



Gender Inequalities in Early Career Trajectories and Parental Leaves: Evidence from a Nordic Welfare State

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Abstract: Parental leaves are, besides unemployment, the main reason for career breaks in early career. Despite the progress in recent decades towards more equal sharing of childcare between mothers and fathers, the labour market risk due to parenting remains mainly with women. In this article, we analyse how parental leaves relate to early career trajectories of young Finnish men and women. Using longitudinal register data for 2005–2016 from the Finnish Centre for Pensions, we perform a multi-trajectory analysis of the labour market attachment of a cohort born in 1980. Based on working days and earnings, we find five distinct career trajectories for both men and women, with the majority being well attached to the labour market by their mid-30s. While men and women on average have similar employment lengths, the gender gap in earnings is already 30 per cent in this early career phase. One of the causes may be found in the highly unequal division of family-related career breaks; the duration of mothers' family-related leaves in this cohort was 13 times longer than fathers' leave spells. Long home care leaves were particularly common among mothers with low education levels and weak attachment to the labour market. Efforts towards a more equal division of parental leaves are needed in order to combat gender inequalities that already emerge in early career and potentially cause life-long disadvantages for women's careers, earnings and pensions.

Keywords: career trajectories; labour market attachment; parental leave; gender inequality; trajectory analysis

1. Introduction

The early phase of working life plays a decisive role in terms of later attachment to the labour market, career and earnings development, and life chances in general. Furthermore, since earnings-related pensions accrue based on earnings throughout working life, early career labour market attachment is also essential for future pension income (see, for example, Hofäcker et al. 2017). Most of the existing research on the labour market attachment of young adults mainly focuses either on the transitions from education to the labour market, or the risk of displacement of young adults not in employment, education or training (NEETs). The stability of early careers, instead, has been studied relatively little, in particular from a longitudinal point of view (Scherer 2005; Blossfeld et al. 2008; Ojala and Pyörriä 2016). Furthermore, gendered patterns of early labour market outcomes have received fairly little attention (Smyth 2005; Manning and Swaffield 2008).

Studying and graduating to a profession affect the timing and success of labour market attachment in the early stages of working life. Another factor that affects the early stages of the working life and, in most countries, leads to gender differentiation, is forming a family (see for example Hynes and

Clarkberg 2005; Angelov et al. 2016). In addition to unemployment, family leaves are the most important reason for career breaks at the early stages of the career. Despite institutional arrangements supporting fathers' family leaves and an increasing trend of men taking at least some time off for parental leave, women still bear the main responsibility for child rearing and thus the labour market risk in most advanced economies.

In this analysis, we study the nexus of early career trajectories and parental leaves of young Finnish women and men. Finland is an interesting case for studying gender inequalities in early careers and family leaves, because it represents a Nordic welfare model with a traditionally high female labour market participation rate, emphasis on gender equality, extensive and good quality public services for childcare and relatively generous family benefits (Eydal et al. 2015; Kautto and Kuitto 2020). However, both the allocation of parental leaves and the relative labour market positions show remarkable inequalities between men and women. Although the employment rate among women in Finland is among the highest in Europe and the share of part-time work among women is relatively low, the employment rate of mothers with children under two years old is particularly low compared to many European countries (OECD 2018a; Pareliusson 2016).

The reason for this may be found both in the institutional setting of the family leave scheme and cultural perceptions of good parenthood. From the institutional point of view, the Finnish family leave scheme offers the possibility to step out of work for childcare for a relatively long period compared to other advanced economies. After the maternity leave period of 105 days around the birth, parents can stay home on parental leave for 158 working days. Parents can split the parental leave between them as they wish, or only one parent can go on leave. In addition, there is a paternity leave of approximately nine weeks available for fathers, of which up to 18 days can be taken simultaneously to maternity or parental leave of the mother, and the rest after the parental leave. All these leave allowances are earnings-related. After the parental leave, when the child is approximately nine to ten months, every child has the right to attend public childcare/early education, or the parents can decide to stay at home on a flat-rate home care allowance until the child is three years old. The majority of families choose to take care of their child at home on home care allowance at least for some time, mostly until the child is approximately two years old.

In 2016, approximately 90.5 per cent of all family leave days were taken by mothers, and 93 per cent of all recipients of home care allowance were women (Kela 2018). Although the majority of fathers take a short paternity leave nowadays¹, the share of fathers taking parental leave (which can be freely divided between the parents) has been very modest, at approximately 1–3 per cent of fathers taking parental leave (Lammi-Taskula et al. 2017; National Institute for Health and Welfare 2019). This may be related to the notions of home being the best place to take care of one's young children and the mother being a better caretaker than the father that are still relatively strong and widespread in Finland (Närvi 2014; Lammi-Taskula 2007). The home care allowance, however, divides opinions. It has been both justified and opposed to on multiple ideological, economic and political grounds (Sipilä et al. 2012). In summary, the possibility to stay at home until the child turns three is thus a strong incentive to stay out of the labour markets for a longer time and affects mostly women (OECD 2018b).

Based on previous studies, we know that mothers who stay at home to take care of their children the longest also have a comparatively low educational level and a weaker labour market status than mothers who stay at home on home care allowance for shorter periods (Närvi 2014; Haataja and Juutilainen 2014; Rissanen 2012). On the other hand, long periods of home care allowance among mothers who are not in employment at the time of childbirth have been observed to cause weaker labour market attachment and breaks in working life also at a later point in time, particularly if the high municipal increment to the home care allowance which varies across the Finnish municipalities adds to the economic incentive of the home care allowance (Peutere et al. 2014). As a rule, breaks in working life caused by motherhood and family leaves have been observed to cause a motherhood wage penalty.

¹ A total of 78 per cent of fathers took 1–18 days of paternity leave that can be taken during the mother's maternity leave in 2014, but only 34% took 1–54 days paternity leave that can be taken after the parental leave period. Paternal leaves thus strongly concentrate on the time immediately after the childbirth and are mostly short (National Institute for Health and Welfare 2019).

The scope of the penalty varies across countries (Budig and England 2001; Budig et al. 2012; Angelov et al. 2016; Kleven et al. 2018, 2019).

That women's wages lag behind men's wages for family reasons is not only due to breaks in women's working lives but also due to many intermediate factors that relate to the burden of childcare resting primarily on women. Women may be treated unequally in the labour market because they are perceived to come with a 'childcare risk' (Angelov et al. 2016; Salmi et al. 2009). Gendered attitudes and an assumed liability for childcare also affect men's and women's choice of career. The segregation of labour markets—that is, the division of men's and women's fields and professions—is considerably strong in Finland compared to the OECD average (European Commission 2009). Considerably more often than men, women are employed in low-paying professions within health care, social services, and in restaurant and hotel businesses. The most common male-dominated professions, in turn, are found within sciences, technology, transport and construction (Lilja and Savaja 2013). Even when working in the same professions as men, women are less frequently in high-paying expert or managerial positions compared to men. In addition, although the employment rates among women are high in Finland when compared internationally, and working part-time is less frequent, women still more often work in part-time or fixed-term employment and do less overtime than men do (National Institute for Health and Welfare 2018).

The impact of gendered working lives and career breaks due to family leaves also manifests itself in the pension gap between men and women towards the end of the life course (Möhring 2018). Although the gap in the length of male and female working lives is narrowing, the differences in wages and time spent outside the work force still lead to a considerable pension gap between men and women (Järnefelt and Nurminen 2013; Kuivalainen et al. 2018). In 2017, the average pension of Finnish women was less than 79 per cent of that of men. The gap is even wider in earnings-related pensions: two-fifths of women also received a national pension, which is granted if the individual's earnings-related pension is below a certain threshold or she/he has not accumulated an earnings-related pension at all (Finnish Centre for Pensions 2018). Breaks in working life partly explain the gender gap in pensions. Since the 2005 pension reform, pension accrual has increased for periods of family leave. In comparative terms, however, the amount of pension that accrues for periods of home care allowance is relatively low (Koskenvuo 2016).

In our analysis, we ask whether family leaves pose a risk for attachment to the labour market in the early stages of working life. Using trajectory analysis, we observe the early stages of working life between the years 2005 and 2016 of Finnish citizens born in 1980. During that period, the persons under observation were between the ages of 25 and 36 years. At that age, the majority had graduated and entered the labour markets. It is quite common, however, for Finnish students to work while they study, so their working life may also begin before or during their studies (Saloniemi et al. 2013; Ojala and Pyöriä 2016). The average age of starting a family and taking family leaves also falls within this age bracket (Statistics Finland 2017). Through our analysis based on longitudinal data, we aim at offering insights into the employment and earnings developments in the early stages of careers, the relevance of family leaves to labour market attachment and the related gender gaps.

2. Data and Method of Analysis²

The data was compiled from the register of the Finnish Centre for Pensions, which is a statutory co-operation body of the earnings-related pension system. The centre's main duties are the monitoring and development of the system, and operating in the nexus between pension insurance companies, policy makers and citizens. All information on which earnings-related pension accrual is based upon is centrally administered by the Finnish Centre for Pensions. The register data covering the total population contains extensive information on employment and earnings on the basis of which earnings-related pensions accrue in Finland. It also includes information on completed educational degrees as well as several earnings-related and basic social security benefit spells such

² The results of the empirical analysis have previously been reported in Finnish in an article published in *Yhteiskuntapolitiikka* 2:2019.

as sickness, unemployment, disability, education and parenting. Data on educational levels and socioeconomic status provided by Statistics Finland was linked to the register data. The data is internationally rather unique as it provides researchers with complete information on the whole population spanning a long period of time. Besides including the total population instead of a sub-sample, register data is superior to survey data often used in studies analysing working life and earnings history over the life course in terms of reliability, because self-reported ex-post information on employment and earnings tend to suffer from vast errors, especially if covering long time periods (cp. Kuivalainen et al. 2018).

We analyse the total population of persons born in 1980 who lived in Finland during the observation period of 2005 to 2016. Persons who had lived abroad during the observation period were excluded, since we cannot track their labour market attachment and earnings during the times spent abroad. The sample consists of 32,177 men and 30,510 women. The observation period was, on the one hand, determined by the availability of comprehensive time series information on career breaks—in this case, the family-related leaves, which is available from 2005 onwards. On the other hand, the age range of 25–36 covers the period in which, on average, young adults become attached to the labour market and start a family, thus exactly the phase of life we are interested in for this analysis.

2.1. Variables

From the point of view of our research question, the key variables that we use to depict labour market attachment are the number of working days and the wage earnings, measured annually. The *number of working days* equals the number of insured working days of a wage earner or a self-employed person per year. The maximum number of working days per year is 360. The *earnings* are based on the annual earnings of a wage earner or a self-employed person for which earnings-related pensions accrue. Because of the rules of the Finnish earnings-related pension system, in which pension insurance is compulsory as soon as the monthly earnings exceed approximately 60 euro (in 2019), basically any earnings are accounted for. The earnings have been adjusted to the 2016 level using the cost-of-living index. The earnings variable has undergone an inverse hyperbolic sine (IHS, see Friedline et al. 2015) transformation.

Furthermore, we include several background variables to describe the characteristics typical to each of the trajectory groups (see further). Those are measured annually during the same observation period from 2005 to 2016:

- socioeconomic group based on occupation,
- educational level,
- marital status,
- native language,
- number of children,
- disability,
- unemployment benefit spells,
- family leave benefit spells,
- educational benefit spells, and
- other social security benefit spells.

Table A1 in Appendix A includes a more detailed description of the background variables.

2.2. Method of Analysis

We apply trajectory analysis to examine the early careers of young adults. Trajectory analysis, or group-based modelling of development, is a statistical method used to study heterogeneity in a longitudinal sample (Nagin 1999, 2005). The fundamental idea behind the method is to identify groups with distinct developmental paths to which individuals in a given sample fit with the greatest probability. Trajectory analysis has been used mainly in social sciences for example in criminological and psychological as well as in clinical studies (cp. Nagin and Odgers 2010). It has also recently been

applied in labour market studies (Hynes and Clarkberg 2005; Saloniemi et al. 2013; Peutere et al. 2014, 2017).

In the trajectory analysis of our study, the variables that depict working days and earnings were included in the same trajectory model (for example, Nagin et al. 2016; Nummi et al. 2017). We decided on this type of multi-trajectory analysis because, on their own, the variables depicting labour market attachment do not measure the risks and the phenomenon of labour market attachment comprehensively enough (Jones and Nagin 2007).

Both variables were modelled with a normal distribution hypothesis. In the analysis, we used a structurally equal fifth-order polynomial age model for both genders, but the parameters of the model were estimated separately for men and women. The results thus take into account the different earnings and employment profiles of men and women. Our aim is to generate as simple and unambiguous a solution as possible. We decided on a five-group solution for both men and women based on both interpretative and statistical information criteria. Figure A1 in Appendix A presents the Bayesian information criterion (BIC) values for the different number of groups. In the five-group solution, all the various forms of trajectories that can be found in the sample are revealed. A model with a higher number of trajectory groups would only repeat different variations of the identified trajectory forms. In both men's and women's models, the likelihood of belonging to the given trajectory group is very high (92.3–99.6%), which is why the chosen trajectory solution can be considered valid.

3. Trajectories of Labour Market Attachment by Gender

In this section, we first describe the women's then the men's employment trajectories at the beginning of their working life. Figures 1 and 2 below present the earnings trajectories during 2005–2016 of men and women born in 1980. The vertical axis represents the level of annual earnings (HIS-transformed), and the horizontal axis the time from 2005 (the year in which the cohort was aged 25) until 2016 (the year in which the cohort was aged 36). The trajectories on the number of working days are very similar (not shown here), so we can conclude that both variables depict the level of labour market attachment at the beginning of the career clearly.

We identified five different employment trajectories for both men and women. Over two-thirds (70.7%) of the women belonged to the group of stable labour market attachment with continuous employment and highest level of earnings within the cohort over time. Approximately 7.8 per cent were on a strengthening trajectory of labour market attachment with increasing employment and earnings, and 7.3 per cent on a weakening trajectory with decreasing employment and earnings. Nearly as many (6.9%) experienced a temporarily weaker but recovering labour market attachment in terms of earnings and employment. For 7.3 per cent of the women, labour market attachment was weak both in terms of employment and earnings throughout the early stage of their working life.

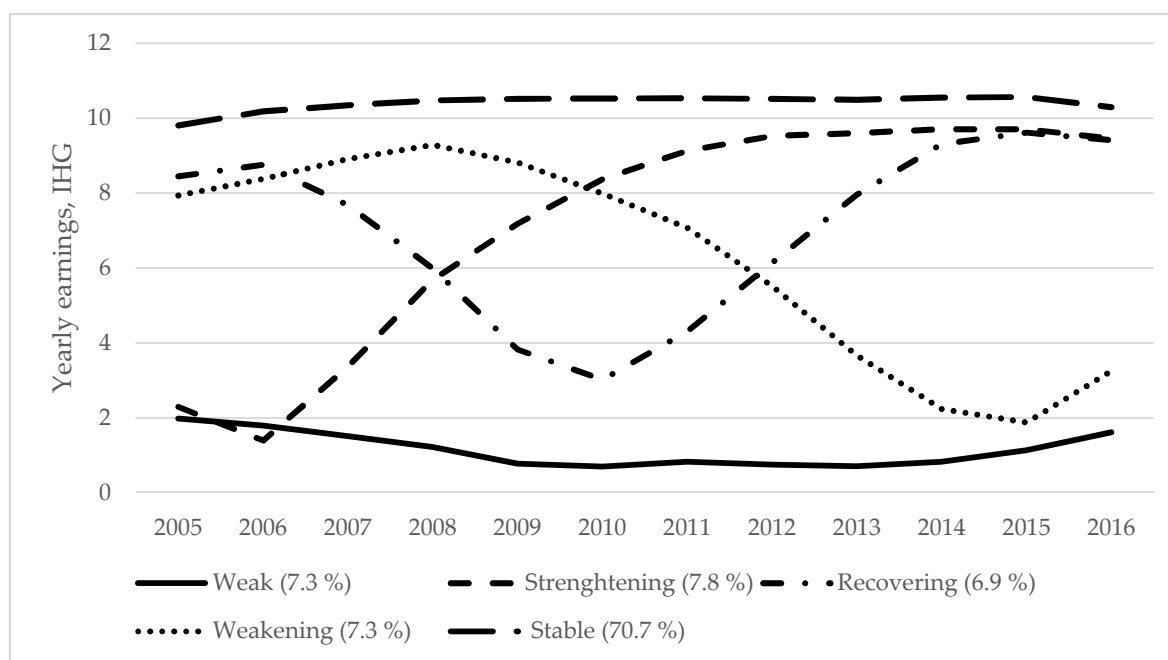


Figure 1. Women's labour market attachment trajectories.

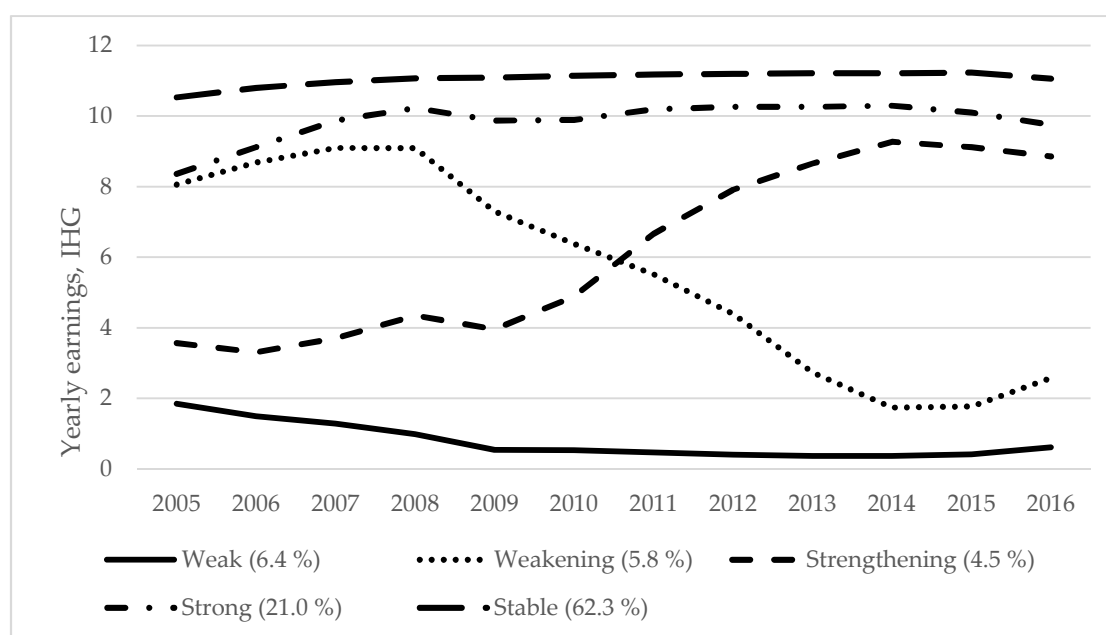


Figure 2. Men's labour market attachment trajectories.

The majority of men belonged either to the stable (62.3%) or the strong (21.1%) trajectories of labour market attachment (Figure 2). For 4.5 per cent of the men, labour market attachment was strengthening while it was weakening over time for 5.8 per cent. Of the men, 6.8 per cent belonged to the group in which the attachment was weak throughout the observation period.

In other words, the men and women of the observed cohort had partly similar employment trajectories at the early stages of their working life, and the majority of them had a stable labour market attachment. When observing the situation at the end of the observation period—that is, when the persons who belonged to the cohort turned 36 years old—the majority of women (85.4%) and men (87.8%) were stably attached to the labour market. On the other hand, nearly every seventh woman (14.6%) and every eighth man (12.2%) was weakly attached to the labour market towards the end of the observation period, at age 36. We could argue that the individuals who belong to these

groups have dropped out, more or less permanently, from the labour market. Their labour market attachment will probably also be unstable in the future.

Considerable socioeconomic gaps underlie the weak and strong labour market attachment trajectories (Table 1). As could be expected, both men and women who were permanently attached to the labour market during the early stages of their careers were, on average, higher educated, worked as lower- or upper-level employees and had fewer spells of unemployment and sickness. A low educational level was, in contrast, clearly linked to a weak labour market attachment. The majority of both men and women on a weak employment trajectory were outside the labour market. In other words, they were either students, at home or otherwise not working in a profession. A weakening employment trajectory, but also a constantly weak labour market attachment, were clearly related to more spells of disability. Disability was associated with a weak labour market position more clearly among men than among women. Unemployment spells were also more common among men than women on the weakening employment trajectory.

Although the labour market attachment of immigrant women is particularly weak, a proportion of both male and female immigrants were on a strengthening employment trajectory during the observation period. Single and divorced men and women (although clearly more men) were on a weak trajectory of labour market attachment more often than on average.

When we looked at the accumulated number of working days and the earnings development at the early stages of the career, we observed considerable gaps not only between different labour market trajectory groups but also between men and women. By age 36, women had accrued nearly as many working days as men (approximately 97% of the equivalent average working days of men, Table 1). Yet women's average earnings during the 12-year observation period summed up to only 70 per cent of men's earnings. The largest single factor explaining this huge gender gap in earnings is the comparably strong gender-based segregation of the Finnish labour markets. As a result, women's wages are often lower than men's wages. However, the register data we have used does not allow us to look directly at the gaps of the observed cohort in terms of profession, wage and number of hours worked.

Another factor explaining the gender gap in earnings, particularly in the early stages of working life, are career breaks due to parenting. Family leaves continue to affect women more than men. In the following section, we look at how family leaves are divided between men and women and how they affect labour market attachment and the employment trajectories described above.

Table 1. Background variables by trajectory group—averages in the observation period 2005–2016.

Trajectory Group	Women						Men					
	Weak	Strengthening	Recovering	Weakening	Stable	All	Weak	Weakening	Strengthening	Strong	Stable	All
%	7.3	7.8	6.9	7.3	70.7	100.0	6.4	5.8	4.5	21.0	62.4	100.0
N	2213	2384	2118	2226	21,569	30,510	2054	1859	1447	6754	20,063	32,177
Labour market attachment												
Earnings (euro per year)	9924	146,346	128,271	108,202	307,018	246,000	6570	102,176	121,372	284,433	445,686	349,378
Working days ¹	364	2701	2556	2268	4069	3457	200	1789	2044	3427	4218	3557
Career breaks ¹												
Maternity/paternity leave	168	172	214	178	163	168	1	5	9	19	31	24
Parental leave	425	439	530	437	389	409	2	8	12	24	38	30
Home care	862	770	771	600	328	452	9	22	21	19	13	15
Unemployment	976	693	786	933	173	370	1095	1513	1186	543	81	375
Other soc. security benefits	76	55	65	116	54	61	76	143	73	62	29	47
Studying	249	558	631	531	521	512	181	348	584	494	355	383
Children												
≥1 child in 2016	62.4	81.9	83.4	74.4	71.9	73	23.7	41.7	42.6	58	69.7	61.5
Number of children in 2016	2	2.2	2.1	1.7	1.4	1.6	0.5	0.8	0.8	1.2	1.5	1.3
Age at birth of first child	23.7	23.8	25.9	27.7	28.1	27.3	26.3	27.2	28.3	28.6	28.7	28.5
Socioeconomic group ²												
Self-employed, %	3.2	5.4	4.5	5.1	3.3	3.7	0.6	4.1	5.6	5.9	6.5	5.8
Upper-level employee, %	4.1	8.8	9.5	8.5	23.9	19.2	1.6	3.7	5.3	13.9	22.4	17.5
Lower-level employee, %	4.5	35.6	26.8	28.9	55.1	46	1.5	6.2	6.7	17.7	28.8	22.4
Manual worker, %	9.2	21.4	19.7	19.7	14.5	15.4	1.3	21	15.4	45.1	41	37
Other, %	79	28.9	39.5	37.8	3.2	15.8	95.1	64.9	67.1	17.5	1.2	17.3
Educational level ²												
Basic level, %	41.3	12.2	10.3	14.1	3.8	8.4	51.9	27.7	25.5	16	9.6	15.4
Secondary level, %	47.9	56.7	52.3	51.8	36.8	41.4	42.5	57.5	52.7	54.3	51.6	51.9
Lower tertiary level, %	7.6	19.7	22.7	21.2	36.1	30.7	3.9	9.1	13.5	17.7	22.8	19.3
Upper tertiary level, %	3.2	11.5	14.8	13	23.3	19.5	1.7	5.6	8.3	12	16	13.3
Marital status ²												
Single, %	31.6	12.9	11.1	17.5	13.4	14.9	63.3	36	39.2	24.5	16.4	23.2
Married/reg. partnership, %	38.9	52.5	54.1	41.3	46.1	46.3	8.5	17.8	18.9	30.3	43.2	35.7
Cohabiting, %	11.3	21.6	23.6	23.7	30.1	27.1	8.1	18	23.7	31.1	31.7	28.9

Divorced, %	18.1	13	11.2	17.5	10.3	11.7	20.1	28.2	18.2	14.2	8.7	12.1
Disability (>50% obs. period)												
No, %	95.5	99.6	99.3	97	100	99.3	94.3	95.6	98.9	99.8	100	99.3
Yes, %	4.5	0.4	0.7	3	0	0.7	5.7	4.4	1.1	0.2	0	0.7
Native language												
Finnish or Swedish, %	84.4	90.6	95.2	93	97.9	95.8	90.5	90.3	91.5	94.9	97.8	96
Other, %	15.6	9.4	4.8	7	2.1	4.2	9.5	9.7	8.5	5.1	2.2	4

¹ Sum of days 2005–2016; ² Mode of the observation period. Abbreviations: Other soc. security benefits: Other social security benefits; Married/reg. partnership, %: Married/registered partnership, %; Disability (>50% obs. period): Disability (>50% of observation period).

4. Career Breaks due to Family Leaves

4.1. Number of Children and Time of Childbirth

The majority of the women and men in the cohort under observation formed families by the end of the observation period. Of the women, approximately 73 per cent had at least one child by the age of 36 (on average, the women had 1.6 children; Table 2), and had their first child at age 27.3 years on average. Of the men, nearly two out of three (61.5%) had at least one child at the end of the observation period (the average number of children per man being 1.3 and the average age at the birth of the first child being 28.3 years). In other words, the men started families at a slightly older age than the women did.

As we can observe in Table 2, the dynamics between labour market attachment and family formation are very different for women and men. Men with a stable employment trajectory had more children, while those with a weak labour market attachment trajectory had clearly fewer children than average. The number of children of women with a stable labour market attachment trajectory, on the other hand, remained below the average of the cohort. On average, the women with the most children were on the strengthening and recovering employment trajectories. The women who are on these trajectories had their first child at an earlier than average age. That is why we can argue that the women on these employment trajectories either become attached to the labour markets after they have given birth to children or return to their stable employment after breaks due to family leaves. In the group of weak attachment, the women are, roughly speaking, divided into two groups. On the one hand, the share of childless women is high in this group compared to the other trajectory groups (37.6%). On the other hand, many women on a weak labour market attachment trajectory have several children. In particular, immigrant women, whose share of the weak employment trajectory was high, had more children than average during the observation period.

Table 2. Average number of children at the age of 25 and 36 by gender.

	Women			Men	
	Age 25	Age 36		Age 25	Age 36
Weak	0.8	2.0	Weak	0.2	0.5
Strengthening	1.1	2.2	Weakening	0.2	0.8
Recovering	0.5	2.1	Strengthening	0.2	0.8
Weakening	0.4	1.7	Strong	0.2	1.2
Stable	0.3	1.4	Stable	0.2	1.5
All	0.4	1.6	All	0.2	1.3

4.2. Differences in Career Breaks due to Family Leaves

In this section, we look at the take-up of family leaves of people born in 1980 with one or more children during the observation period ($N = 42,043$). Figures 3 (women) and 4 (men) show the total amount of days on family-related leaves during the observation period from 2005 to 2016 in different groups of employment trajectories, by different types of family leave schemes.³ The darkest bar depicts the average length of the maternity or paternity leave spent while receiving a maternity or a paternity allowance. The medium grey bar depicts the total length of the average period of parental leave measured by days of parental allowance. Based on the data we used, we cannot separate people who are on partial parental leave and work at the same time, so the figures include mothers and

³ Note that we cannot directly observe the form of the family behind the patterns of having children and taking family-related leaves—that is, whether the mothers and fathers of the cohort are living in a different- or same-sex partnership or lone parenting. Therefore, neither assumptions of a hetero- or homosexual partnership nor lone or couple parenting are made when reporting the distribution of family-related leaves. The question of couple dynamics in sharing family-related leaves is a highly interesting one, but beyond the scope of the data at hand.

fathers on both full and partial parental leave. However, as part-time parental leave is rare, most of the parental leaves are likely to be full time. The light grey bar depicts the sum of home care leave periods spent on home care allowance.

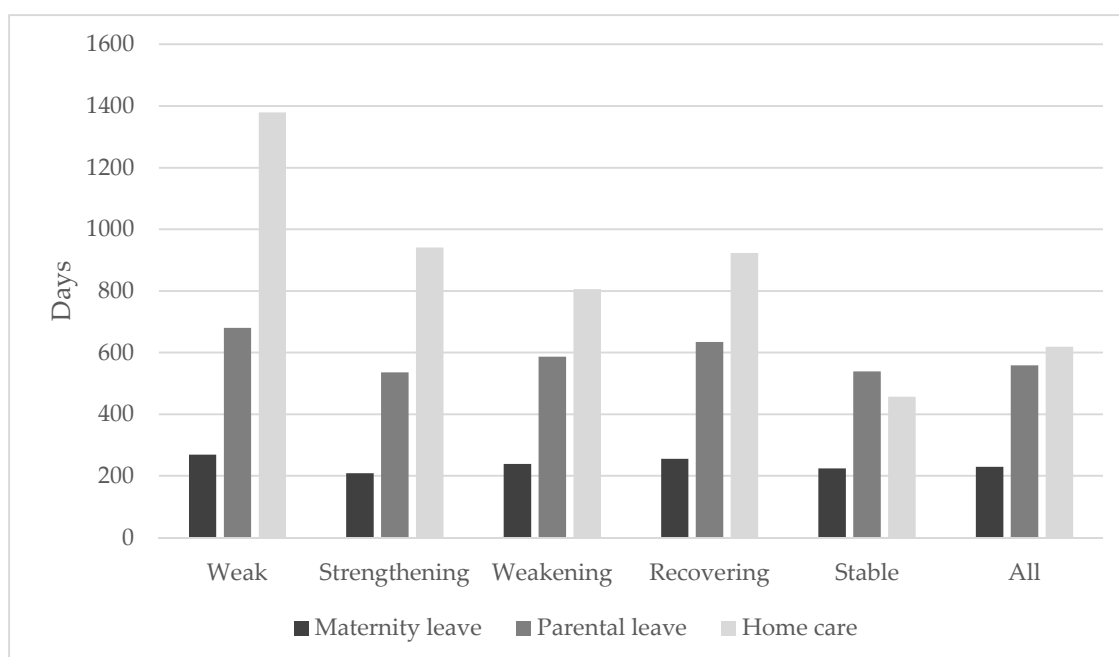


Figure 3. Mother's family leave days by trajectory group and type of family leave (total of days 2005–2016).

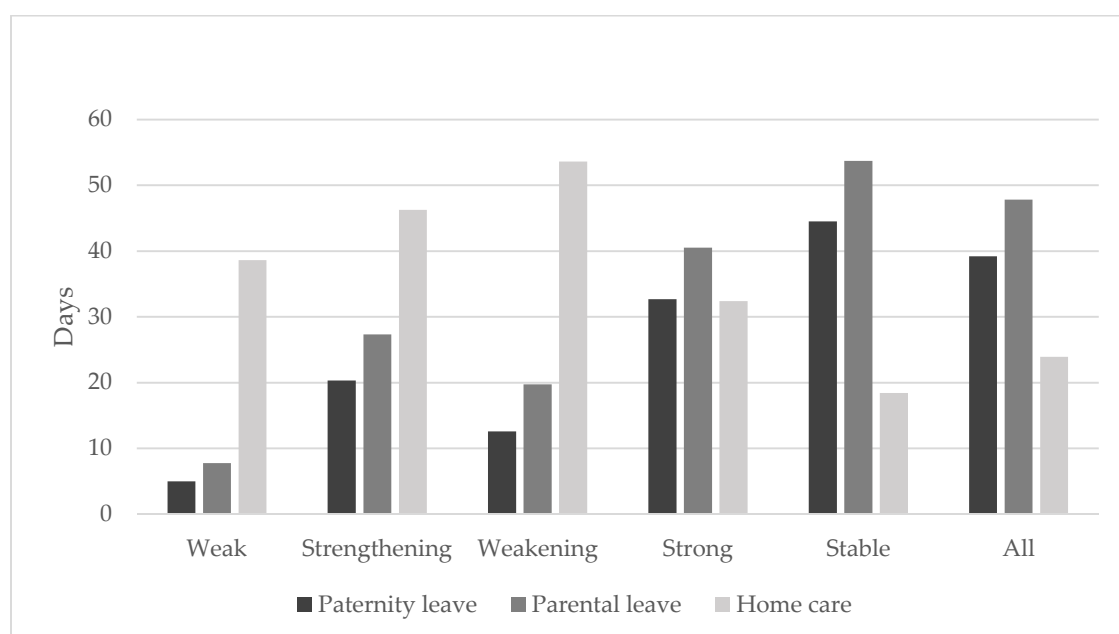


Figure 4. Father's family leave days by trajectory group and type of family leave (total of days 2005–2016).

The use of family leaves differed clearly both between genders and between people on different employment trajectories. Breaks in employment trajectories caused by family leaves were nearly completely concentrated on the mothers of the cohort: while the fathers of the cohort had spent, on average, a total of 111 days of benefits on family leaves by the age of 36, the average figure for mothers was 1408 days. In other words, the duration of breaks in employment caused by childcare at the early

stages of working life was over 13 times as long for the mothers of the observed cohort compared to the fathers.

Gender differences, as well as the intra-group differences between women and men, were also considerable when the use of family leaves was compared in various employment trajectory groups. There were no considerable gaps in the number of days women on various employment trajectories spent on maternity and parental leave, although both kinds of family leaves were taken slightly less often by mothers on a strengthening or a stable employment trajectory. The length of the home care leave, in contrast, varied greatly between the mothers of this age cohort: mothers on a stable labour market attachment trajectory were on home care allowance for a noticeably shorter period than the mothers on average and the mothers in all other groups. The periods on home care leave were particularly long among the mothers with a weak labour market attachment.

In contrast to women, family leaves, in particular paternity and parental leave, were mainly taken by fathers on a stable and strong labour market attachment trajectory. Only a few fathers stayed at home on home care allowance, but there was some variation in this regard between the employment trajectories. At the early stages of their working lives, the fathers with either a weakening or a strengthening employment trajectory had the greatest number of days on home care allowance. In other words, fathers with a stable employment trajectory seemed to be taking earnings-related paternity and parental leaves while those with a weak labour market attachment took home care leaves.

5. Conclusions

Our analysis shows that the majority of the young Finnish adults who have recently entered the labour markets had a stable labour market attachment at the early stages of their working life (cf. Pareliusson 2016; Ojala and Pyöriä 2016). Nevertheless, one in eight Finnish young adults had a weak labour market attachment because either their employment and earnings had been very low throughout the early career, or their labour market attachment had weakened throughout the observation period for some reason. This group of young adults is in danger of becoming labour market outsiders. Low education level was a particularly important predictor of weak labour market attachment. This finding is also in line with earlier studies on persons not in employment, education or training (NEETs), the share of which among the young adults in Finland is alarmingly high (Alatalo et al. 2017; Finnish Youth Research Society 2017). Each year, approximately 10 per cent are neither working nor studying (Statistics Finland 2016). In addition, longitudinal studies have shown that approximately 10 per cent of each age cohort experience severe problems with labour force attachment (Nummi et al. 2017). The situation of these labour market outsiders thus needs attention.

Early career trajectories of this young Finnish cohort reveal considerable gender inequalities. On average, there were only minor differences in the number of days in employment between men and women by the age of 36. However, already at this early stage of the career, women's earnings were clearly lower than men's earnings. Because the early stages of working life are also a strong predictor of later employment and earnings development, it is fairly certain that the observed differences will accumulate further throughout their life course and also affect their future retirement income (Koskenvuo 2016; Möhring 2018).

The majority of the cohort had started a family during the early stages of their career. The number of children and when they were born varied, however, by employment trajectory, especially among the women. Women with a stable labour market attachment had children later and also had fewer children compared to women with a less stable labour market attachment. On the other hand, men with a strong labour market attachment had more children than average. This is in line with research from other countries, which, on the one hand, shows that men with a higher educational level and a stable employment status are more likely to have children and that, on the other hand, men with children have a "fatherhood premium" in terms of career and earnings development (see for example Kaufmann and Uhlenberg 2000; Koslowski 2011). Although our analysis does not focus on causes and effects, our observation shows a clear imbalance between the genders in the dynamics of family formation and careers.

Even in this relatively young cohort of Finns, women are particularly likely to have career breaks due to family leaves. This explains, in part, both the gender gap in earnings and the dynamics of forming a family and labour market attachment described above. The length of time the individual spent on home care allowance varied considerably between the groups. The share of parents staying at home to take care of their child(ren) was considerably smaller among the groups with a stable labour market attachment and higher levels of education. It was correspondingly large among the groups with a weak labour market attachment and lower educational level. Among the men, the use of family leaves was differentiated by employment trajectory so that those with a stable labour market attachment were more likely to take paternal and parental leaves, while those outside the labour market were more likely to be on home care allowance. Overall, the number of days on parental leave was also minor among the 36-year-old men.

Our observations concur with the findings of previous studies: women with a weak labour market attachment and a low educational level take care of their children and stay at home on home care allowance more often than highly educated women and women who are in an employment relationship (Närvi 2017; see also Evertsson and Duvander 2011). Based on our descriptive analysis we cannot prove, however, whether the long periods on family leaves were due to a weak labour market attachment already before having children or whether the long family leaves resulted in a weak labour market attachment. This subject requires further analysis and could have important ramifications for public policies.

Our case study points to perhaps surprisingly large gender differences in early careers and parental leaves. Even in Finland, where the Nordic model of welfare state is said to provide good conditions for women's labour market participation and to promote equal sharing of child rearing between fathers and mothers, the situation does not look equal. The unequally distributed career breaks between men and women due to family leaves add to the inequality between men and women both at the early and the later stages of working life. In terms of equal labour market position of women and men, a more even distribution of family leaves between fathers and mothers is called for. What is more, fathers' higher leave-taking has been shown to have further positive effects for a more equal division of household work and a greater engagement of fathers in childcare even later on in life (Tamm 2018; Duvander and Johansson 2019). A family leave reform that is in planning at the time of writing in Finland should therefore include clearer initiatives for increasing fathers' leave-taking and address the negative incentives set by the extensive home care leave. The opportunity to combine work and family life for example through more flexible working time and parental leave arrangements should also be improved (cp. Hietamäki et al. 2018; Chung and van der Lippe 2018). Furthermore, a change in attitudes both in families and at workplaces supporting fathers' responsibilities and rights in childcare is urgently needed (see for example Närvi 2014; Sipilä et al. 2012). With regard to early career labour market attachment, it is, however, equally important to reduce the risk of ending up outside the labour market, regardless of gender.

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Appendix A

Table A1. Variable description.

Variable	Content	Detailed Description
Maternity leave	Days of receiving maternity allowance	Annual data 2005–2016, days per year.
Paternity leave	Days of receiving paternity allowance	Annual data 2005–2016, days per year.
Parental leave	Days of receiving parental leave allowance	Annual data 2005–2016, days per year.
Home care	Days of receiving home care allowance	Annual data 2005–2016, days per year.
Unemployment	Days of receiving earnings-related or basic unemployment allowance	Annual data 2005–2016, days per year.
Other social security benefit spells	Days of receiving other social security benefits such as sickness allowance	Annual data 2005–2016, days per year.
Studying	Days in education leading to a degree	Annual data 2005–2016, days per year.
Number of children	Number of children born alive	Annual data 2005–2016. Also includes children born before 2005.
Age at birth of first child	Age of the parents at birth of first child	Also includes first children born before 2005.
Socioeconomic group	Socioeconomic group at the end of the year. Classification: Self-employed, upper-level employee, lower-level employee, manual worker, other.	Annual data 2005–2016.
Education	Highest achieved educational degree at the end of the year. Basic level, upper secondary level, lowest and lower degree level tertiary, highest tertiary.	Annual data 2005–2016.
Marital status	Single (including also widows), married or in registered partnership, cohabiting.	Annual data 2005–2016. Information on cohabitation was deduced based on address, age and family relationship.
Disability	Disability pension or rehabilitation benefit	Annual data 2005–2016. Dichotomous variable indicating whether a person has been disabled at least half of the observation period in sum.
Native language	Native language	Dichotomous variable of native language (Finnish/Swedish or other).

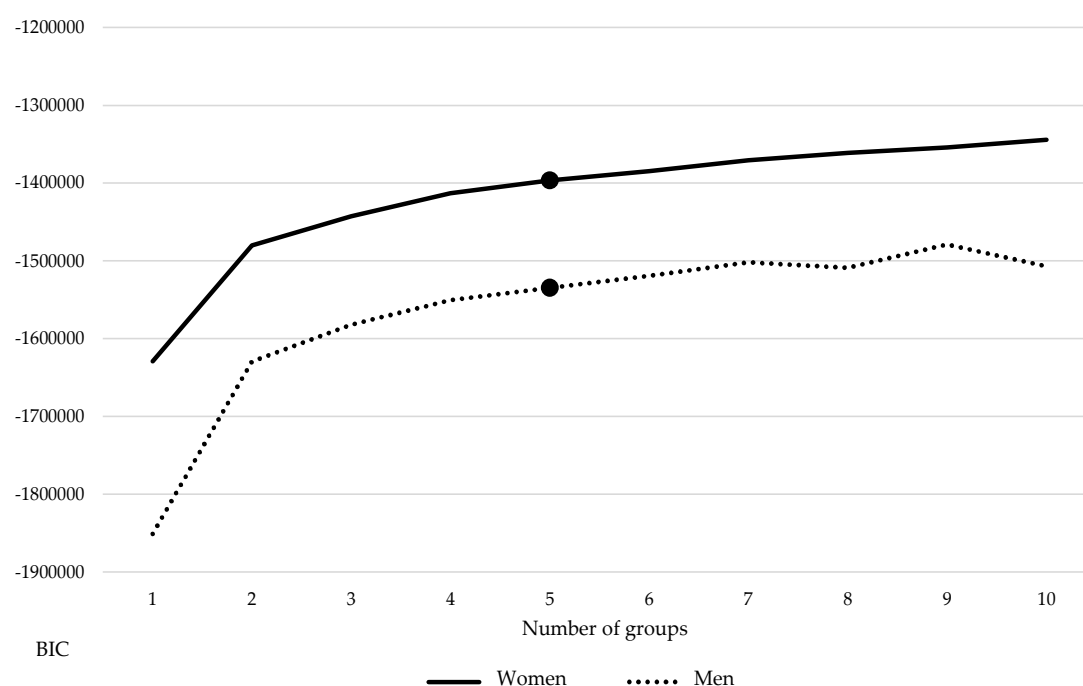


Figure A1. Bayesian information criterion (BIC) values of the trajectory analysis with different number of groups.

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