



LUND UNIVERSITY

School of Economics and Management

Master's Program in Economic Growth, Population and Development

Comparative Research into Recent Family and Partnership Formation and Dissolution Patterns in Nordic Countries: the case of Iceland

Victor Flick – vi0232fl-s@student.lu.se

The current conjecture towards Nordic fertility rates brings the focus on the state of advancement of the second demographic transition (SDT) in the region. Nordic countries' SDT developments have been unique as they have not experienced the same low fertility as other countries. Yet, since 2010, Iceland lost nearly a quarter of its fertility and reached an all-time low total fertility rate (TFR) last year in 2018. Other Nordic countries like Norway and Finland recorded their lowest TFR ever in 2018 and 2017 respectively – which warrants the focus of this study.

In the framework of the second demographic transition, this thesis aims to reveal and discuss the recent trends and developments of some demographic indicators in the Nordic countries. The work will take a special interest on the Icelandic demographic state, which, comparatively to Scandinavia, has received little attention in the literature. To what extent have Iceland's demographic behaviours developed alike other Nordic countries? Furthermore, this study will verify if young Icelanders follow Scandinavian demographical developments of the second demographic transition. The thesis uses data gathered from a variety of sources including Eurostat, the statistical office of the European Union and official statistical agencies of Iceland, Norway, Sweden and Denmark.

The results present Iceland as an outlier or a leader in the advancement of the SDT. While Icelandic dynamics follow a similar pattern to other Nordic countries, young Icelanders seem to have their unique and own way of entering partnerships and creating families.

Keywords: family formation, partnership formation, partnership dissolution, TFR, childbearing, births, marriage, divorce, second demographic transition, cohabitation, gender revolution

EKHS01

Master's Thesis (15 credits ECTS)

May 2019

Supervisors: Annika Elwert, Jeffrey Neilson

Examiner: Maria Stanfors

Word Count: 13 047

Acknowledgments

I would like to thank my supervisor Annika Elwert for the valuable guidance and professional insight she provided on my work. I would also like to thank Jeffrey Neilson, who took over the supervising of my thesis later on, for his supportive comments and useful help. Finally, I thank my study partners and friends for their support, and the Lund University for providing quality work environment and an empowering program.

Table of Contents

Acknowledgments	2
List of Figures.....	4
1. Introduction	5
1.1 General introduction.....	5
1.2 Aim	5
1.2 Outline	6
2. Theoretical framework	6
2.1 Second demographic transition: theory	6
2.1.1 Focus on cohabitation	8
2.1.2 Role of contraception	9
2.1.3 Criterion for diffusion	10
2.2 Shift in values: the underlying reason for demographic developments	11
2.3 Competing perspectives	12
2.3.1 Gender revolution	12
2.3.2 SDT vs Gender revolution: future trajectories	14
2.4 Past studies	15
3. Research questions and aim.....	17
4. Data and Method	18
4.1 Indicators	18
4.1.1 Indicators definition	18
4.2 Eurostat.....	19
4.3 National Statistics	19
5. Results	20
5.1 Total Fertility Rate	20
5.2 Births in- and outside marriage	23
5.3 Age at first child birth	25
5.4 Age at first marriage	28
5.5 Divorces	30
5.6 Consensual unions	32
5.7 Interpretations.....	33
6. Conclusion.....	34
References.....	35
Statistical sources	38
Appendices	39

List of Figures

Figure 1: Model of the first and subsequent second demographic transitions, source Van de Kaa 1999	8
Figure 2: Total fertility rates charts for the Nordic countries and the Euro area 1960-2017, source Eurostat	21
Figure 3: Ratio of the Nordic countries' / the Euro area's and Iceland's fertility rates 1963-2017, calculated by the author, data source Eurostat	22
Figure 4: Share of births outside wedlock charts for the Nordic countries and the Euro area 1960-2017, source Eurostat	24
Figure 5: Evolution of the share of births outside wedlock for Iceland 1853-2018, source Hagstofa Íslands (Statistics Iceland)	25
Figure 6: Mean age of mother at first childbirth charts for the Nordic countries 1960-2017, source Eurostat, and Statistics Iceland, Statistics Norway and Statistics Denmark	26
Figure 7: Ratio of the Nordic countries' and the Icelandic mean age of mother at first childbirth, calculated by author, data source Eurostat and, Statistics Iceland, Statistics Norway and Statistics Denmark	27
Figure 8: Mean age of father at first child charts for Iceland, Norway and Denmark 1981-2018, source Statistics Iceland, Statistics Norway and Statistics Denmark	28
Figure 9: Mean age at first marriage for women in the Nordic countries 1960-2017, source Eurostat and, Statistics Iceland, Statistics Norway, Statistics Sweden and Statistics Denmark	30
Figure 10: Mean age at first marriage for men in the Nordic countries 1960-2017, source Eurostat and, Statistics Iceland, Statistics Norway, Statistics Sweden and Statistics Denmark	29
Figure 11: Divorces per 100 marriages charts in the Nordic countries 1960-2016, source Eurostat	31
Figure 12: Mean age at first consensual union and first marriage charts for Iceland 1991-2011, source Hagstofa Íslands (Statistics Iceland)	33

1. Introduction

1.1 General introduction

The study of the recent patterns in terms of family formation and partnership formation and dissolution enters in the framework of the second demographic transition. But before this second demographic transition, there was the first demographic transition. The first demographic transition refers to the subsequent declines in mortality and fertility in the 18th and 19th centuries in the Western countries. Nordic countries were among the first ones to enter the demographic transition, starting from a high-high ending to a low-low fertility and mortality. In the 19th century, Scandinavian countries entered the demographic transition with a decline in the infant mortality rate, with Finland and Iceland, in the Nordic region, following later (Edvinsson et. al. 2008). While the first demographic transition saw a significant decline in fertility, it is, first, the result of the drastic decline in mortality. Alternatively, the second demographic transition should be analysed in the prism of fertility decline (Van de Kaa 2002). The second demographic transition (SDT) appeared in the 1960s, first in the USA and in Scandinavia (Surkyn & Lesthaeghe 2004) but was only conceptualized in 1986 by Van de Kaa for the first time. The concept has evolved since then; and as from today, the research agrees on the following features defining the SDT: sustained sub-replacement fertility, increased mean age at first marriage and first child birth, higher share of births outside marriage as well as increased rates of divorce. Nordic countries are often presented as being forerunners in the advancement stage of the SDT (Lesthaeghe & Van de Kaa 1986). Thus, the literature dealing with the SDT and its stage of advancement in the Nordic countries is consequent. The literature focusing on Iceland is rarer.

1.2 Aim

This thesis discusses the current demographic situation and recent developments of demographic trends in the Nordic countries. It relates these trends to the theory of the second demographic transition, transition in which Northern European countries were forerunners (Lesthaeghe & Van de Kaa 1986; Sobotka 2008). It takes a closer look into the state of the literature around the second demographic transition, mainly dealing with the theory and the criticism of this theory embodied by the gender revolution. I will elaborate on this gender revolution, as it comes as a competing perspective on what has been driving the recently-observed demographic changes. Furthermore, this thesis will provide a complete description of the evolution of key demographic indicators in the very recent years in the Nordic countries, namely Iceland, Norway, Sweden, Denmark and Finland. This work will give an insight into the underlying causes explaining the new demographic behaviours and will use the Icelandic case as a main focus. The thesis will compare Iceland's recent demographic developments to the ones of its Nordic neighbours. The literature around Icelandic's demographic state is severely lacking, has been overlooked, and moreover lacks recent or updated studies. It offers little discussion on the Icelandic case concerning family and union patterns. Eydal and Olafsson's study (2003) highlights the general demographic trends the country is following, but the presented data, however, is somewhat outdated since the most recent datasets are from 2001. This, therefore, is where this thesis finds its role: by expanding the literature and providing freshness to the Icelandic demographic state, in terms of family formation and partnership formation and dissolution. Therefore, new findings regarding family and

partnership formation and dissolution will help expand the literature. Additionally, I will provide a comparison of the Icelandic and Nordic relevant trends, which will give more insight into the uniqueness of Iceland and fresh basis for further research.

This work will target the second demographic transition (SDT). The SDT is one of the main theoretical perspectives being applied in today's studies on new demographic trends and behaviour. Van de Kaa and Lesthaeghe were the first scholars to define and defend the concept of the second demographic transition. According to them, the changes in demographic patterns are the consequence of the shift in values individuals share in a society. Thus, the decline in fertility, rise in cohabitation and divorces, the increase of the age at first marriage and at first child are the result of the evolution of the society's norms and shared moral ethics (Van de Kaa 1987 & Lesthaeghe 2010). Therefore, demographic observations and dynamics would be the reflection of the state of acceptance towards new norms. The thesis will discuss this theory and I also assess the main criticism of the SDT theory.

1.2 Outline

Concerning the structure, I will, at first, provide an understanding of the SDT theory and its main features and criterions. Further, I will emphasise the underlying reasons for the demographic changes specific to the SDT emanating from the shifts in values and norms. I will also underline the gender revolution, which is the main criticism of the SDT theory. Finally, I will illustrate this literature review with past studies and results. As a further step, I will state the research questions and aim of this research, after what I will define and present the data and used methodology. The results section includes comparative and descriptive analysis of six relevant demographic indicators, namely: the total fertility rate, the share of births outside wedlock, the age at first child for both men and women, the age at first marriage for both men and women, the divorce rate and, lastly, consensual unions. In this analysis, I will illuminate the Icelandic case, in contrast to the other Nordic ones, with the help of comparative charts that aim at analyse and discuss the development in the demographic trends. The analysis shows that the Icelandic case is somewhat of an outlier, or a leader, regarding the discussed demographic indicators. Mostly, it shows that while Icelanders follow the same demographic developments as other Nordics, they stand at another level for nearly all of the indicators. This research then closes with a conclusion based on the findings of the research.

2. Theoretical framework

2.1 Second demographic transition: theory

In the 1980s, the concept of SDT emerged, and the demographic observations were very different from the ones recorded before: in the 1950s, couples were economically able to enter marriage and parenthood early, and the decade was marked by lowering age at first marriage and high fertility (Van de Kaa 1987). The term of second demographic transition (SDT) was introduced in 1987 by Van de Kaa. He painted the SDT in different demographic changes specific to the period, and according to him, the SDT is characterized by low fertility, the rise of non-marital cohabitation and changes in marital behaviours.

The SDT, just like the (first) demographic transition was first observed in the Western societies, particularly in the Scandinavian countries in the 1960s (Surkyn & Lesthaeghe 2004). In his study (2010), Lesthaeghe states that the 1950s saw some early signs of the SDT emerge, especially in divorces rates in the USA and Scandinavia. Yet, the development of this demographic change was far more visible in the 1960s during which fertility declined from the “baby-boom” high levels, and the trends for the age at first marriage as well as for never-married increased (Council of Europe 2004). Cohabitation came as a next sign and by the 1980s procreation outside marriage, and within cohabitation, spread from the Scandinavian forerunner countries to Western Europe (Lesthaeghe 2010). Scandinavian countries appear to be more advanced in this transition (Bernhardt 2004). According to Sobotka (2008), key characteristics of the SDT include increased cohabitation as well as increased non-marital childbearing. The SDT shows different underlying motivations and differs from the first transition as it brings new demographic predictions: disconnection between marriage and procreation, diversity in living arrangements (not only marriage), plurality in household structures (not only nuclear family), and sustained sub-replacement fertility (Zaidi 2017). Following the theory around the SDT, it becomes clear that the changes in demographic behaviours resulted in a diversity of households in Europe. The sequences impacted marriage behaviours, the propensity to cohabit, to divorce, it impacted the age at which individuals choose to have children. These changes, consequently, changed the household’s dynamics. Households patterns are much more diverse and complex than the nuclear family (married couple with children). Van de Kaa gives some changing examples: a divorced man may take care of his children while two women may partner up and take care of their children (Van de Kaa 1987). The observed demographic changes of the SDT show a weakening of the marital institution (Van de Kaa 2002). Signs of this weakening include: an increase in behaviours towards the use of contraception and the acceptance of it in more and more sections of the population, an increase in divorces and in cohabitation (instead of marriage), and changing attitudes towards abortion. In 2013, Holland stated marriages “take new symbolic meanings, distinct from union formation and the desire to have children”.

The proposed demographic changes can be listed as following:

- (1) significant decline to **below-replacement fertility**, partly emanating from postponement in childbearing;
- (2) significant decline in the rate of first marriage associated with an **increase in mean age at first marriage**;
- (3) strong **increase in divorce rates** and in the dissolution of unions;
- (4) strong increase regarding **cohabitation**;
- (5) strong **increase in the share of births outside wedlock**;
- (6) shift in modern **contraception usage** replacing traditional methods.

Additionally, the SDT developed with the embracement of longer single living, premarital cohabitation, and the progression to parenthood within cohabitation. These new kinds of households started to appear progressively in Europe: Western Europe saw such features appear in the 1970s, Spain and Portugal in the 1980s, Central Europe in the 1990s (Surkyn & Lesthaeghe 2004).

In the prism of family formation, Van de Kaa’s 1987 study cites multiple sequences through which societies pass when entering the SDT:

1. the swing from the “golden age of marriage to the dawn of cohabitation”
2. the shift from the “king-child with parents to a king-pair with a child”: adults being the focus of the couple instead of the children
3. the change from “preventive contraception to self-fulfilling conception”: contraception not preventing birth but enabling to choose when to have kids
4. the move from “uniform to pluralistic families and households”

For him, the timing of these changes finds evidence of logical ordering even though the start and pace of these sequences vary from one region to another in Europe. These sequences do follow a chronological and enabling order. Each change opens the door to another one: people choosing to cohabit, rather than marrying enabled the choice of having children to fulfil the couple’s life. Additionally, Van de Kaa states these changes have led to the low fertility observed today in Western societies embracing individualism and progressiveness (Van de Kaa 1987).

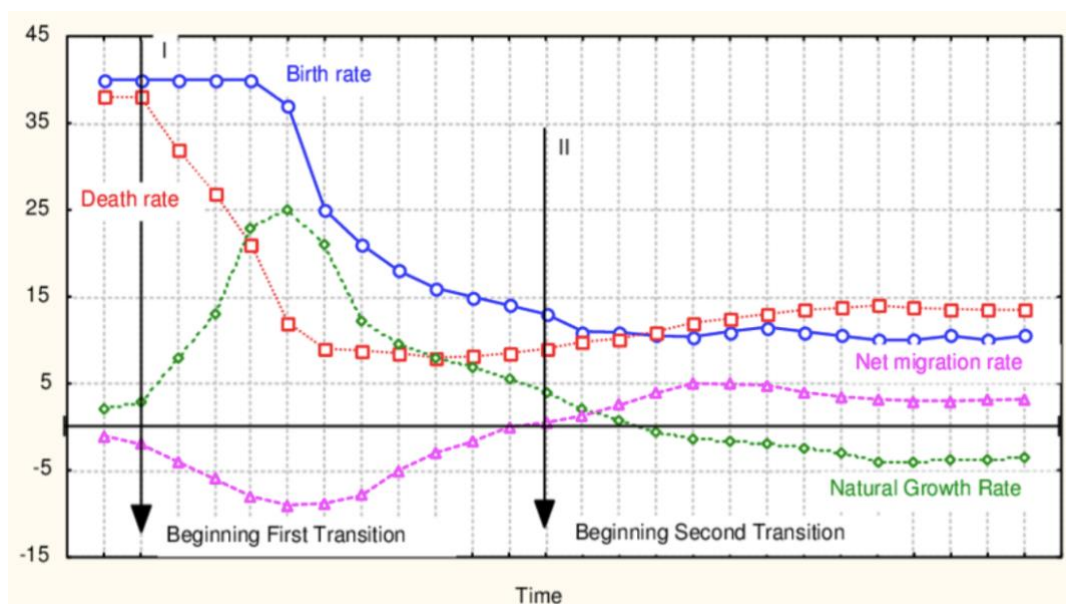


Figure 1: Model of the first and subsequent second demographic transitions, source Van de Kaa 1999

We will detail these sequences:

2.1.1 Focus on cohabitation

An important feature of the SDT is the dramatic shift from the altruistic to the individualistic marriage dynamics. The principle that marriage has a utility rationale changed to a focus on the welfare of both adults with children coming second (Lesthaeghe 2010). Ariès mentioned in 1980 that one of the main differences between the SDT and the first transition is the shift from the “king child era” to the adult self-realization era (fulfilled adults). From a historical perspective, many couples sought social and official sanctions via marriage; with marriage

being a logical solution to out-of-marriage pregnancies. With the shift in peoples' values, Van de Kaa (2002) insisted the SDT is characteristic of the weakening of the marital institution. Yet, young generations in Europe in the 1980s still considered marriage and parenthood as the "most decisive" steps into adulthood (Van de Kaa 1987). Signs show that marriage is still viewed as an important step into adulthood and people do tend to have favourable views on the marital institution, even in Sweden (Wiik, Bernhardt, and Noack 2010). Moreover, marriage and parenthood do illustrate long-term commitment and responsibility, whereas leaving home and cohabitation represent less permanent steps and do not reflect as serious a status as marriage does (Kiernan 1986). According to Van de Kaa, cohabitation, therefore, must be categorised differently to marriage. This is because nearly all married couples have experienced cohabitation without marriage, whereas marriage has not been experienced by all cohabitants (Van de Kaa 1987).

Since the 1970s, **cohabitation** has increasingly become the chosen way of entering adulthood in Western societies. Opinions on cohabitation have been evolving from deviant to "normal" behaviour. By the end of the 1960s, cohabitation was still an uncommon way of entering adulthood, but acceptance followed and it became "normal" to cohabit with someone without being married (e. g. Trost 1979). Van de Kaa (1987) cites this as the swing from the "golden age of marriage to the dawn of cohabitation". Furthermore, cohabitation represented an important shift from the more traditionalistic views of couple-life. He also states that marriage and cohabitation can be observed as "two sides of the same coin", as both represent couple-bonding (Van de Kaa 1987). Moreover, he defends the idea that married and cohabiting couples should not be distinguished regarding family formation, if the stability and fertility of these unions are the same. From a social perspective, marriage and cohabitation are equivalent (Jeffrey Neilson, SASE12, lecture 4). In other words, partnership formation can be achieved both via marriage or cohabitation, and this implies that family formation can be regarded within marriage but also within cohabitation. Illustrating this: the proportion of births outside marriage rose between 1970 and 1980 in Northern and Western Europe, which is proof that there is clear recognition of the right to have a child for unmarried stable couples.

2.1.2 Role of contraception

Limiting family-size, and the acceptance of it, was illustrated by the decline in higher-order births (Van de Kaa 1987). In a later study (2002), Van de Kaa argued that the SDT is characterized by complete control of below replacement-level fertility. According to Lesthaeghe (2010) innovations in efficiency and reliability of contraceptive means (invention of the pill, improvement in IUDs, hormonal contraception) have affected fertility greatly. This sequence was enabled by more effective and suitable **contraception** as better contraceptive means meant more decision power regarding the childbearing timing in marriage. These material changes have allowed couples to postpone childbearing and it meant "greater freedom" on deciding for a pregnancy (Van de Kaa 1987). This, therefore, indicates the **link between marriage and childbearing has lost importance**. As contraception has allowed individuals to avoid, or decide for, pregnancies, the age at first marriage increased (non-legitimized births were rarer / unwanted births declined). Innovation in contraception embodied the shift to parents' free choice of childbearing: in the SDT, contraceptive means enable parents to decide for a pregnancy while the goal of it was to avoid pregnancy in the

first transition (Lesthaeghe 2010). Although this evolution influenced the timing and rapidness of the SDT, as well as the groups which were concerned, it must not be understood as a necessary feature for the development of the SDT (Van de Kaa 1987). A study from 2001 proved that increasing proportions of couples were using contraception to prevent pregnancy (Frejka & Ross 2001). Furthermore, some scholars believe this improvement in contraception was only secondary as the real change occurred in couples' mind-sets (Van de Kaa 2002). Regarding the use of contraception, Northern and Western European countries were forerunners and revealed a wide use of the pill in the late 1970s. Sterilization also became popular in Great Britain and Denmark with 10% and 15% use in 1975 and 1976 respectively. In 1977 in Norway, 28% of contraceptive users chose the IUD (Van de Kaa 1987). Better contraceptives had the first impact of enabling couples to cohabit outside marriage and without children, as they could control pregnancies. Moreover, the change in norms enabled couples to deliberately choose to have children, even outside marriage, without fearing the children would be stigmatized (Van de Kaa 1987).

Reliability and efficiency of contraception paved the way to the sexual revolution, after which sex was not confined to marriage and not only directed at procreation only. Another important aspect concerns liberalization, whereby women were "asserted the right to regulate their fertility" (Lesthaeghe 2010). Furthermore, the liberalization of abortion symbolized a subsequent step into emancipation. For Lesthaeghe, these value changes enter in the framework of authority and normative structure rejection.

Abortion played a central role in the couples' approach to conceive children and fertility choices. The freedom to choose when to have a child has also led to the emancipation of couples, or, in other words, self-development (Van de Kaa 2002). Liberalization began in the 1930s in Iceland, Denmark and Sweden and later in Norway and Finland, after WWII (Van de Kaa 1987). Focusing on Iceland, the full legal recognition of abortion was given to Icelandic women in 1975 (UN 2014). The law allows abortion on medical and social request. In the Nordic countries, Finland gave the right to abort in 1970 (*Vuoden 1970 aborttilaki sanomalehtien pääkirjoitukissa*); Denmark in 1973 (*Lovtidende for Kongeriget Danmark*); Sweden in 1974 (*National Board of Health and Welfare 2010*); and Norway in 1978.

2.1.3 Criterion for diffusion

In their study (2004), Surkyn and Lesthaeghe list criterions participating to the diffusion of the SDT. Households choose different pathways when adopting the SDT behaviours and the historical and regional context is, therefore, a criterion enabling the acceptance of these pathways. Regarding **historic and regional contexts**, regions with a "much longer history of tolerance" are more likely to accept cohabitation and procreation within cohabitation as a new way of family formation (e. g. Kytir 1993). Lesthaeghe noted in 2010 that "resistance" was stronger in countries with a Catholic background in comparison to those with Protestant heritage. Van de Kaa supports this idea of regional, or cultural, differences. As he argues, the adoption of the innovative forms of behaviour depends on how well new ideas can diffuse into existing patterns and traditions (Van de Kaa 2002, e. g. Micheli 1996). Although necessary, the cultural aspect cannot be considered as sufficient for the SDT changes.

Citing five other relevant studies, Lesthaeghe explains the SDT features differ substantially between countries. The advancement of the SDT and paths taken by different countries do differ because of historical reasons. Therefore, the SDT cannot be taken as a standard scenario (Lesthaeghe 2010). The observed demographic changes led the literature to find the underlying reasons for these developments, where postponement in childbearing and in marriage, higher divorce rates and lower fertility, and the rise in cohabitation and out-of-wedlock births would have a common source. For the SDT scholars, the observed demographic changes are the consequence of subsequent and rather concomitant shifts in values and norms in the society.

2.2 Shift in values: the underlying reason for demographic developments

According to Surkyn and Lesthaeghe (2004), these demographic shifts are linked to a shift in ethical and moral values: the “new living arrangements”, with a stress on cohabitation, are the expression of “anti-authoritarian sentiments”, leading to more egalitarian values as well as self-actualisation. The authors insist on three different kinds of shifts: first, the accentuation on “individual autonomy”; second, they underline the importance of rejection toward all types of authority and control performed by institutions; and finally, self-improvement, the rise of self-expression and actualisation in an environment calling for higher order needs. **With cohabitation, new generations of better educated young people express their value-orientation of secular, egalitarian and anti-authoritarian worldviews.**

In the same study, Surkyn and Lesthaeghe (2004) list a set of dimensions within which new generations planted their pathways: secularisation, egalitarianism with a stress on gender equality, unconventional civil morality and ethics, as well as the accentuation of expressive values, and, finally, companionship with a loss of conventional marital ethics. The use of contraceptives contributed to the shift in values to post-materialistic concerns (Van de Kaa 1987). A central intuition about the SDT is the swing from material needs (job security, housing, subsistence, physical security) to a focus on non-material concerns, such as the recognition by others for own realization, self-actualization, emancipation, individual autonomy in choice and freedom of expression. Referring to Maslow, higher-order needs become the foundation of the values’ side of the SDT, and tolerance is central value. This is why the SDT marks an ideational change (Lesthaeghe 2010). The societal background changes and indicators such as rising symmetry in gender roles, sexual revolution, and flexible life-course organization (Lesthaeghe 2010) enable a transposing to demographic behaviours. When explaining the underlying reasons for the demographic changes of the SDT, scholars have been using the European Values Survey (EVS) as a tool to find proof of the diffusion of post-materialistic values. The empirical research also focused on the living arrangements of couples. The EVS 1999/2000 contained questions about cohabitation and divorce (Lesthaeghe & Surkyn 2004), and the results demonstrated a strong diffusion in secular values, which is typical of post-materialism (Van de Kaa 2002). According to Van de Kaa (2002) and Thornston (1985, 1992), the attachment to secularism corresponds to choices in favour of new types of households and living arrangements.

The theory around the second demographic transition focuses on the societal changes from the period between the 1960s and the 1980s. Van de Kaa insists on the shift to more personal freedom, more individual choice, and the seeking of self-fulfilment as major principles (Van

de Kaa 2002). These changes in values, leading to more acceptance, more secularistic ideas and individualism, would have led to the observed demographic changes in Western countries, such as: a rise in the age at first marriage, rise in the share of never-married, rise in divorces, increased cohabitation as a new household type. Finally, all those shifts in demographic behaviours would result in low fertility. However, the development of SDT features can be nuanced: although Northern European countries have showed early development and acceptance of “nonconventional” household structures and parenthood postponement, they have, on the contrary, kept higher levels of fertility still at sub-replacement levels (Lesthaeghe 2010).

The presented shift in norms and values as an explanation of the demographic changes of the SDT has been strongly criticized by other authors. The criticism claims the observed changes are resulting from structural changes in the labour market and consequently in the couple relationship structure. In the frontline, Goldscheider, Bernhardt and Lappegård (2015) disclose the gender revolution as being the motivation for the demographic changes. Bernhardt (2004) argues the SDT critically lacks a gender perspective, and her and her colleagues propose an alternative view on the recent evolution in demographic patterns: there is a coming second phase to these changes.

2.3 Competing perspectives

Since Van de Kaa’s conceptualisation of the SDT, the notion has evolved. Cliquet (1992) stated the SDT would be the “continuation” of the first transition, and in the 1990s, common criticism painted the SDT as a typical feature of the Western World typical feature that could not spread to other countries. Later in 2004, Coleman said the SDT would simply be a “secondary feature” of the demographic transition and would only be a change in “life style preferences”. Goldscheider et. al. (2015) give an alternative explanation to the demographic changes of the SDT. According to them, the observed demographic trends are the result of the gender revolution – concept advanced and strongly defended in their study (2015). Goldscheider et. al. (2015) draw attention to the lack of consensus on the determinants and consequences of the SDT. Several other scholars find difficulty in finding generalisation on the terms of the SDT (Bernhardt 2004; Cliquet 1992; Coleman 2004; Van de Kaa 2004).

2.3.1 Gender revolution

Alternatively, the SDT changes occurred in parallel to the improvement in women’s labour force participation. Multiple studies do show the link between SDT demographic changes and the increasing share of women working. Goldscheider et. al. (2015) state that “throughout (...) the growth in female labour force participation, employed women married later and had fewer children than women who were not employed”. Some other studies, they cite, showed negative correlation between female economic responsibilities and unions’ stability. Goldscheider et. al. (2015) demonstrate the gender revolution as being the reason behind these changes. The observed demographic trends reflect the development of the first part of the gender revolution, which starts with the entering of women in the labour force (public

sphere, which was previously largely dominated by men). This gender revolution marks the beginning of women's economic responsibilities in addition to family ones. Women entering the labour force marked a huge change in gender relationships. Such a big impact on couples' relationships is the reason for the demographic trends of the SDT (Goldscheider et. al. 2015), such as low fertility, fewer union formations and more union instability (dissolutions). Other studies (Esping-Andersen & Billari 2015) show results supporting the idea that the rise in female economic responsibilities created a shock in family dynamics and ended in "less family". These scholars, Esping-Andersen and Billari (2015), also criticize the SDT approach. They do not agree with the shift in values lying as the reason for the demographic changes. In contrast, they argue that couples do still wish for children and relationships, and have a preference for family. As an alternative explanation to the demographic changes, they cite the erosion of the male breadwinner or the female housewife model. Model that lost relevance because of the rise in women's economic importance (Esping-Andersen and Billari 2015).

Discussions provide different characteristics for the SDT and some scholars do state that it is closely tied to the gender revolution. For example, Sobotka believes that the gender revolution appears to be a key factor in the "driving trends associated" with the SDT (2008). Moreover, countries with the highest scores in the SDT process, like the Nordic countries, have been the first ones embracing the "principles of gender equality" (Sobotka 2008).

Furthermore, the gender revolution has a second stage: the entering of men in the household (private sphere) and their involvement into it. This second step would be strengthening families again (Goldscheider et. al. 2015) and the problematic demographic trends once endured could be reversed thanks to the consequence of men's involvement in the home. Signs already show such advancement in men's roles in the private sphere and studies support the intensification of this change (e.g., Aassve, Fuochi, and Mencarini 2014). Fathers seem to be more involved in childcare, and this is an initial step of this crucial change, as mentioned by Eggebeen in 2001. A new balance can be found with this men-involvement in the home, this is the second stage of the gender revolution (Goldscheider 2015). Eventually, the completion of the gender revolution would rise fertility and comfort union stability. The reversal of the dynamics specific to the SDT has already been observed, namely increasing fertility, union formations and union stability (Goldscheider 2015). Using total fertility rate data from the United Nations and comparing 1980 to 2010, Esping-Andersen and Billari show that a turnaround to less family is happening for countries that entered the SDT first. Supporting this idea of reversing possibility: countries with the highest levels of female labour force participation, like the Nordics, are the ones with the highest fertility in Europe. On the other hand, Southern Europe – which adopted SDT changes later on – shows low fertility and low female labour force participation (e.g., Engelhardt, Kögel, and Prskawetz 2004; Rindfuss and Brewster 1996). Moreover, countries with high levels of fertility in the developed nations' context are the ones promoting fathers' involvement in the home through generous paternal leave, for example.

Several papers have shown that women economic responsibility is not harmful to family and union formation. In terms of unions, education and egalitarian values seem to be prime indicators of union stability. Some studies prove better-educated women are more likely to marry than less-educated women. For example, in a study in 2011 in Sweden, women with a “high career orientation were more likely to enter a union” than other women (Thomson and Bernhardt 2010). Other studies in Sweden (Hoem 1997) and the US (Martin 2006) show that women’s educational attainment is negatively related to divorce. Esping-Andersen and Billari (2015) cite other studies (e. g. Chesnais 1996; Thévenon 2011) linking positively fertility and economic role of women. The authors state Scandinavia as an example in household labour division and dual-career couples. Multiple studies do prove the positive effect of men involvement in the household for reversing demographic trends and union stability, which I believe support the gender revolution theory. Men with more egalitarian values are more likely to marry than others (Sevilla-Sanz 2010). Transition from cohabitation to marriage has been showed to be more frequent for fathers involved in the private sphere (e.g. childcare). As stated in Goldscheider’s et. al. study (2015): “Nordic men who take parental leave are less likely to end their union” (Lappegård, et al. 2014). Regarding fertility, a study from 2014 establishes a gender-equality threshold over which fertility increases again (Garcia-Manglano, Nollenberger, & Sevilla-Sanz). This gender equality needs to emerge in the private sphere to reverse the fertility dynamic, where the focus lies on both the economic role of both parents and their concomitant involvement in the household (Goldscheider, Oláh & Puur 2010). A family equilibrium can be found, which would emanate from gender-egalitarian arrangements (Esping-Andersen & Billari 2015). According them, relationships and also social institutions’ adaptation to new expectations is necessary for finding this equilibrium and its diffusion.

Sweden seems to be the only country that has fully embraced the gender revolution (in other words the two stage of the gender revolution). While women enjoy high levels of labour force participation, men do commit in the household. For Goldscheider et. al., Sweden is the only country where both halves of the gender revolution can be observed and both halves would reinforce each other. Additionally, entering parenthood does not signify sharing traditionalistic attitudes and behaviours for young Swedes, unlike in other countries (Goldscheider et. al. 2015). The Swedish exceptional situation finds its source, in part, from the policies in place: national supportive attitude towards equality between genders is related to behaviours in the private sphere as mentioned by Kil & Neels in 2014. Sweden is known to be one of the most egalitarian countries (Bernhardt, Noack and Lyngstad 2008), moreover the state provides family support, such as paternal leave. Thus, this progressive national attitude reinforces egalitarian involvement in the home (second part of the gender revolution), having a positive effect on union stability and fertility (Goldscheider et. al. 2015).

2.3.2 SDT vs Gender revolution: future trajectories

Specific dynamics of the SDT have also spread to other continents than the ones it emerged in: many countries of Latin America and Asia share such demographic traits (Lesthaeghe 2010).

However, regarding the gender revolution, Goldscheider et. al. state their scepticism toward a geographical spreading as easy as the one the SDT has followed. Nations where the gender revolution displays signs of development have a “long history” in gender role flexibility which is not necessarily the case elsewhere than in Northwestern Europe (Goldscheider et.al. 2015).

SDT defenders’ explanations for the underlying demographical shifts differ from Goldscheider’s et. al. view on the topic. The first one underlines the importance of values and ideational changes, while the latter ones place a structural shift in the centre of the explanation. Fundamentally, the gender revolution should be viewed as a reshaping of the relationship between men and women – relationship that can change as it reflects the consequences of industrialization (Stanfors & Goldscheider 2015). Concerning future trajectories, the scholars’ expectations are contrasting as well: SDT defenders agree on the permanency of low fertility, for example, whereas the optimistic gender revolution scholars believe in replacement-level fertility once the revolution is complete. For these latter ones, the SDT characteristics are transitional and related only to the first part of the gender revolution. If one takes a look at Nordic countries, where the fertility is close to replacement levels, Lesthaeghe (2011) and Sobotka et. al. (2011) see it as an exception and foresee no improvement in union stability. Regarding cohabitation, Goldscheider et. al.’s position is not very clear. They do, however, state that cohabitation and non-marital childbearing is not detrimental to children as it embodies a recognized couple status like marriage. Additionally, postponement in parenthood is not viewed as problematic for them, but can be seen as actually beneficial for children being raised in a household with a more mature situation.

2.4 Past studies

In the 1970s, particularly in Scandinavia, cohabitation had already become a social institution such that “couples do not choose to cohabit instead of marry. They just cohabit” (Trost 1979). Swedish and Danish patterns set the change: Van de Kaa states other Western European countries have been following the Scandinavian trends toward cohabitation reaching the stage of acceptance since (Van de Kaa 1987). In 1971, Björnsson described the “Icelandic way of starting a family” as the following:

- Meeting > conception > cohabitation > birth of first child > wedding.

Whereas the “recognised” way would have been:

- Meeting > engagement > wedding > conception > birth of first child. This second way clearly follows a traditional outcome of partnership and family formation, whereas the described “Icelandic way” could be viewed as very modern.

This Icelandic way and its early timing of entering parenthood appears to be highly advanced in the SDT sequences. As Lesthaeghe says: “the parenthood decision often comes first, and the marriage decision follows” (Lesthaeghe 2010).

Focusing on the Nordic countries, the fertility rates have been below the 2.1 level of replacement for decades, except for Iceland, and procreation is no longer exclusive to wedlock anymore. For example, in Sweden, 57% of all births occur outside marriage (Andersson et al 2017). The disconnect between marriage and childbearing is prominent, as marriage is now a later step into partnering and comes after cohabitation and family formation. According to Andersson et. al. (2017), the “role of non-marital cohabitation” is notably “very strong in Sweden” (Andersson et al 2017). According to Sobotka (2008), there is a “positive regard” towards cohabitation as a “premarital stage”, and more and more people in Europe are considering it as an alternative to marriage. The recognition of it, alternatively to marriage, is considered and rising (Sobotka 2008). Kiernan (1996) grouped EEC survey data from ten European countries to observe the rise in the popularity of cohabitation. The results revealed that, in Denmark, women preferred cohabitation over marriage, thereby proving this increasing popularity for cohabitation. Other authors state numbers of couples entering marriage without prior cohabitation is decreasing (Klijzing & Macura 1997). Supporting this, less than 5% of the marriages in Sweden are direct ones, where a direct marriage is one where couples marry without prior cohabitation (Andersson and Philipov 2002). The share of births outside wedlock in the total births as an increasing dynamic is one of the main feature of the described SDT. In his study (2002), Van de Kaa reconstructed a table comparing this share in 1965, 1980 and 1999 using data from other prominent studies (Frejka and Calot (2001), Council of Europe (2000), and Sardon (2001). The Nordic countries show the following increase:

Norway’s share of births outside marriage rose from 4.6% in 1965 to 14.5% in 1980, and to 49% in 1999. Thus nearly half of all births occurred outside the marital institution. For Sweden, the share started at 13.8% in 1965, rose to 39.7% in 1980 and to 55.3% in 1999. Regarding Denmark, there was a 9.5% share that increased to 33.2% and ended at 44.9% in 1999. Finally, for Finland, this share went from 4.6% to 13.1% and then to 38.7%. It is, therefore, clear to see that Nordic couples have embraced procreation outside wedlock. Sweden even demonstrated more than half of births outside marriage in 1999.

In Sweden and the European setting, creating a family nowadays is no longer synonymous with marriage. In other words, people can have children and start a family without having to be married (Björnberg 2001). The duration of years outside of marriage is increasing in length, indicating that marriage is occurring much later in people’s lives. Cohabitation is becoming the main first form of union and precedes legal recognition through marriages (Wiik, Bernhardt & Noack 2010). In his 2004 study, Kiernan used data from Eurobarometer Surveys 2000-2001 from the European Commission combined with other surveys providing a 90 000 individuals sample to analyse the popularity of cohabitation. Kiernan concluded that Nordic countries do embrace cohabitation more than any other European country: among couples in partnership, 85% were, at the time the research was conducted, cohabitating and not married, meaning 15% are married. This share was of 74% and 73% in Finland and Denmark, respectively.

This traditional institution of direct marriage has even become an “unusual pathway typical of specific religious and ethnic groups” (Sobotka 2008) and would, therefore, not reflect the behaviour of the majority of the population. Norms evolved in the sense that couples were not required to marry before childbirth, and the ever-married proportion as well as the age at first marriage declined as a result. By the time Van de Kaa published his study in 1987, only Sweden and Denmark had fully completed the full sequences of change in family formation.

Other indicators show this swing from an altruistic to a more individualistic marriage pattern: the decline of marriage rates in Sweden started in 1970, followed by Denmark and Switzerland in 1975; and the rise of mean age at first marriage with Scandinavians marrying the latest (26.1 and 27.3 in 1984, respectively for Denmark and Sweden). Moreover, Iceland seems to follow such a pattern where more than 40% of births occurred (back then) outside wedlock, and where mean age at first marriage was higher (back then) than the age at first childbirth (Van de Kaa 1987).

Regarding divorces, the list was topped by Denmark in 1982 and Sweden in 1983, where both countries showed both more than 45 divorces per 1 000 existing marriages (Van de Kaa 1987). According to him, the changes in laws allowed separations and divorces to occur earlier in marriage and at younger ages than before. Other studies support the democratization of divorce and figures show a steady increase for nearly all observed European countries. In the Nordics, Sardon's study (2000) indicated that divorce rates increased in all countries between 1980 and 1999. The divorce rate climbed from below 30 to over 35 in Iceland, 43 to 53 in Sweden, 25 to 40 in Norway, and from below 30 over 50 in Finland and Denmark showed only a slight increase.

Contraception has been widely adopted by couples to regulate fertility during the defended SDT. Coleman's study (1996), although dated as it uses data from around the 1980s corresponds to a relevant time of investigation. The results show that 73% of married women did use contraceptive means at that time (the pill and condoms were more widely spread than others means).

3. Research questions and aim

The goal of this study is to draw attention to the very recent dynamics and trends in the demographic behaviour in the Nordic countries. This thesis aims to shed light on and compare Nordic trends concerning family formation and partnership formation and dissolution in the recent years, more precisely since the 1960s. Partnership formation and dissolution, and family formation have been, and still are, demographic concerns that have been impacted strongly by the SDT. As underlined in the theory section, entering partnerships now happens at later ages, partnerships dissolutions are more frequent, and childbearing occurs later in life. Focusing on the case of Iceland, the expectations are that the demographic trends followed in the past decades are somewhat different than the ones followed by the other Nordic countries. Nordic countries are known to be the most gender-equal countries; in this context, the Icelandic case might be unique.

Have the Scandinavian countries been showing low / sub-replacement levels of fertility over the past few decades? Is procreation still closely tied to marriage? Are the types of unions growing more diverse and coming across more traditional paths? In quantitatively comparing Scandinavian and Finnish trends with the Icelandic ones, this thesis will contribute to the empirical literature regarding the SDT in Iceland. Moreover, this work will provide new basis for further research on this topic.

Furthermore, to what extent has the SDT been developing in the Nordic countries and in Iceland? Are Iceland demographic behaviours alike other Nordics' demographic behaviours?

Compared to its Nordic neighbours, Iceland has a very small population and is an isolated island. This thesis will answer the question whether Iceland might have followed its own demographic features in the recent years.

4. Data and Method

4.1 Indicators

The SDT literature insists on various indicators to show the observed demographic trends. Yet, some of these indicators appear to be the most suitable and explanatory ones in order to assess the evolution of the SDT in the analysed countries. Therefore, I will look more closely at the following indicators for the five Nordic countries (Denmark, Finland, Sweden, Iceland, Norway): the total fertility rate (TFR) as well as the total fertility rate in terms of Icelandic TFR; the share of births outside wedlock; the mean age at first child both for both women and men; the mean age at first marriage both for women and men; the mean age at first consensual union for Iceland; and the divorce rate. The study is not using the marriage rates but prefer using the mean age at first marriage, as it gives a better overview on the timing of partnership formation – which is the focus of this work. Moreover, we choose to take a closer look at the age at first child for men because this indicator often is often missing in demographical studies. Also, we do believe it is as relevant to know when men have their first child as it helps in assessing the evolution of the SDT.

The indicators take the form of longitudinal data and the analysis will provide comparative charts. The charts will provide a clear understanding of recent evolution in the demographic trends of the Nordic countries towards family formation and partnership formation and dissolution. This study will compare Icelandic data with Norwegian, Swedish, Danish, and Finnish data.

4.1.1 Indicators definition

The total fertility rate is computed by adding the age specific fertility rates for women in a given year. It can be interpreted as the mean number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the fertility rates by age of a given year (Eurostat 2019). The replacement level fertility is 2.1 children per woman, and such a sustained fertility level would mean that the population replaces itself (WHO 2019).

The share of births outside marriage: it compounds the percentage of live births occurring where the marital status of the mother is other than married at the time of birth (Eurostat 2014).

As self-explanatory as it can be, the mean age at first childbirth for women is the mean age at which women get their first child. For men, it is the mean age at which men get their first child (Eurostat 2019).

Mean age at first marriage by sex: the mean age at first marriage is the mean age of women and men when they first get married. Marriage here, is, being referred to as an act, ceremony

or process by which the legal relationship between two persons is formed. The legality of the union may be established by civil, religious or other means as recognised by the laws of each country.

Alternatively, consensual unions refer to the situation when two persons belong to the same household, and have a marriage-like relationship with each other, and are not married to or in a registered partnership with each other. It is important to note that couples living in consensual unions are not married or are not in any legally-registered partnership (Eurostat 2019). Therefore, consensual unions allow us to use an indicator reflecting cohabitation.

Divorce is the final legal dissolution (ending) of a marriage. A divorce is the type of separation between spouses that confers on both parties the right to remarry under civil, religious, or other provisions, according to the laws of each country. The divorces per 100 marriages is the ratio between the number of divorces (independently of the duration) and the number of marriages in a given year.

4.2 Eurostat

The presented data have been collected via Eurostat, the European statistical office. The office ensures quality in the research work. In 2016, the office was audited by the European Foundation for Quality Management and was given a two-stars certificate recognising the office's excellence. Eurostat complies to systematic checks on their processes by the Quality assurance framework of the European Statistical System. Hence, Eurostat works in respect to trust, professional independence and innovation. The office is a directorate of the European Commission. Gathering national data, Eurostat is the perfect tool for objective analysis and enables comparison between countries and overtime thanks to longitudinal presentation of the data. Eurostat compounds country-level data on demography and the presented indicators do not reflect sample calculations but reveal the country levels of each of the indicators. For example, the mean age at first birth for Iceland has been calculated by adding all the ages of the women who gave birth to their first child during a given year and by dividing this addition by the number of women who gave birth to their first child during that year.

4.3 National Statistics

The Nordic official statistical agencies Hagstofa Íslands (Statistics Iceland), Statistisk sentralbyrå (Statistics Norway), Statistiska centralbyrån (Statistics Sweden), Danmarks Statistik (Statistics Denmark), and Tilastokeskus (Statistics Finland) provide high quality data and, for most indicators, have a strong historical record. They operate with "impartiality, objectivity and statistical confidentiality", comply with the European Statistical System (ESS), and their quality system is based on the European Statistics Code of Practice published by the ESS (*Statistics Iceland, Quality policy; Quality work in Statistics Norway; Strategy and Quality Danmarks Statistik*).

The official statistics agencies have been used for completing datasets when needed. Statistics Iceland, Norway and Denmark completed the Eurostat dataset for the mean age of women at birth of first child for respectively 1961-1991, 1961-1990 and 1960-1967, 2002-2003, and 2006-2011. The same databanks were used for the mean age of men at first child for 1981-2018 for Iceland, 1981-2018 for Norway, and 1986-2018 for Denmark.

The data sets have been completed with data from Statistics Sweden, Iceland, Norway and Denmark for the mean age at first marriage for both women and men respectively for 1960-1989; 1965, 1975, 1980 and 1985; 1974-1989; and 1960-1989.

Regarding the age at first consensual unions, the thesis uses data from Statistics Iceland due to lack of data on Eurostat. Therefore, the analysis for this indicator is not comparative but rather, and only, descriptive of the evolution of it in Iceland.

(*cf. Statistical sources*)

5. Results

Scandinavia and Nordic countries, more generally, have been among the first ones to enter the SDT. The acceptance of new values, such as individualism, should be reflected in the statistics (Surkyn & Lesthaeghe 2004). According to these researchers, Nordics have adopted the SDT demographic behaviour for decades, but are these associations still showing the same patterns?

The results section contains a descriptive comparison of the six chosen indicators in the five Nordic countries, namely Iceland, Norway, Sweden, Denmark, and Finland. Special focus is given to Iceland as the aim is to verify the Icelandic's demographic stage and relation to other Nordics. The results seem to place Iceland as an outlier for all the analysed indicators. The graphs used below have been plotted with the generated data from the Demography and migration database of Eurostat 2019. The generated data sets have been completed with additional data from Statistics Iceland, Statistics Norway, Statistics Sweden and Statistics Denmark. All the data extraction and analysis have been performed by the author. In addition to the six descriptive graphs, I calculated the ratio between the Icelandic and the other Nordic countries' TFR and mean age of mother at first childbirth. These two ratios help understanding how the Icelandic trends evolve in relation to the other Nordic countries' trends.

5.1 Total Fertility Rate

The TFR is a measure of fertility, but it is important to note that it is a synthetic rate which means that this measure is not based on counting the number of children actually born to women during their lifetime. In contrast to completed or cohort fertility, the TFR does not reflect the true fertility. For example, postponement in childbearing does affect the TFR on the decline for example. Thus, this measure is highly sensitive to changes in the timing of births (Klængur Jónsson 2018). The TFR is calculated with the age-specific fertility rates of women in childbearing years (15 to 49). It is a volatile measure, yet it is the measure commonly used to assess fertility.

The very recent years have been among the ones presenting the lowest TFR ever recorded in the Nordics. In Iceland, the 2018 TFR was the lowest ever recorded (*Statistics Iceland, 2nd April 2019*). The situation is the same in Norway where the TFR has been decreasing since 2009 and was the "lowest ever registered" for 2018 (*Statistics Norway, 12th March 2019*). Finland presents a similar conjecture, with an "all-time low" 1,49 TFR in 2017 (*Statistics Finland, 27th April 2018*). In contrast Denmark and Sweden are not encountering the same low-records of fertility, yet

both countries faced lower fertility levels respectively during the 1980s and the 1990s (as seen on the graph below).

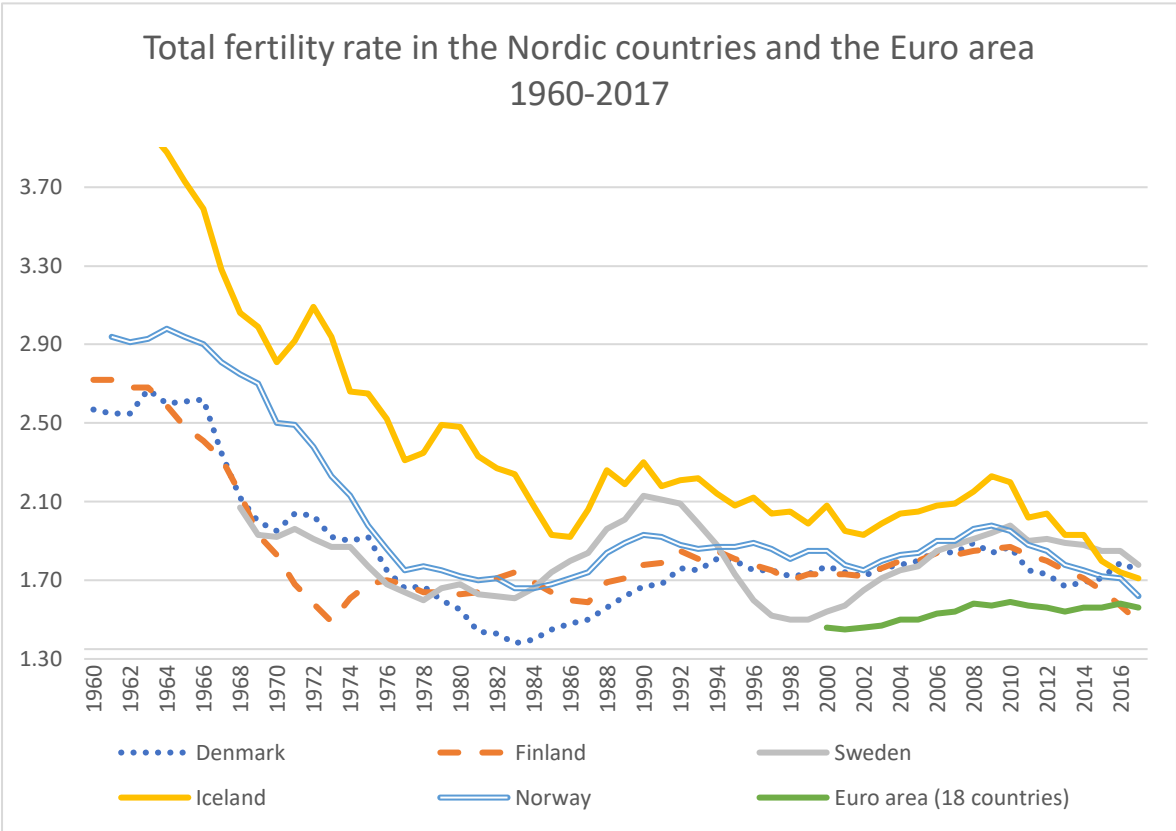


Figure 2: Total fertility rates charts for the Nordic countries and the Euro area 1960-2017, source Eurostat Database 2019, Population and social conditions, Fertility indicators

Throughout the 1980s, 1990s, and 2000s Nordic countries have shown relatively high fertility rates especially when comparing them to fertility rates of the rest of Europe, or the Euro area. Many South and Eastern European countries have experienced low-lowest fertility (<1,3) rates in the 1990s and in the 21st century (Kohler et. al. 2002) while Northern Europe seemed to be “immune” to such phenomenon. The very recent and current fertility rates in the Nordics are not to be compared with the low-lowest ones, but it is important to note that the decline in these rates has been rapid or even drastic. Since 2011, all the Nordic countries without exception have been experiencing a decrease in total fertility rates (TFR). The most impressive decline is to be observed in Iceland, for which the TFR started from a high, above replacement level, of 2.23 child per woman in 2009 ending at 1.71 in 2017 (Eurostat 2019). In only eight years, this decline represents a 23.32% decline in fertility levels. Focusing on the 2011-2017 period, the decline in TFR accounted for more than 15% in Iceland, 18% in Finland, nearly 14% in Norway, and about only more than 6% in Sweden while Denmark’s TFR was the same in 2011 and 2017. The *Appendix 1* shows the evolution in TFR levels with more accuracy for the years 2000-2017. Regarding these very recent years, Denmark seems to be the outlier regarding the TFR as it is the only Nordic country for which the indicator seems to stabilize after a slight increase between 2013 and 2016.

One important observation concerns Iceland: as clear as the graph above presents it, Iceland’s TFR has been significantly above the ones of its Nordic neighbours since at least 1960 and until

2012. After 2012, Iceland's TFR joins the ones from the other Nordics and presents only the 3rd highest TFR in 2017. Thus, while Icelandic TFR has been an exception for a long period and has been flirting with the replacement-level for many decades, this exception seems to have faded away in the very recent years.

By simply plotting the other Nordics' TFR in terms of the Icelandic TFR, one can observe the increase of this indicator for all countries. When this indicator equals one, it means the TFR of Iceland and the other country is identical. When it is above one, it indicates that the other country's TFR is higher than the Icelandic one. Lastly, when the indicator stays below one, it is the Icelandic TFR that is higher. Firstly, the graph below shows that the Icelandic TFR has been higher than in the other Nordics up to 2015 with Sweden overtaking and then joined by Denmark in 2016. Secondly, the graph shows a non-steady increase, meaning that the Icelandic TFR is slowly losing importance in comparison to other Nordics. The TFR of the other Nordics became closer and closer to the Icelandic ones. In general, Icelandic's TFR has become closer and closer to other Nordics' TFR and to the Euro area average as well. In contrast, since 2016, Finland's and Norway's TFR loses importance compared to the Icelandic one, indicating a large drop in these two Nordics compared to Iceland.

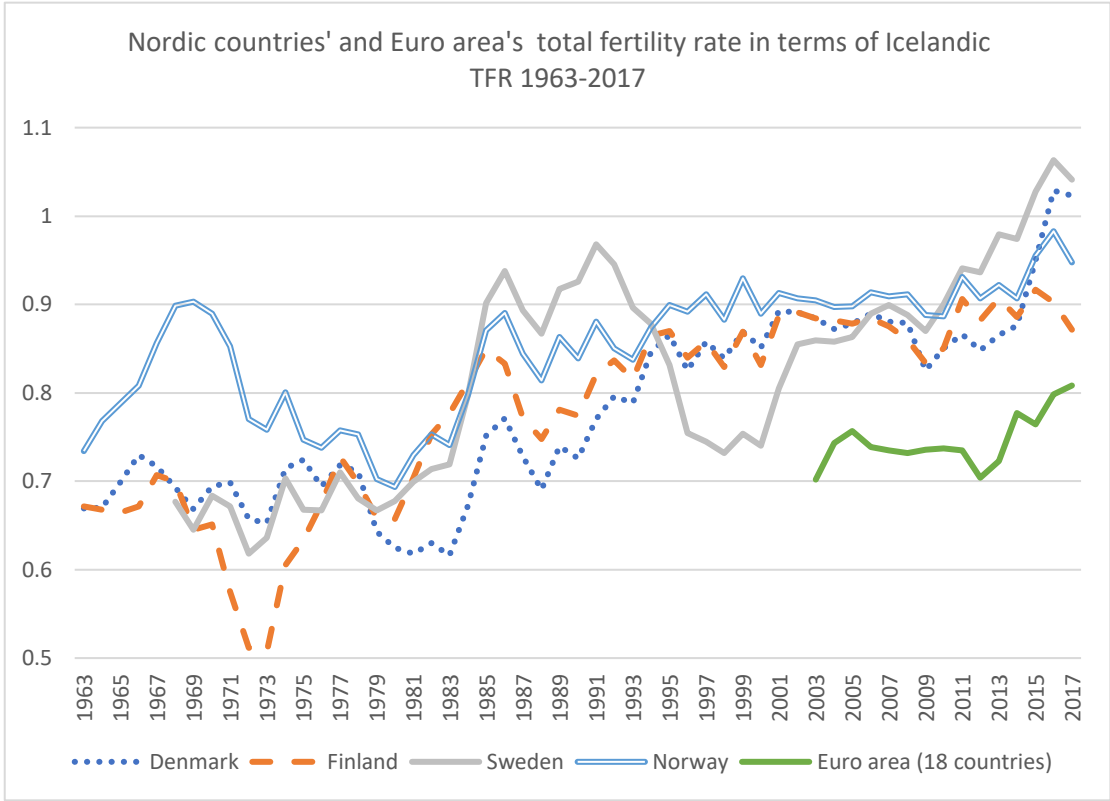


Figure 3: Ratio of the Nordic countries' / the Euro area's and Iceland's fertility rates 1963-2017, calculated by the author, source Eurostat Database 2019, Population and social conditions, Fertility indicators

The studied period includes the changes of the SDT. According to several scholars and Lesthaeghe (2014), the change sourcing from the SDT in terms of fertility is a sustained below-replacement level TFR. In all four continental Nordics, the TFR showed below replacement level since 1968 in Sweden, since 1969 in Denmark and in Finland, and since 1975 in Norway. Therefore, these latest Nordic countries checkmark the sub-replacement fertility level which

is a typical and important demographic feature of the SDT. Iceland, in contrast, seems to have entered this stage of the SDT way longer after the other Nordics: it was only in 1984 when Iceland showed a TFR below the 2,1-replacement level. The TFR stayed below 2,1 only for only four years before increasing over this level again. The TFR flirted with the 2,1 replacement-level for several years after that, sometimes surpassing it, like in 2008-2010. Thus, there is doubt Iceland fully entered this stage of the SDT. Lesthaeghe insists on the “sustained sub-replacement level fertility”, yet Iceland does not show below 2,1 TFR for sustained periods of time. The longest period during which the Icelandic TFR stayed below the replacement level was 11 years between 1997 and 2007. It then attained a 2,23 TFR in 2009. Although the TFR kept sub-replacement fertility levels for 11 years, the observed TFRs were very slightly below the 2,1 threshold: 2,05 in 1998; 2,08 in 2000; and 2,04 in 2004, indicating they were flirting with the fertility replacement level.

Therefore, even though Iceland has experienced sub-replacement level fertility for a sustained 11 years, the difference between the replacement level and the observed TFR during the years under 2,1 was very small. I thus have doubts whether Iceland ever entered this phase of the SDT. Nevertheless, Icelanders do seem to have fewer children in the very recent years: since 2010 the rate has been dropping steadily and this might be the sign that Iceland is entering this stage of the SDT.

Focusing on the other Nordics, none of them – except Sweden between 1990 and 1991 – exceeded the fertility replacement level after 1975. All the continental Nordics have experienced a drop in TFR and showed sustained sub-replacement fertility levels. I can, therefore, safely state that Denmark, Sweden, Finland and Norway adopted the change in fertility, specific to the SDT. Besides, the drop in TFR in the very recent has been much more rapid in Iceland than in the other Nordics, as stated earlier. Indeed, 2015 marks the first year the Icelandic TFR is surpassed by another Nordic’s TFR.

5.2 Births in- and outside marriage

Concerning the share of births outside marriage, it is important to note that Iceland seems to be a forerunner for this SDT feature. Before the development of the SDT in the Nordics in the 1960s, the share of births outside wedlock in Iceland represented already about a quarter of all births, whereas births outside marriage seemed to be very unusual in Sweden, Denmark, Norway and Finland at that time. This is particularly true of the two latter ones where it represented not even 5% of all births and was, therefore, nearly non-existent.

Yet, since 1960, the shares of births outside wedlock have been increasing in all the Nordic countries. Comparing 1960 to 2017, the share of births outside wedlock is nearly 5 times greater in Sweden, nearly 7 times greater in Denmark, more than 11 times greater in Finland, and more than 15 times greater in Norway. Regarding Iceland, this development does not seem as important as the share of births outside marriage multiplied by around 2,8 between 1960 and 2017, but at higher levels.

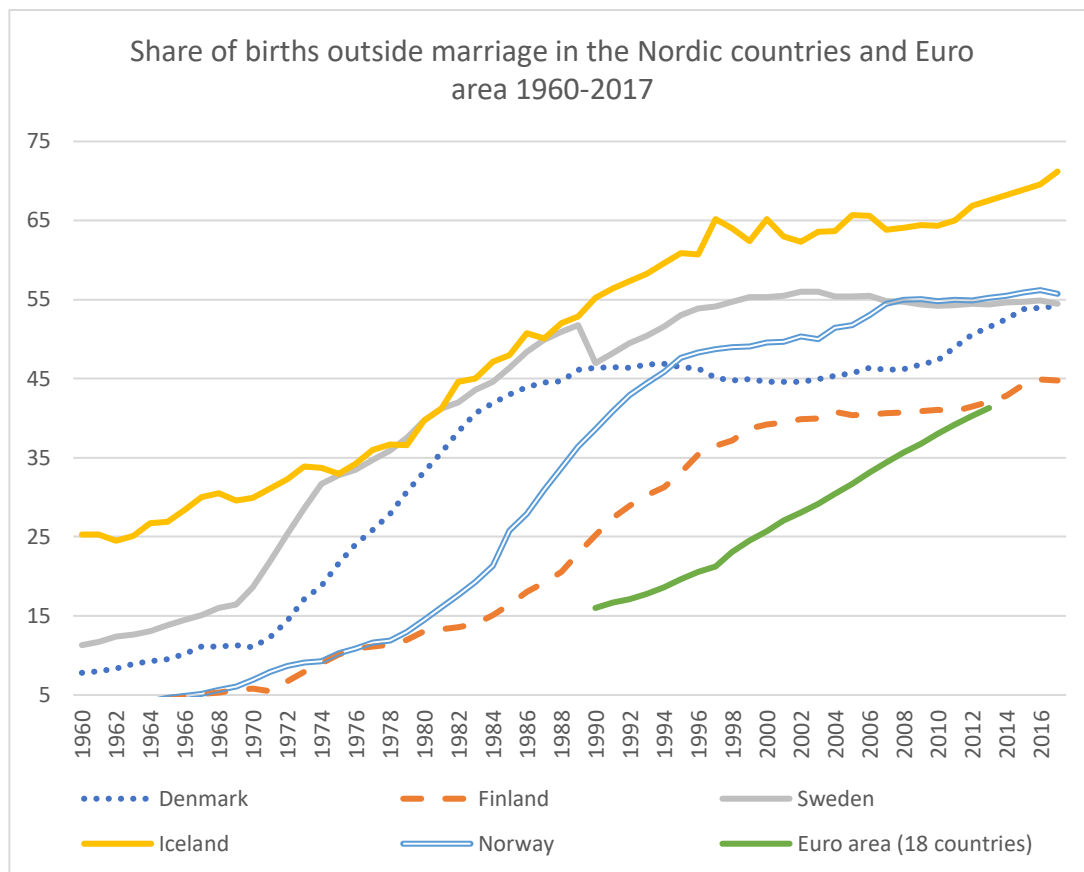


Figure 4: Share of births outside wedlock charts for the Nordic countries and the Euro area 1960-2017, source Eurostat Database 2019, Population and social conditions, Fertility indicators

The increase in this share is evident and remarkable: Icelandic births occurred outside marriage for every one in four mothers in 1960 and occurs for around three in four mothers nowadays. This changed happened over about three generations. The three Scandinavian countries (Norway, Sweden and Denmark) show less extreme values, and today, slightly more than half of the births occur outside marriage. The three Scandinavian countries met around a 55% value in 2017 while Iceland, as a forerunner, shows a 71% share of births outside wedlock. Regarding Finland, the change seems to have been much shier: the majority of the births still occur within marriage (44,9% of births occurred outside marriage in 2016). Finns seems to show a more conservative behaviour regarding births status as more than 55% of the total number of births still occur within marriage. However, this share reduces year by year.

Furthermore, the Swedish and Norwegian figures are stabilizing as they have been oscillating around 55% for almost 20 years in Sweden and for 10 years in Norway. This stabilizing pattern has been shared by both countries since 2000. Most of the change happened between the 1970s and the late 1990s. However, the Icelandic and Danish dynamics – and the Finnish ones in a smaller order – have displayed an increasing pattern in the very recent years. From a historical perspective, the share of births outside wedlock has been relatively high in comparison to other European countries. Comparing the Nordics with the Euro area, it is evident that outside-wedlock births are much more common in the first ones: in 1995 less than 20% of all births occurred outside wedlock in the Euro area while thy represented already more than 45% in Norway and Denmark, 53% in Sweden, and more than 60% in Iceland.

Focusing on Iceland more specifically, the share of births outside marriage has been the highest from the Nordic countries since 1960 with the exception of 1979 when Sweden showed a higher share. The share rose rapidly from the mid 1960s on, with a steady growth until the late 1990s going from less than 30% to more than the double. In the more recent years, the growth of this share continues rising but to a lesser extent. For decades, Iceland has been a forerunner regarding this indicator. Icelandic's share of births outside wedlock was already above 14% in 1853, whereas the next Nordic country overpassing this 14% share was Sweden more than a century later in 1966. At this time, Icelandic's share of births outside marriage (28,4%) was nearly twice as high as the Swedish one (14,5%). Since then, Iceland and Sweden have been leading, with very similar rates between 1975 and the late 1980s, after which Iceland's rate kept rising while the Swedish one has been following slower increases and eventually stabilization. In 2016, Iceland was the European country with the highest share of birth outside wedlock (Eurostat 2016).

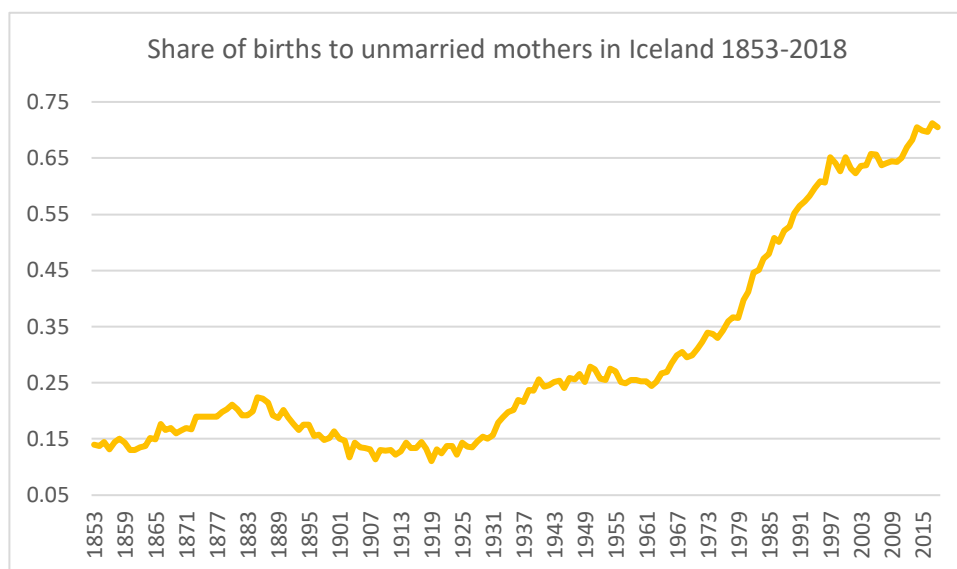


Figure 5: Evolution of the share of births outside wedlock for Iceland 1853-2018, source Hagstofa Íslands (Statistics Iceland) Database 2019, Population, Births and deaths

It is safe to state that all the Nordic countries have fully entered this feature of the SDT and that procreation is definitely not exclusive to marriage. Moreover, it appears that Iceland is a leader for the share of births outside wedlock.

5.3 Age at first child birth

The generated data offer coverage from 1960 onwards for Iceland, Norway and Denmark. Regarding Sweden and Finland, the coverage starts at 1990. The followed pattern is clear and similar for all countries of the Nordic region where the mean age at first childbirth has been increasing continuously. In the historical context, the age at first childbirth had been declining in the 1950s, and this period was demographically marked by lowering age at first marriage. In the traditionalistic societies (Van de Kaa 1987), this meant lowering age at first childbirth as well. Before the SDT, marriage and childbearing were very much concomitant. Therefore, the age at first childbirth and age at first marriage need to be studied in parallel – I analyse the pattern followed by the mean age at first marriage in the next section.

As a result of lowering age at first marriage, fertility had been shifted to earlier ages as well. Following the trends of the SDT, couples' freedom regarding childbearing grew and the link between marriage and childbearing lost importance (Van de Kaa 1987). From 1970 on, the rise of the age at first childbirth is visible, and the increase is constant throughout the whole period until 2017. An interesting observation concerns Iceland: the Nordic island's mean age of mother at first child birth stays well below its Nordic neighbours' values. In 2017, all Nordics showed an age at first childbirth older than 29 while Iceland's mean is not yet reaching 28. Although this age keeps a safe difference in comparison with the other Nordics, the value is increasing in Iceland.

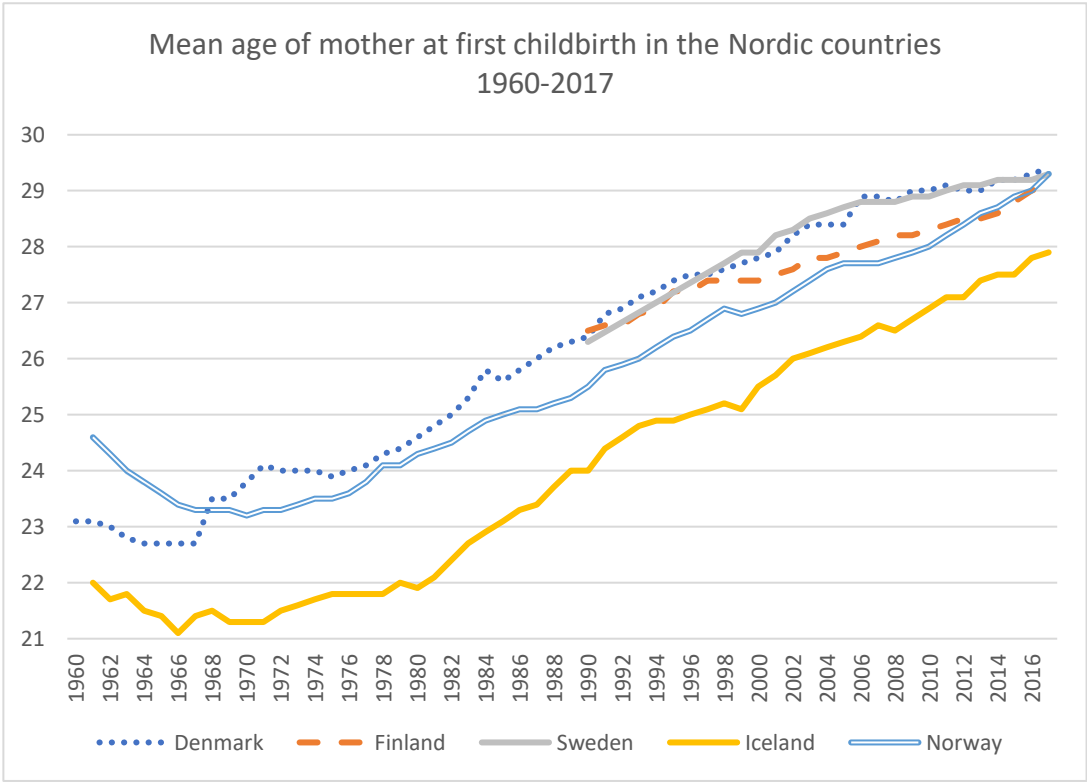


Figure 6: Mean age of mother at first childbirth charts for the Nordic countries 1960-2017, source Eurostat Database 2019, Population and social conditions, Fertility indicators; and Statistics Iceland Database, Statistics Norway Database and Statistics Denmark Database

However, the difference between the Icelandic outlier and the other Nordic countries loses significance (see graph below). We take a closer look at the ratio between the Nordic's and the Icelandic's mean age of mother at first childbirth. The lower the value is, the closer it is to the Icelandic age at first child birth: approaching 1,00 means approaching the same age at first childbirth as the Icelandic mothers mean age at first childbirth. This value is depending on the Icelandic as well as the other country's age at first childbirth. In other words, if the other country's age at first childbirth does not change from one year to another while the Icelandic age at first childbirth increases from one year to the other, the value will approach the 1,00 value. On the graph below, it is clear that all countries have increasingly approached Iceland more and more over the years. Consequently, the ages at first childbirth are more and more similar: Icelandic women have their first child at ages closer to the other Nordic women's ages. Thus, Iceland is less and less of an outlier regarding this indicator, and eventually, Icelandic

women might show equal age at first childbirth to Scandinavian ones in the future (if the trends keep the same pace).

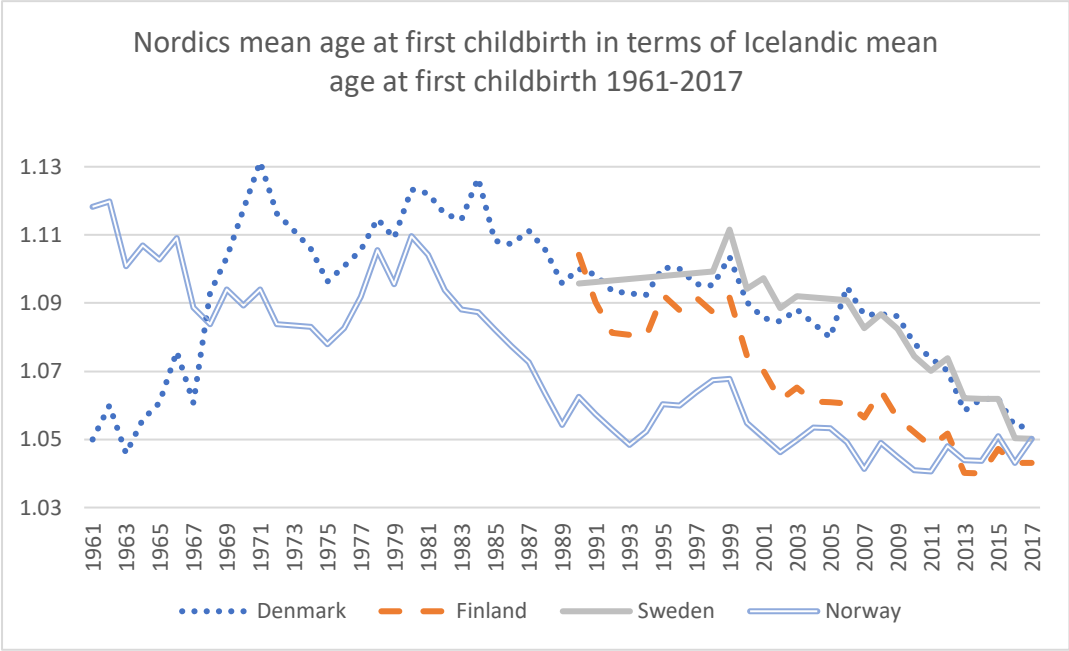


Figure 7: Ratio of the Nordic countries' and the Icelandic mean age of mother at first childbirth, calculated by author, source Eurostat Database 2019, Population and social conditions, Fertility indicators; and Statistics Iceland Database 2019, Statistics Norway Database 2019 and Statistics Denmark Database 2019

Up until now, I have been describing and analysing the age at first childbirth for mothers. I now take a look at the recorded same measure for fathers in Iceland, Norway and Denmark. The dynamics are very much alike and comparable: the age at first marriage has been increasing over the period in the three observed Nordics. Icelandic values are, once again, standing as outliers in comparison to other Nordic countries (here Norway and Denmark). Fathers in Denmark and Norway have been showing closer age at first childbirth over the years. In contrast, Icelandic fathers' mean age at first child shows much younger ages. Nevertheless, this difference has been reducing over the years. For example, the Norwegian and Danish fathers' mean age at first child in terms of Icelandic fathers' mean age at first child has been much declining over the period (*Appendix 2*) showing a smaller and smaller difference between Iceland and the other Nordics.

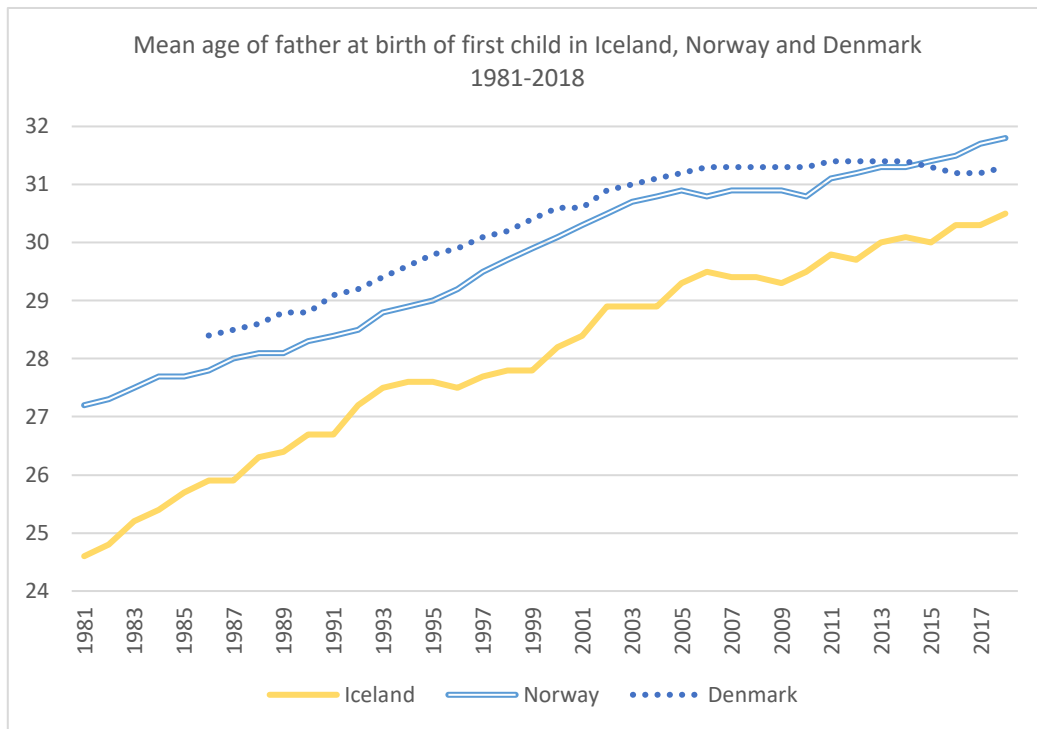


Figure 8: Mean age of father at first child charts for Iceland, Norway and Denmark 1981-2018, source Statistics Iceland Database 2019, Statistics Norway Database 2019 and Statistics Denmark Database 2019

5.4 Age at first marriage

With couples entering adulthood by marrying at older ages, the mean age at first marriage follows the SDT's expectations. Nordics' young adults are entering marriage later and later as can be observed on the two graphs below. The mean age at first marriage has been increasing since the early 1970s. The indicator's patterns are very similar and comparable between men and women: for both, Swedes are the ones marrying much later in life and this has been the case for nearly the whole period. Young Icelanders and Danes were leading at older ages for some years in the 1990s: Icelanders married later than Swedes between 1995 and 1998, and for Danes, this occurred between 1992 and 1998. Additionally, it is interesting to note that between 1990 and 2017, Finns have consistently been marrying at earlier ages (in comparison to the other Nordics), even though this is occurring at older and older ages.

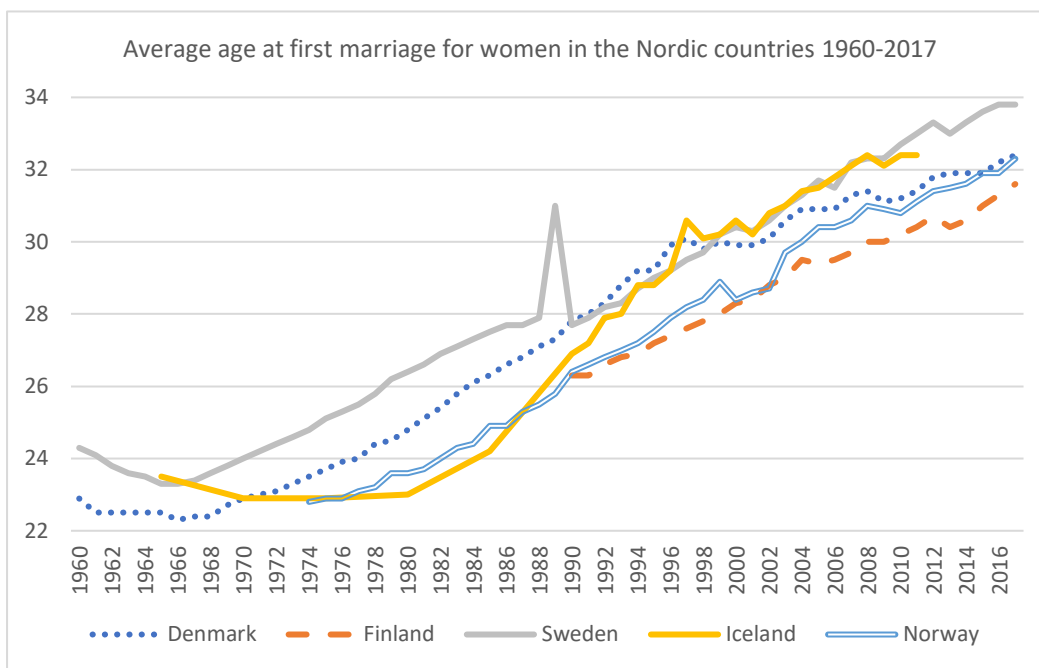


Figure 9: Mean age at first marriage for women in the Nordic countries 1960-2017, source Eurostat Database 2019, Population and social conditions, Marriage indicators; and Statistics Iceland Database 2012, Statistics Norway Database 2018, Statistics Sweden Database 2019 and Statistics Denmark Database 2019

Sweden is the country where individuals marry the latest, whereas Finland is the last country at picking up the older ages. Neither Eurostat nor Hagstofa Íslands (Statistics Iceland) propose the very latest years in their database for the age at first marriage in Iceland (missing data after 2011). However, it is interesting to note that Icelandic couples do marry late and also later and later. In comparison to the other Nordic countries, Icelandic women enter marriage at similar ages to Swedish women, whereas Icelandic men tend to marry somewhat earlier than Swedish men. Yet, Icelanders do seem to have fully entered this increasing-ages feature of marriage regarding the SDT, and it would be very interesting to see the very latest patterns for this indicators and especially regarding male's age at first marriage in Iceland to see if the drop in 2010/2011 is only temporary or if this indicates a lowering age at first marriage for Icelandic men.

Important to highlight as well is that Iceland seems to follow a unique pattern regarding the age at which men and women marry. Up until the late 1980s Icelanders were the ones marrying the youngest, but the development was very rapid so that from 1997 onwards, Icelanders were the ones marrying the oldest among the Nordic countries.

The sharp peak 1989 in the age at first marriage for both women and men in Sweden originates from a change in law towards widow pensions, which has led to multiple marriages.

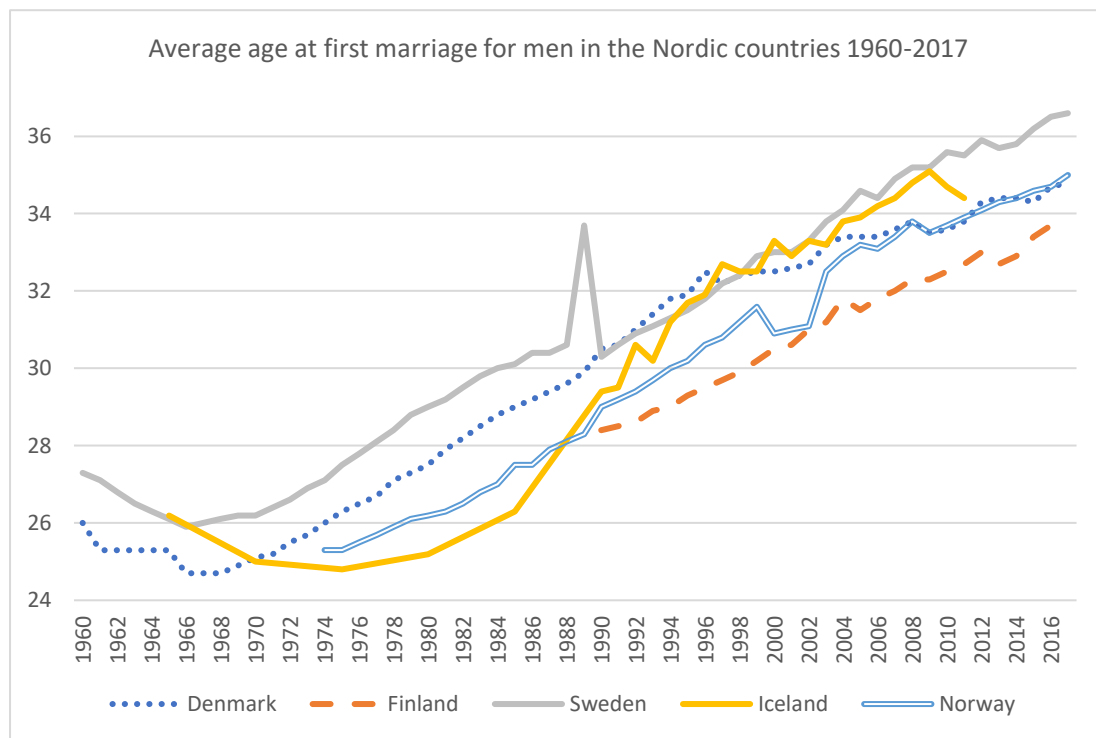


Figure 10: Mean age at first marriage for men in the Nordic countries 1960-2017, source Eurostat Database 2019, Population and social conditions, Marriage indicators; and Statistics Iceland Database 2012, Statistics Norway Database 2018, Statistics Sweden Database 2019 and Statistics Denmark Database 2019

It is also surprising to note that while Iceland can be observed as an outlier concerning the fertility rate, the share of birth outside marriage, and the mean age at first childbirth, it cannot be observed as an outlier regarding the age at first marriage. However, the pattern the Icelandic indicator took is unique. The timing of the rise of the age at first marriage is skewed to later years. In addition, the pace is also interesting as the growth is much quicker than for other Nordic countries. Icelandic values have been the lowest at the beginning of the development of the SDT, and it was not before mid-1970s when the Icelandic mean age at first marriage started rising. The steady increase allowed to catch up very quickly, and in the very recent years, Iceland shows the second oldest ages at first marriage for both men and women. The charts show that all the Nordic countries' age at first marriage comes across more traditional paths, thus marrying is not a required step into entering adulthood or parenthood. The Nordic countries have all entered this stage of the SDT; by the timing and pace Iceland stands out as unique regarding the development of this indicator.

5.5 Divorces

The dynamics followed by the divorce rates during the studied period 1960-2016 is not as clear as previous dynamics. There are more variations from year to year. Nonetheless, starting in the late 1960s, we can observe an increasing pattern regarding divorces. This feature is typical from the SDT and marks the expression of more individualism (Van de Kaa 1987). The increase is clear and rapid during the first years but appears to stagnate and fluctuate in a similar range at the end of the spectrum. Sweden and Denmark were the first countries in which divorces became popular: Sweden passed the 50 divorces per 100 marriages in 1974

and Denmark did so in 1980. Finland and Norway only reached this rate later (in 1989 and 1991 respectively). Surprisingly, Icelandic charts never reached this rate of 50 divorces per 100 marriages (it did not even reach 45). Iceland seems to stand, once more, as an outlier and here regarding divorces. During the impressive development in divorces, Iceland kept rising but in the lower spectrum with Norway and Finland; and, once Norwegian and Finnish trends kept rising to higher rates in the 1990s, the Icelandic ones slowly started to decline. For Denmark, the divorce rate decreased from the high levels in the 1980s but has again risen in the very recent years. Concerning Sweden, divorce rates are clearly high during the whole period. Similarly to the peak observed in the age at first marriage in 1989 in Sweden, there has been a sharp decline in divorces for this year in Sweden due to of the change in law for marriage and widow grants’.

Divorces have been experiencing acceptance and democratization in the early years of the SDT development. Nordic countries, and especially Sweden and Denmark, have been among the first countries to show development in divorces. It is evident that the Nordics have fully entered this sequence of the SDT and that family paths come across more traditional paths. Yet, it seems that divorce rates have not risen to higher and higher levels after the 1990s. Comparing the 1990s to the 2000s, divorce rates have been somewhat declining in Iceland, Sweden and Finland. Unlike other indicators (share of births outside marriage, age at first child or age at first marriage), the divorce rates do vary much more from year to year and do not follow a clear development after the 1990s.

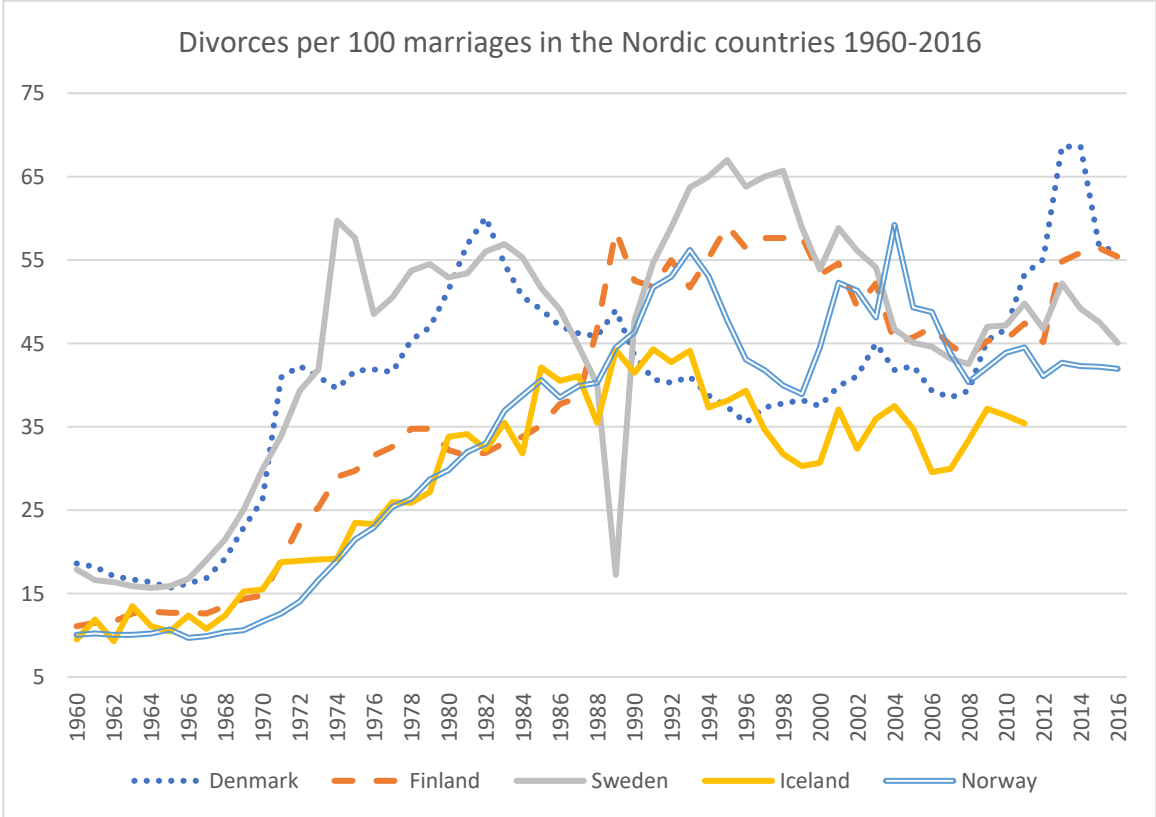


Figure 9: Divorces per 100 marriages charts in the Nordic countries 1960-2016, source Eurostat Database 2019, Population and social conditions, Divorce indicators

Regarding Iceland, it is clear that divorce rates have been the lowest amongst the Nordics since 1997. A decreasing dynamic in more recent years is even observable, but unfortunately the data for after 2011 were not available. Icelanders seemed to follow other Nordic countries' (namely Finland and Norway in this context) pattern from 1960 on where divorce rates increased rapidly until the 1990s. While Iceland fully complies with the SDT framework for the divorce rates' development, it stands out, once more, out as an outlier. Icelandic dynamics towards divorce have developed in a different way from the 1990s on.

5.6 Consensual unions

Consensual unions refer to the living arrangement not involving any legal act, in which two individuals live together in a marriage-like relationship. The data was recorded by Statistics Iceland about consensual unions over a twenty years period, from 1991 to 2011.

The charts enable us to compare the evolution of the ages at first marriage and at first consensual union for both women and men. Over the 20 years period, it is evident that Icelanders married or entered consensual unions older and older. Between 1991 and 2011, young Icelandic men entered consensual union four years later while young Icelandic women entered consensual unions 3,6 years later on average. This increase represents slightly more than 15% for men and slightly less than 15% for women. By way of comparison, the increase from 1991 to 2011 in the age at first marriage represents about 16,6% and more than 19% for men and women respectively, so the age at first marriage has increased at a much quicker pace over these 20 years than the age at first consensual union did. Therefore, while entering consensual unions older and older on average, young Icelanders marry even older. In other words, the difference in age between the age at first consensual union and the age at first marriage is slightly increasing.

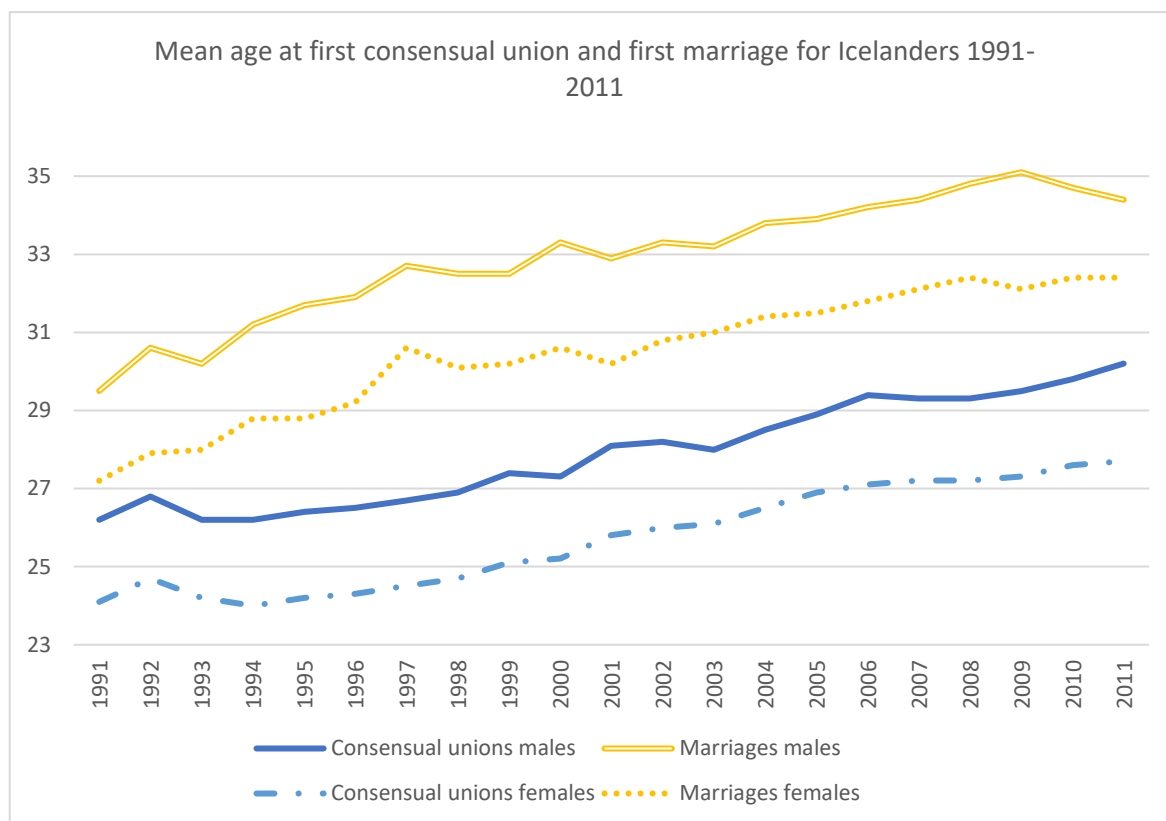


Figure 10: Mean age at first consensual union and first marriage charts for Iceland 1991-2011, source Hagstofa Íslands (Statistics Iceland) Database 2012, Population, Marriages

As a further step, it would be very interesting to gather data on marriages by previous marital status of the spouses. This would enable us to see if entering a consensual union is a first step into adulthood and precedes marriage. As describe by Björnsson in 1971, Icelanders do tend to marry as a final step of the family and partnership formation. Would they enter consensual unions first and then eventually marry? We would assume so. The graph clearly shows that Icelanders do enter consensual unions at much earlier ages in comparison to entering marriage. It is thus not foolish to assume that consensual unions represent a first step into adulthood, and therefore precede marriage. Finally, marriage now takes a new symbolic meaning (Holland 2013). It is no longer a crucial step into partnership formation but rather partnership confirmation. Referring to Holland (2013), marriage may symbolize the final step in the process of family building. In this context, marriage is called capstone marriage and occurs after completion of desired family size and accentuates long term commitment (Holland 2013).

5.7 Interpretations

There is no doubt Iceland has entered the SDT. After having considered each indicator in more detail, it appears that Iceland shows an outlier or a leading position in comparison to the other Nordic countries. Regarding the share of births outside marriage and the mean age at first marriage, Iceland seems to be in a leading position in the development of the SDT. Icelanders show a high share of births outside marriage, the highest of the Nordics and in Europe (Eurostat 2016). Additionally, young Icelanders decide to marry later in life in comparison to other Nordics (apart from the Swedes). Icelanders marrying later may reflect the advancement of the SDT in the country, and it may also simply reflect the Icelandic way of starting a family (Björnsson 1971): cohabitation being an important feature in the living

arrangements in the country, and preceding marriage as a first step into partnership formation.

While leading in the advancement of some SDT characteristics, Iceland stands as an outlier regarding other indicators. Young Icelanders decide on having children at younger ages (younger than in all the other Nordic countries) which stands in contrast to the typical SDT definition. Although the TFR has declined and converged to similar levels nowadays, fertility has been outlying at the highest level of the Nordic countries for decades. Furthermore, I cannot say the TFR stayed at sub-replacement levels for a sustained period of time, which is another important feature of the SDT. Besides this, divorces occur less frequently in Iceland than in other Nordic countries.

It is important to keep in mind that Nordic countries have been among (or even the) first nations to develop SDT features. Some analysed indicators insert doubt whether Iceland is an outlier or a leader in this context. For example, fertility fell only very recently, below the replacement-level. Is this decline for good or simply a temporary swing?

6. Conclusion

This thesis aimed at highlighting the state of certain demographic indicators in the Nordic countries, putting Iceland in the centre of the analysis. It aimed at showing the recent developments of these indicators. Nordic countries are leading in terms of advancement in the SDT, results demonstrate that fertility levels stayed under the replacement-level for sustained periods of time (except for Iceland). Results, show that now procreation is not tied to the marital institution, and that union types are not following traditional paths anymore. Moreover, results illustrate that the Icelandic case differs to the other Nordics, but it remains unclear if young Icelanders are leaders or outliers when it comes to the SDT and the related demographic patterns. In some aspects, Icelanders show extremely developed behaviour typical to the so-known SDT (e. g. high share of births outside wedlock, old age at first marriage), yet in other aspects, Icelanders show shier dynamics that can be interpreted as slower development of the SDT (e. g. high fertility, younger ages at first child, lower divorce rates). While it is impossible, from the presented analysis, to provide any clear conclusion, it is safe to state that Iceland follows – or rejoins – Nordic demographic dynamics. Indeed, the levels of the Icelandic indicators presented converge with the other Nordic indicators over time. And although the development of these demographic changes goes in the same direction, the Icelandic charts enable me to conclude that the Icelandic SDT-features are unique.

Future research would use values and norms (European Values Survey) shared by the population to establish a relation between the advancement of demographic indicators and SDT-typical ethics / beliefs. A work combining these two aspects would argue in favour, or not, of the SDT underlying reasons that Van de Kaa and Lesthaeghe defined. Sobotka's study (2008) analyses such relation with the help of an SDT-index and applying such analysis to the Nordic and Iceland cases would definitely be relevant.

This work features in the framework and builds on the literature of the second demographic transition. It gives fresh basis on the Icelandic case – case that has been overlooked in the literature. This thesis concludes that the Icelandic patterns regarding family formation and partnership formation and dissolution is similar to the other Nordic countries patterns, yet it

is somewhat unique. The Icelandic ways of entering partnerships and forming family differs from either level, pace or timing in comparison to Scandinavia and Finland.

References

- Andersson, G. and Philipov, D. (2002). Life-table representations of family dynamics in Sweden, Hungary, and 14 other FFS countries: A project of descriptions of demographic behavior. *Demographic Research* 7(4): 67-144. [online] Available at: <https://www.demographic-research.org/volumes/vol7/4/>
- Andersson, G., Thomson, E. & Duntava, A. (2017). Life-table representations of family dynamics in the 21st century. *Demographic Research*, Vol. 37, article 35, Pages 1081,1230 [online] Available at: <https://www.demographic-research.org/volumes/vol37/35/37-35.pdf>
- Bernhardt, E. (2004). Is the Second Demographic Transition a useful concept for demography? *Vienna Yearbook of Population Research*, Vol. 2 (2004), pp. 25-28 (4 pages). [online] Available at: https://www.jstor.org/stable/23025434?seq=1#metadata_info_tab_contents
- Bernhardt, E.; Noack, T. & Lyngstad T. (2008). Shared housework in Norway and Sweden: advancing the gender revolution. *Journal of European Social Policy* 0958-9287; Vol 18(3): 275–288. [online] Available at: <https://journals.sagepub.com/doi/pdf/10.1177/0958928708091060>
- Björnberg, U. (2001). Cohabitation and Marriage in Sweden-Does Family form Matter? *International Journal of Law, Policy and the Family*, Volume 15, Issue 3, 1 December 2001. [online] Available at: <https://academic.oup.com/lawfam/article/15/3/350/915159>
- Björnsson, B. (1974). The Lutheran doctrine of marriage in modern Icelandic society. *Scandinavian university books*, Oslo, 1971
- Council of Europe (2004) Recent Demographic Developments in Europe, 2003. Strasbourg: *Council of Europe Publishing*, pp. 66–68.
- Edvinsson S., Gardarsdottir, O. & Thorvaldsen, G. (2008). Infant mortality in the Nordic countries, 1780–1930. *Continuity and Change* 23 (3), 2008, 457–485 [online] Available at: https://www-cambridge-org.ludwig.lub.lu.se/core/services/aop-cambridge-core/content/view/2AEDAC803368A94BE7E226429F4CF7F0/S0268416008006917a.pdf/infant_mortality_in_the_nordic_countries_17801930.pdf
- Esping-Andersen, G. & Billari, F. (2015). Re-theorizing family demographics. *Population and development review*, 41(1), 1-31. [online] Available at: <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1728-4457.2015.00024.x>
- Eurostat (2014). Glossary: Birth. [online] Available at: <https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Birth>
- Eurostat (2016). Are more babies born inside or outside marriage? [online] Available at: <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20180416-1>
- Eurostat (2019). Mean age of women at childbirth and at birth of first child. [online] Available at: <https://ec.europa.eu/eurostat/web/products-datasets/product?code=tps00017>
- Eurostat (2019). Total Fertility Rate. [online] Available at: <https://ec.europa.eu/eurostat/web/products-datasets/-/TPS00199>
- Eydal, G. & Olafsson, S. (2003) Demographic Trends in Iceland. *Welfare Policy and Employment in the Context of Family Change*. [online] Available at: <https://www.fatherly.com/wp-content/uploads/2016/04/icelanddemo.pdf>

Frejka, T. & Ross, J. (2001). Paths to subreplacement fertility: the empirical evidence. Pp. 213-255 *Global Fertility Transition, Supplement to PDR, Vol. 27, New York, Population Council*. [online] Available at:

Goldscheider F., Bernhardt E. & Lappegård T. (2015). The Gender Revolution: A Framework for Understanding Changing Family and Demographic Behavior. *Population and Development Review* 41(2); 207-239 (June 2015). [online] Available at: <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1728-4457.2015.00045.x>

Goldscheider F., Oláh L. & Puur A. (2010). Reconciling studies of men's gender attitudes and fertility: Response to Westoff and Higgins. *Demographic Research* 22(8): 189–198.

Hoem, J. (1997). Educational Gradients in Divorce Risks in Sweden in Recent Decades. *Population Studies*, 51:1, 19-27. [online] Available at: <https://www.tandfonline.com/doi/pdf/10.1080/0032472031000149696>

Holland, J. (2013). Love, marriage, then the baby carriage? Marriage timing and childbearing in Sweden. *Demographic Research*, Vol. 29, pp. 275-306 [online] Available at: <https://www.jstor.org/stable/pdf/26348155.pdf?refreqid=excelsior%3Aa0feeda6241a106eb38ecdb0e9fd8ef9>

Kiernan, K. (1986). Leaving Home: living Arrangements of Young People in Six West European Countries. *European Journal of Population*, Vol. 2, No. 2 (1986) p. 177-185. [online] Available at: <https://link.springer.com/article/10.1007/BF01796889>

Klængur Jónsson, A. (2018). Family policies, childbearing, and economic crisis: The case of Iceland. *Demographic Research: Volume 39, Article 19, Pages 561-592, Published 19 September 2018*. [online] Available at: <https://www.demographic-research.org/volumes/vol39/19/39-19.pdf>

Lesthaeghe, R. (2010). The Unfolding Story of the Second Demographic Transition. *Population and Development Review* 2010; 36(2):211-51. [online] Available at: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1728-4457.2010.00328.x>

Lesthaeghe, R. (2011). The 'second demographic transition': A conceptual map for the understanding of late modern demographic developments in fertility and family formation. *Historical Social Research* 36: 179–218. [online] Available at: <https://www.ssoar.info/ssoar/handle/document/34225>

Lesthaeghe, R. (2014). The second demographic transition: A concise overview of its development. *PNAS*, Vol. 111 [online] Available at: <https://www.pnas.org/content/111/51/18112>

Lesthaeghe, R. & Van de Kaa, D. (1986). Twee demografische transitie's? *Bevolking: groei en krimp*. 1986:9–24.

Lovtidende for Kongeriget Danmark, Part A, 6 July 1973, No. 32, pp. 993-995. [online] Available at: <https://cyber.harvard.edu/population/abortion/Denmark.abo.htm>

Micheli, G. (1996). New Patterns of Family Formation in Italy. Which Tools for Which Interpretations? *Genus* LII, 15-52.

Neilson, J. (2019). SASE12, Family and Work: Scandinavia in International Perspective. Lecture 4: The Second Demographic Transition, PowerPoint presentation, LUSEM, Lund University.

OECD, 1999. Preparing Youth for the 21st Century. *OECD Publications, Paris*

Official Statistics of Sweden: Statistics – Health and Medical Care: Induced abortions 2009 (2010) National Board of Health and Welfare. [online] Available at: <https://www.socialstyrelsen.se/Lists/Artikelkatalog/Attachments/18031/2010-5-12.pdf>

- Roussel, L. (1986). L'évolution récente de la structure des ménages dans quelques pays industriels (*Recent Changes in Household Structure in Some Industrialized Countries*). *seminar paper, 1986*. [online] Available at: https://www.persee.fr/doc/pop_0032-4663_1986_num_41_6_17671
- Sevilla-Sanz, A. (2010). Household division of labor and cross-country differences in household formation rates. *Journal of Population Economics* 23: 225–249. [online] Available at: <https://link.springer.com/article/10.1007/s00148-009-0254-7>
- Sobotka, T. (2008). The Diverse faces of the Second Demographic Transition in Europe. *Demographic Research, Volume 19, Article 8, Pages 171-224, Published 01 July 2008*. [online] Available at: <https://www.demographic-research.org/Volumes/Vol19/8/>
- Stanfors, M. & Goldscheider, F. (2015). The forest and the trees: Industrialization, demographic change, and the ongoing gender revolution in the United States and Sweden, 1870–2010. *Demographic Research, Volume 36, Article 6, Pages 173-226, Published 11 January 2017*. [online] Available at: https://portal.research.lu.se/portal/files/19773536/36_6.pdf
- Statistics Denmark. Strategy and Quality. [online] Available at: <https://www.dst.dk/en/OmDS/strategi-og-kvalitet>
- Statistics Finland (Tilastokeskus) 27 April 2018. Total fertility rate at an all-time low. [online] Available at: https://www.stat.fi/til/synt/2017/synt_2017_2018-04-27_tie_001_en.html
- Statistics Iceland (Hagstofa Íslands) 02 April 2019. Fertility rate in 2018 lower than ever before. [online] Available at: <https://www.statice.is/publications/news-archive/births-and-deaths/births-2018/>
- Statistics Iceland, Quality policy. [online] Available at: <https://www.statice.is/about-statistics-iceland/quality-policy/>
- Statistics Norway (2019). Quality work in Statistics Norway. [online] Available at: <https://www.ssb.no/en/befolkning/artikler-og-publikasjoner/quality-work-in-statistics-norway>
- Statistics Norway (Statistisk Sentralbyrå) 12 March 2019. Decline in fertility. [online] Available at: <https://www.ssb.no/en/befolkning/artikler-og-publikasjoner/decline-in-fertility--379997>
- Surkyn, J. & Lesthaeghe, R. (2004). From Value Orientations and the Second Demographic Transition (SDT) in Northern, Western and Southern Europe: An Update. *Demographic Research Special Collection 3, Article published 17 April 2004, Pages 45-86*. [online] Available at: <https://www.demographic-research.org/special/3/3/s3-3.pdf>
- Suutarinen, H. (1972). Vuoden 1970 aborttilaki sanomalehtien pääkirjoitukissa [The 1970 abortion law in newspaper editorials]. M.S. Thesis in Social Politics, University of Helsinki.
- Thomson, E. & Bernhardt, E. (2010). Education, Values, and Cohabitation in Sweden. *Marriage & Family Review*, 46:1-2, 1-21. [online] Available at: <https://www.tandfonline.com/doi/abs/10.1080/01494921003648431>
- Trost, J. (1979). Unmarried Cohabitation. (*Våsteras: Internationallibrary, 1979*) p. 186.
- Van de Kaa, D. (1987). Europe's Second Demographic Transition. *Population Bulletin Vol. 42, No. 1, March 1987*. [online] Available at: <https://estvitalesydemografia.files.wordpress.com/2013/04/europec2b4s-second-demographic-transition.pdf>
- Van de Kaa, D. (2002). The Idea of a Second Demographic Transition in Industrialized Countries. *Sixth Welfare Policy Seminar of the National Institute of Population and Social Security, Tokyo, Japan, 29*

January 2002. [online] Available at:
<https://pdfs.semanticscholar.org/17c8/c2c3b43d447474107554926eb289d269c939.pdf>

Wiik, K. A., Bernhardt, E. & Noack, T. (2010). Love or Money? Marriage Intentions among Young Cohabitors in Norway and Sweden. *Acta Sociologica*, Vol. 53, No. 3, pp. 269-287 [online] Available at: <https://www-jstor-org.ludwig.lub.lu.se/stable/pdf/25782141.pdf?refreqid=excelsior%3Ad9eb8d2f68e15c20ae370aa273ada365>

World Health Organization (2019). Total Fertility Rate. [online] Available at: http://www.searo.who.int/entity/health_situation_trends/data/chi/TFR/en/

Zaidi, B. & Morgan, P. (2017). The Second Demographic Transition Theory: A Review and Appraisal. *Annu Rev Sociol.* 2017 Jul; 43: 473–492. [online] Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5548437/>

Statistical sources

Eurostat Database (2019). *Population and social conditions > Demography and migration > Marriages and divorces, Marriage indicators: mean age at first marriage. Last update 11-02-2019.* [online] Available at: <https://ec.europa.eu/eurostat/data/database>

Eurostat Database (2019). *Population and social conditions > Demography and migration > Marriages and divorces, Divorce indicators: divorces per 100 marriages. Last update 21-03-2019.* [online] Available at: <https://ec.europa.eu/eurostat/data/database>

Eurostat Database (2019). *Population and social conditions > Demography and migration > Fertility, Fertility indicators: proportion of live births outside marriage, total fertility rate, and mean age of mother (father) at birth of first child. Last update 08-05-2019.* [online] Available at: <https://ec.europa.eu/eurostat/data/database>

Statistics Denmark (2019). *Average age of males and females getting married. Last update 16-05-2019.* [online] Available at: <https://www.statbank.dk/10017>

Statistics Denmark (2019). *Average age of women given birth and new fathers. Last update 16-05-2019.* [online] Available at: <https://www.statbank.dk/10017>

Statistics Iceland (2012). *Mean age, median age and modal age of spouses by previous marital status 1960-2011. Last update 09-11-2012.* [online] Available at: https://px.hagstofa.is/pxen/pxweb/en/lbuar/lbuar__fjolsk__Giftingar/MAN06103.px

Statistics Iceland (2012). *Registration of consensual unions by age of partners 1991-2011. Last update 09-11-2012.* [online] Available at: https://px.hagstofa.is/pxen/pxweb/en/lbuar/lbuar__fjolsk__Giftingar/MAN06111.px

Statistics Iceland (2019). *Mean-, median and modal age of parents 1961-2018. Last update 04-02-2019.* [online] Available at: https://px.hagstofa.is/pxen/pxweb/en/lbuar/lbuar__Faeddirdanir__faeddir__faedingar/MAN05103.px

Statistics Norway (2018). *Average age at marriage, by sex. Marriages between different sex 1974 – 2018. Last update 03-05-2019.* [online] Available at: <https://www.ssb.no/en/statbank/table/05742>

Statistics Norway (2019). *Mean age of parent at first child's birth 1961 – 2018. Last update 07-03-2019.* [online] Available at: <https://www.ssb.no/en/statbank/table/07872/>

Statistics Sweden (2019). *Average age at marriage by sex. Year 1871 – 2018. Last update 21-03-2019.* [online] Available at: http://www.statistikdatabasen.scb.se/pxweb/en/ssd/START__BE__BE0101__BE0101L/GiftMedelalder/?rxid=f19919bf-a581-41b5-ac00-11e1bf317fc7

Appendices

Appendix 1

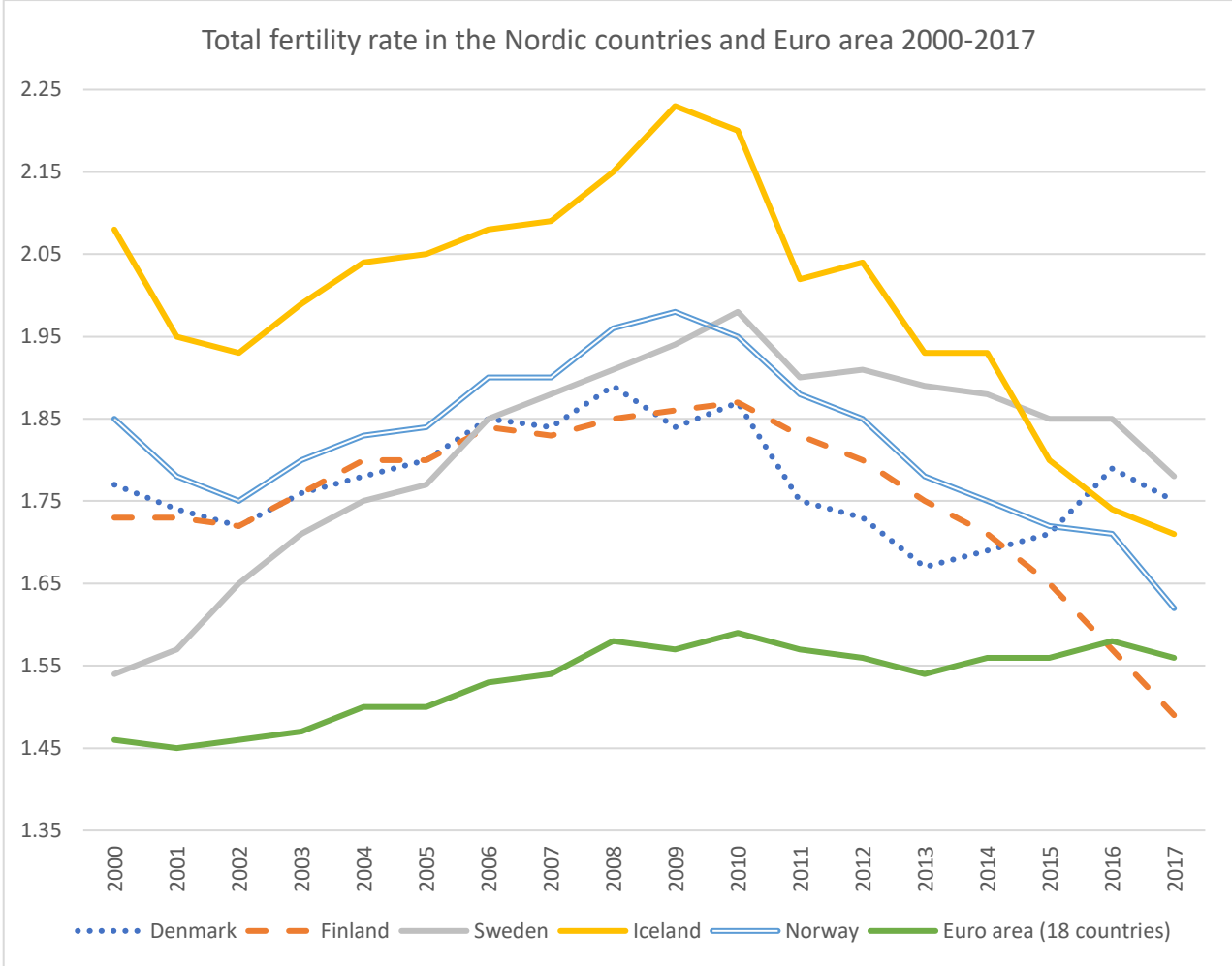


Figure 13: Total fertility rates charts for the Nordic countries and the Euro area 2000-2017, source Eurostat Database 2019, Population and social conditions, Fertility indicators

Appendix 2

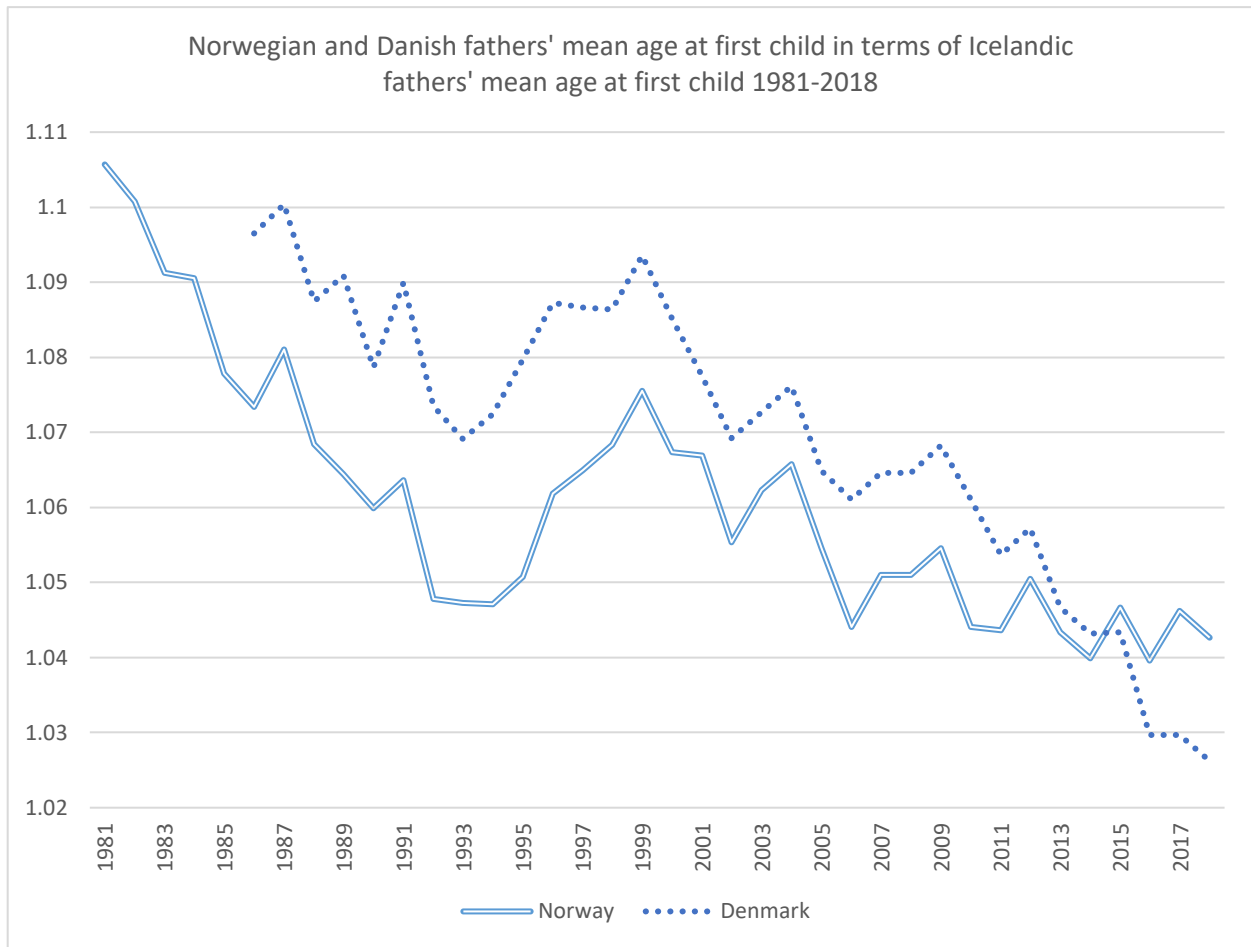


Figure 14: Ratio of the Norwegian / Danish and the Icelandic mean age of fathers at first child 1981-2017, calculated by the author, source Eurostat Database 2019, Population and social conditions, Fertility indicators