1.89***	0.126	1.89***	0.126
Fourth quartile	2.64***	0.183	2.62***	0.181	2.62***	0.182	2.62***	0.181
Missing	1.51***	0.084	1.53***	0.087	1.53***	0.086	1.53***	0.086
Reform								
Born after reform	-		0.84***	-0.033	0.82**	-0.033	0.74**	-0.033
Interactions								
Moth. EU*reform	-		-		1.09		-	
Moth. oth.*reform	-		-		0.95		-	
Fath. EU*reform	-		-		-		1.42**	
Fath. oth.*reform	-		-		-		1.00	
Constant	0.29***		0.30***		0.30***		0.31***	
N	8834		8834		8834		8834	
AIC	9834.4		9825.5		9828.7		9819.3	

Significance levels: < 0.001 ***, < 0.01 **, < 0.05 *, < 0.1 '

Source: Birth register and population register data of the canton of Geneva, own calculations

Table 2: Model results: Likelihood of a first birth being marital if couples were not married 6 months prior to birth

	Model 5		Model 6		Model 7		Model 8	
	OR	AME	OR	AME	OR	AME	OR	AME
Nationality(Mother)								
Swiss (ref.)	-		-		-		-	
European Union	1.03	0.035	1.03	0.035	0.99	0.034	1.02	0.035
Other	1.19	0.006	1.19	0.006	1.11	0.006	1.20	0.005
Nationality (Father)								
Swiss (ref.)	-		-		-		-	
European Union	0.69***	-0.021	0.69***	-0.017	0.69***	-0.018	0.59***	-0.027
Other	0.90	-0.070	0.42	-0.070	0.91	-0.070	0.65	-0.069
Age (Mother)								
<24 (ref.)	-		-		-		-	
25-29	1.14	0.025	1.15	0.028	1.16	0.029	1.16	0.029
30-34	1.08	0.016	1.10	0.018	1.10	0.019	1.11	0.019
35-39	0.98	-0.003	0.99	-0.001	1.00	-0.001	1.00	0.000
40+	0.90	-0.020	0.92	-0.015	0.92	-0.015	0.90	-0.019
Age (Father)								
<24 (ref.)	-		-		-		-	
25-29	1.51*	0.078	1.55*	0.081	1.55*	0.081	1.53*	0.080
30-34	1.49	0.075	1.53*	0.079	1.53*	0.079	1.52*	0.077
35-39	1.44'	0.069	1.48'	0.073	1.49'	0.074	1.47'	0.071
40+	0.91'	-0.016	0.93	-0.012	0.93	-0.012	0.93	-0.011
Income (Mother)								
First quartile (ref.)	-		-		-		-	
Second quartile	0.80'	-0.041	0.80'	-0.042	0.79'	-0.042	0.79'	-0.042
Third quartile	1.18	0.033	1.17	0.031	1.17	0.031	1.17	0.032
Fourth quartile	1.13	0.025	1.13	0.024	1.13	0.024	1.14	0.026
Missing	1.13	0.023	1.13	0.024	1.13	0.024	1.11	0.020
Income (Father)								
First quartile (ref.)	-		-		-		--	
Second quartile	1.39**	0.057	1.38**	0.055	1.38**	0.055	1.37**	0.054
Third quartile	1.88***	0.118	1.86***	0.116	1.86***	0.116	1.86***	0.116
Fourth quartile	2.35***	0.167	2.32***	0.164	2.32***	0.164	2.31***	0.162
Missing	1.41*	0.061	1.46*	0.067	1.46*	0.067	1.47*	0.068
Reform								
Born after reform	-		0.72***	-0.064	0.68***	-0.064	0.56***	-0.066
Interactions								
Moth. EU*reform	-		-		1.15		-	
Moth. other*reform	-		-		1.26		-	
Fath. EU*reform	-		-		-		1.72**	
Fath. other*reform	-		-		-		2.61**	
Constant	0.19***		0.21***		0.21***		0.22***	
N	3731		3731		3731		3731	
AIC	4321.4		4307.3		4310.3		4295.7	

Significance levels: < 0.001 ***, < 0.01 **, < 0.05 *, < 0.1 '

Source: Birth register and population register data of the canton of Geneva, own calculations