# Changing Paradigms of Women's Labor Market Participation: Cases of Denmark and the USA

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#### TESI DOCTORAL UPF / 2019

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#### **CHAPTER 1: Introduction**

'It is no longer a question of what women are physically and mentally capable of doing. The emphasis has now shifted from the discussion of: 'What can women do?' to one of: 'What should women do?' Implicit in this question is an interest both in women's individual well-being and in the welfare of society.' (Myrdal and Klein 1956 [1970]: xv)

'When the working day is done Oh, girls—they wanna have fun' (Hazard 1983)

#### 1.1 Introduction

Since the proto-feminist amendments to the early human rights documents calling for recognition of women as full citizens (De Gouges 1791, Wollstonecraft 1792), then incipient social sciences have been writing ceaselessly about the proper role women should play in society. The family and work arrangements of agrarian societies were uprooted by the industrial revolution and, just when a supposedly stable set of new ideals was devised, be it in the shape of Victorian or of post-World War II domesticity (Myrdal and Klein 1956 [1970]; Millet 1969 [1979]; Coontz 2011; Ruggles 2015), it would blow up soon after due to its incongruences with the reality and circle back to the 'querelle des femmes'.

Building on several fields addressing this key question in the social sciences - normative thinking about gender equality, quantitative work to know the scope of the issues, and qualitative research mining for meaning ascribed to realities - this thesis is dedicated to the question of gender equality in the labor market, asking, out of all other valid and fascinating research questions, under what conditions do men and women have the same intensity of labor market attachment. Limiting my research to the last third of the 20th century and two highly developed economies, it means looking back at the legacy of the second wave of feminism and several external phenomena like full employment societies, mass uptake of modern contraceptives, and educational expansion that coincided with it in interaction with third wave notions of individuality and intersectionality, and a changing globalized world. Operationalized to micro-level variables, this means an interest in measurable labor market outcomes, assuming that the absence of gendered differences is the desirable normative goal, while bearing in mind that there are both individual and structural forces working against it. Amidst all

these complexities I seek to establish a set of characteristics that enable the closure of the gap between the labor force trajectories of men and women. Following the footsteps of previous research, I look for these characteristics among the sociodemographic stratifiers of life chances and the policy framework that mediates the relations between labor force participation and family life.

This thesis contributes to knowledge about gender differences in labor market attachment by using a longitudinal, life-course approach throughout the thesis as this methodology fine-tunes the previous cross-sectional findings. I compare two cases of starkly different policy contexts but similar women's labor market participation rates following the logic of most different systems design directly in one of the empirical chapters and indirectly throughout the thesis. I compare different birth cohorts observed at the same ages in two of the empirical chapters to observe cohort effects, and compare the same birth cohorts at the same observed ages in order to see the case specifics play out in the third. Access to detailed longitudinal data allows for rich material to observe age and cohort effects, case specifics, and deepen our understanding of the gendered patterns of labor force participation.

## 1.2 Theoretical Explanations for Women's Labor Force Participation

Once upon a time the family was the natural environment for both men and women. Husband and wife took part in the education of their children; each shared the other's worries and successes, and all carried their respective share in the joint load of work, even though that share differed between the individual members of the family according to their strength and ability. [...] Under pre-industrial conditions, labour and leisure were not as definitely separated as they are now. Children were soothed with fairy tales while hands were busy on the loom. The father cutting the hay could take time off to teach his son to put pins into the rake or to distinguish the songs of different birds. Certainly, the nights were set aside for sleep and rest, but this was broken when a cow was about to calve. This gliding from one occupation to another, from work to play and back again, is totally foreign to the industrial world. (Myrdal and Klein 1956 [1970]:

The reasoning regarding the formal labor force participation of women is still recovering from the traumatic Victorian division of life spheres (Millet 1969 [1979]), and its theoretical beginnings are firmly anchored at the height of industrial full employment economy and family wage (Oppenheimer 1997; Cooke 2011), and most of the academic writing on the topic overwhelmingly tells an American story. While the almost universal economic activity of men and their collective move from agrarian to industrial and later service economies was assumed as an obvious rational decision bringing income, independence, and self-worth (Morse and Weiss 1955; Ruggles 2015), this logic – with an occasional exception, such as Myrdal and Klein (1956 [1970]) - wasn't applied to women. Even more,

It would not be much of an exaggeration to claim that women gave "birth" to modern labor economics, especially labor supply. Economists need variance to analyze changes in behavioral responses and women provided an abundance of that. Men, by and large, were not as interesting since their participation and hours varied far less in cross section and over time. (Goldin 2006: 6)

The literature women's labor market participation is interwoven with that on partnership formation and reproductive work, because most of the time women were not treated as independent economic agents seeking to maximize their utility. The challenge once somebody attempted to theorize about the gendered differences in labor force participation was to congruently incorporate into their models (a) the predominant male breadwinner logic, (b) foreseeing the consequences of absence of a male breadwinner, and (c) allowing for the odd case that deviated from the logic aimed at income and leisure maximization, mostly by writing those off as unusual preferences.

The New Home Economics made a great effort to formalize the behavior of families in the language of economics (Becker 1960, 1965, 1981, 1995; Becker et al 1977; Mincer 1962), rarely acknowledging their roots in the work of Charlotte Perkins Gilman's (1898; Woolley 1996) or Margaret Reid's (1934; Folbre 1996; Forget 1996; Yi 1996; Ferber 2003). Curiously enough, Becker's specialization-for-efficiency explanation (1960, 1965, 1981, 1995; Becker et al 1977) ended up rationalizing the ideal-typical male breadwinner model while that model that was already not the most numerous among American families by 1961 (Oppenheimer 1997; Ruggles 2015).

Already by late 1950s, the longitudinal data did not fit this story neatly (Mincer 1962), and the big jump in the labor market participation of young married women was still ahead, starting in 1962 (Ruggles 2015). The notion of a 'backward-bending' supply curve of labor turned out not applicable to women's labor force participation time series, despite the cross sectional observations suggesting that wives reduce their participation when the income of husbands increase. Contradicting the notion that married women – and marriage was early and almost universal, and those not married got meaningfully attached to the labor force long before the male breadwinner paradigm crumbled (Myrdal and Klein 1956 [1970]; Weiss and Morse 1958; Blau et al 2001; Ruggles 2015) – just countercyclically supplemented the family income if her husband failed to earn enough,

One of the most striking phenomena in the history of the American labor force is the continuing secular increase in participation rates of females, especially particularly of married women, despite the growth in real income. Between 1890 and 1960 labor force rates of all females fourteen years old and over rose from about 18 per cent to 36 per cent. In the same period rates of married women rose from 5 per cent to 30 per cent, while real income per worker tripled. (Mincer 1962: 64).

Mincer concluded that, at least for white married couples and despite the ongoing short-term countercyclical adjustments of families, the rise of available wages for women had been greater than the effect of husbands' rising wages. Although his explanatory model included only three variables - husband's income, wife's earnings and 'tastes' error term – already then Mincer's discussion mentioned many of the future methodological challenges: bringing together individual's and household's interests, juxtaposing cross-sectional fluctuations in family arrangements with a life course perspective, introducing housework as an additional element to consider, an examining class and race difference in labor force participation rates. Even Becker had to admit that his elegant models were not working because the increased labor force opportunities of women had decreased the utility of the traditional marriage (1981).

Becker's insistence on household as a unit whose internal workings are guided by altruism and simultaneously maximize wellbeing of all family members (1960, 1965, 1981, 1995; Becker et al 1977) provoked an astonishing amount of response taking account its very restrictive basic assumptions and limited empirical explanatory power (MacDonald 1984; England 1989; Bergmann 1995; Ferber 1995, 2003; Woolley 1996;

Folbre 2004, 2012; Lundberg and Pollak 2007). It could be argued, though, that the failure of neoclassical economics to provide a realistic account of the decision making around women's labor force participation spurred several branches of more nuanced research about the individual decision-making and intra-household dynamics: bargaining models taking into account the role of social norms and the possibility of conflict (McElroy and Horney 1981; Pollak 1985; Sen 1990; Chiappori 1992; Lundberg and Pollak 1993) in economics, and gendered interactions between family and working lives in Gerson's longitudinal work contrasting professed preferences and actual life trajectories (1985), West and Zimmerman's 'doing gender' (1987), the tensions caused by the 'second shift' (Hochschild and Machung 1989) and implicit gender roles that prevent change in these patterns (Wiesmann et al 2008; Cha 2010). Stemming from these strains of literature, my hypotheses are based on the assumption that individual actors are rational and are maximizing their utility, yet the utility functions at play are very complex interactions between universal desires for wellbeing and security, social norms and pressures, labor market and policy context one finds herself in, and individual preferences. Hence I am not attempting to formalize this function but limiting my research to identifying the observable expressions of it. Given the complex relationship between work and family trajectories, I assume that they are necessarily endogenous and do not attempt to establish causal links. Instead, I explore the likelihood of certain constellations of sociodemographic characteristics and life trajectories.

Class differences also have marked the women's labor force participation literature, as these patterns are class-specific and have changed with time. As women's paid work has changed from being driven by economic need (with few vocational exceptions) to an (Goldin 2006), the profile and behavior of working women have become much more heterogeneous (Wilde et al 2010; Landivar 2014).

From a purely human capital point of view, education expansion into mass access to tertiary education (Shavit et al 2007; Goldin and Katz 2008) changed the opportunity calculus between paid work and homemaking, because, even in the segregated and blatantly discriminatory labor market of the heyday of the male breadwinner model, investment in education paid off (Mincer 1958). And, as their identities and 'horizon' of possibilities were changing, following cohorts increased their educational attainment accordingly (Black and Juhn 2000; Goldin 2006). In the long run, the college wage

premium for the general population has remained the same yet between 1915 and 1980 the balance between the supply and demand for college-educated workers worked in favor of income equalization. Since then, the relative supply of college-educated workers fell and the college premium rose (Johnson 1997; Goldin and Katz 2008). Coinciding with structural changes in the Western economies such as deindustrialization (Ruggles 2015), the returns to education have become more uncertain too (Heckman et al 2003).

Additionally to considering the potential income loss, higher educated women have been routinely reported as having higher labor market aspirations (Friedan 1963; Komarovsky 1962 [1987], 1985 [2004]; Goldin 2006), be it due to selection effect that made them pursue a degree in the first place or an impact of having studied. Nevertheless, recent work suggests that even this assumption might be overturned, with young women from lower SES background declaring a (neo)traditional family arrangement less desirable than those from higher SES families (Gerson 2011).

Acquiring a higher level of education, of course, is not random or only a personality-based decision but a powerful class marker. When it comes to making labor market decisions, working- and middle-class women face a different set of pushes and pulls depending on the context. For example, those with very little education face so low potential wages that the meager USA benefits make more sense (Burtless 1995; Edin and Lein 1997). Working and lower-middle classes in general have no choice but to bring in two incomes, although these often enduring disruptive schedules (Presser 2003), involuntary part-time (Drobnič and Wittig 1997), and deficient childcare system (Williams 2006) among other problems. Middle and upper-middle classes find themselves trapped between the insidious logic 'having it all': both 'leaning in' in the constant availability of professional life (Acker 1990; Jacobs and Gerson 2005; Moen and Roehling 2005; Cha 2013) and hotly debating the 'correct' way to parent (Stone 2007, 2008; Stone and Hernandez 2012; Damaske 2013). For those with highest occupational achievement the widest gap in income lost opens if they decide to become mothers (Wilde et al 2010).

However, unless a research design is specifically aimed at disentangling the 'origins-education-destinations' triangle, it is impossible to separate education as a marker of human capital and education as a marker of social class. As I am not doing a

decomposition analysis, throughout this thesis I mostly use education level as a marker of social class.

Several exogenous shocks coincided with the shift in women's labor market trajectories, allowing to maintain the idea of rational actors whose opportunity calculus had now changed. Reliable contraceptive technology divorced sexuality from marriage (Ryder and Westoff 1977 [2015]; Goldin and Katz 2002; Goldin 2006; Ruggles 2015). Although externalized household had declined sharply and the average home has become larger, labor saving innovation (fast food, frozen and take-away meals, automatic washing machines and dryers, easy care fabrics), and changing expectations – 'declining standards' – have reduced the hours spent on housework (Bianchi et al 2000). However, in the second third of the 20<sup>th</sup> century the changes in housework patterns were assumed to offset each other (for example, with the raise of intensive mothering and chauffeuring required by the life in suburbia) (Oppenheimer 1970) and in the third, 'the propensity to use time for housework declined most among the group with the most, not the least, time available for housework' (Bianchi et al 2000: 214).

The major exogenous shock was the economic cycles and the profound change in economy since the 1970s energy crisis. While the 1960's women's influx in the labor force was linked to the switch from the industrial to a service economy and the demand for low-level service workers in the time of full employment (Oppeneheimer 1970 the real wages have stagnated since the 1970s increasing the importance of having a second earner (Ruggles 2015). Also, the new uncertainty of male labor force prospects (Easterlin 1976; Easterlin et al 1990) caused marriage delays that stimulated stronger labor force attachment of women which again delayed marriage by allowing women to 'set a higher standard for the minimally acceptable match' (Oppenheimer 1988: 587), and establishing new criteria for a successful partnership where 'the gain to marriage increases with age' (Oppenheimer 1997: 449).

The exogenous shocks are not an explicit part of my research designs but background information I use to interpret the general social milieu of the time window observed. Also, my use of longitudinal data and sequence analysis is an asset here, as any sudden massive change in behavior observed would be picked up in the sequences without having to introduce considerations of particular exogenous shocks in my research design.

Several macro-level changes of the last third of 20<sup>th</sup> century have been bundled together describing a new, very different society than the one of 1940s-1960s. While it is impossible to establish neatly causal models that would cover all the dimensions that have changed, the post-materialist and second demographic transition theoreticians (Easterlin 1976; Ingleheart 1977 [2015]; Easterlin et al 1990; Lesthaeghe 1995; van de Kaa 2001) offer a vision of lower fertility, changing meaning of couple relationships, stagnating real wages coupled with increased consumerism and female economic autonomy, and decreasing social control either driven by (Ingleheart 1977 [2015]; Van de Kaa 2001) or followed by (Ruggles 2015) a major change in values. In any case, at least the demographic behavior links have been empirically proven to have changed from the low fertility and unstable partnership 'equilibrium' to a new one – a dual earner one where also the house- and care-work is shared - in some countries, reopening the field to explain differences between the countries with comparable economic development (Esping-Andersen et al 2013; Esping-Andersen and Billari 2015). And a great part of this divergence has been explained by the extent to which policies enable the expression of gender egalitarian preferences (McDonald 2000a, 2000b, 2002), opening a large field of comparative research analyzing the same paid and unpaid work conflicts in different policy settings (just to name a few, Lewis and Aström 1992; Blossfeld and Drobnič 2001; Cooke 2006a, 2006b, 2011; Cooke et al 2013; Esping-Andersen 2007, 2009 [2013]; Lewis et al 2008; Aisenbrey and Fasang 2017; Andersson et al 2014; Pöyliö and Van Winkle 2019).

Aided by the 1970s economic crisis, the teleological 'logic of industrialization' expectation that 'all industrializing nations, regardless of their historical and cultural traditions or present political and economic structures, become similar through an evolutionary process resulting from the impact of economic and technological growth on the occupational system' (Quadagno 1987) came to a halt. It became very clear that there were profound sociopolitical differences shaping the national welfare states that at their turn were shaping the opportunity structures of individual lives (Titmus 1974; Esping-Andersen 1990).

In line with the welfare state-specific research designs, much of literature taking stock of the change in status of women in Western democracies since the last third of 20<sup>th</sup> century simultaneously enumerate the great advances and insist on its incomplete (Esping-Andersen 2009 [2013]), uneven (England 2010, 2011) unfinished (Gerson

2011), stalled (Pedulla and Thébaud 2015; Thébaud and Pedulla 2016) nature. While part of the feeling expressed is a normative disappointment about the lack of complete gender convergence, it also contains weariness about its possible limits, the likelihood of trend reversals, and its intersections with social class and race. Notions of a less stable, postindustrial economy and family structures post-second demographic transition form the backdrop of my thesis while the frustration about the unfinished gender revolution and differences in policy provisions are the backbone of my research questions and potential explanations.

Life course paradigm brings together all these micro- and macro-level dynamics, the normative patterns typical of subgroups of population (Elder 1994; Elder et al 2003), and allows to explore the available microdata 'to study the interaction between individual lives and social change. It is a way of conceptualizing lives within the contexts of families, society and historical time' (Kok 2007: 204). I look at the available data from this perspective trying to discern the dominant and marginal pathways, gendered and intersectional dynamics, class differences, and quasi-universal life course markers established by the policy setting. The focus on agency and 'linked lives' allows for a rich interplay between – implicit or explicit – desires and the opportunity structure that surrounds the individual, limiting their options and restricting what acting in one's interest means (Elder 1994; Elder et al 2003).

Throughout my thesis I include men in my research designs as the peers against which the trajectories of women are to be evaluated, and focus on experiences, instead of expressed preferences. Although preference theory (Hakim 1996; 1998) is a beautiful reflection of the third-wave fantasy of 'free choice' and much has been published about it, I did not see it as a useful or reliable entry point for my research. When information about women's 'lifestyle' preferences is available, in most cases it is revealed at the same time as the current 'lifestyle', making causal inference impossible. In retrospective work and research with longitudinal data, it has been found that women's labor market trajectories are dynamic to an extent that preferences stated early in life, or even behavior at some point, hold little predictive value over the later life course, can be adjusted ad-hoc, and are revealed only under certain contextual conditions (Transgaard 1981; Gerson 1985; Crompton and Harris 1998; Crompton and Lyonette 2005, 2007; García-Manglano 2015; Cech 2016), or 'ideal typical' clustering turns out more complex when done with longitudinal data (Aassve et al 2007). Even in Hakim's work

the assumption is that about 60 per cent of women are 'adaptive', i.e. with no strong preference either way (1996). And unquestioned go the process of preference formation, the preferences of men, and the idea that every woman is free to choose 'a homecentered lifestyle', presumably because there is a breadwinner or welfare state ensuring an adequate quality of life so that she could act on her preferences, a double standard already denounced by Myrdal and Klein (1956 [1970]). Even a brief glance at the social stratification literature will reveal the class and cultural biases of these assumptions. Instead of working with those, I assume that everybody has preferences - probably for most people, men and women, the most desirable 'lifestyle' would be that of unrestricted leisure - but that those are malleable and class- and context-specific.

#### 1.3 Case Selection

My work is based on the idea that class- and context-specific social norms form part of individuals' calculus when making labor market decisions, that the 'ideal worker paradigm' (Acker 1990; Presser 2003; Jacobs and Gerson 2005; Moen and Roehling 2005; Williams 2006; Cha 2013) matters and that it entail a different set of traits depending on the economy and one's position in it. While the work-life interface is necessarily multi-faceted when approached empirically, my two cases differ significantly when it comes to both (1) how paid work and work-life balance is treated discursively, and (2) the policy framework supporting it. Both claim that their approach fosters productivity and creativity, but the supposed mechanisms for achieving them are very different.

My case selection seeks to emphasize the differences in policy setting while being instances of similar developments of women's labor force participation after the Second World War. The selection of Denmark and USA for comparison was deemed promising due to the similarities in the evolution of the most formal and simple marker of gender relations in the labor market, female labor force participation (Rubery et al 1998, 1999; Goldin 2006, 2014; Esping-Andersen 2009 [2013]), following an implicit Most Different Systems Design (Przeworski and Teune 1970; Anckar 2008): taking 'as the starting point the variation of the observed behavior at a level lower than that of systems' (Przeworski and Teune 1970: 34) and keeping 'the question of at which level the relevant factors operate [...] open throughout the process of inquiry' (Przeworski and Teune 1970: 36). Both countries are open economies, stable democracies, and among

the highest ranked countries on most social wellbeing indicators, being ranked as 11<sup>th</sup> (Denmark) and 13<sup>th</sup> (USA) in the most recent Human Development Report (UNDP 2018). They largely share the industrialization history, especially the timing of transition from an industrial to postindustrial economy. And the massive influxes of women in the labor force in Denmark and the United States in the last third of 20th century are very similar: a highly educated female population gravitates towards a consistent and life-long labor market attachment in a context of full employment and continues to doing so throughout the recessions of the early 1970s, 1980s and 1990s. What I was trying to capture was these two cases of comparable economic development going through a similar 1970s female labor market revolution despite being at the opposite ends of the decommodification typology (Esping-Andersen 1990). The expectation all along was that the common explanatory 'variables below the system level' (Anckar 2008: 390) would be the usual suspects: economic or vocational necessity is the key, either enjoying supportive policies and thus maximizing the participation, or finding their way, with varying costs, around the obstacles. But it had to be seen to what extent the individual trajectories fit the ideal typical mould, especially when it comes to the most and least privileged observations.

The two countries are paradigmatic cases of their welfare state types (Esping-Andersen 1990), and similar comparisons, often including more observations, each representing a different type of welfare state, are abundant, either offering overarching conclusions in edited compilations (for example, Blossfeld and Drobnič 2001; Esping-Andersen 2007) or by direct comparison (for example, Pfau-Effinger 2004; Cooke 2006a, 2006b, 2011; Cooke et al 2013; Esping-Andersen 2009; Esping-Andresen et al 2012; Aisenbrey and Fasang 2017; Pöyliö and Van Winkle 2019, and Van der Lippe and Van Dijk 2002 for a review).

	Denmark	USA
Percentage of representative samples in disagreement with the statement 'When jobs are scarce, men should have more right to a job than women' (European Values Study 2019; World Values Survey 2019)	1990 – 86.0% 1999 – 89.4% 2008 – 95.7%	1995 - 69.1% 1999 - 81.3% 2006 - 65.9% 2011 - 69.3%

Labor force participation rate: % of female population 15+ (national estimate, World Bank	1960 - 36.5%	1960 - 37.7%
	1985 – 59.7%	1985 – 54.5%
2019a)	2000 – 60.2%	2000 – 59.9%
20174)	2017 – 58.2%	2017 – 57.0%
Female share of employment in senior and middle	2000 - 19.7%	2000 - 35.3%
management (%) (World Bank 2019a)	2017 – 27.6%	2017 - 40.5%
Share of employees working less than 35 hours per	1994 - 43.6%	1994 - 25,5%
week (%) (ILOSTAT 2019)	2018 – 44.0%	2018 – 22.0%
Share of employees working more than 48 hours	1994 – 6.5%	1994 – 15.5%
per week (%) (ILOSTAT 2019)	2018 – 4.9%	2018 – 13.5%
Employment in general government as a percentage	2008 - 27.8%	2008 – 15.9%
of total employment (OECD Stat 2017)	2015 – 29.1%	2015 – 15.3%
Share of central government employment filled by	2015 - 52.5%	2015 – 42.6%
women (OECD Stat 2017)	2013 32.370	2013 12.070
Recessions since 1960 (World Bank 2019b)	1974-1975; 1980-1981; 2008-2009	1974-1975; 1980; 1982; 1991; 2008- 2009
GINI coefficient (OECD Data 2018a)	2015 – 0.26	2015 – 0.39
Poverty rate (OECD Data 2018b)	2015 – 5.5%	2015 - 22.9%
Welfare state type according to Titmuss (1974)	Institutional	Residual
Welfare state type according to Esping-Andersen	Social	Liberal
(1990)	democratic	Liberai
		Not a nation-
Paid maternity leave (Rós Valdimarsdóttir 2006;		wide policy but
Vahratian and Johnson 2009; OECD Family	Since 1960	provided by
		some states
Database 2017)		and some
		employers

Table 1.1: An overview of the main similarities and differences between the two cases.

My two cases are among the typical examples of extreme opposites in welfare state design, be it Titmuss's (1974) distinction between residual and institutional welfare

states or Esping-Andersen's (1990) liberal and social democratic regime-types. In the background of my thesis is the clash between 'the philosophy of the traditional, minimalist welfare state [...] to establish a safety net, a haven of last resort, for those demonstrably unfit or unable to work' (Esping-Andersen 1990: 141) and 'the modern, advanced welfare state [that] has deliberately abandoned the minimalist philosophy, and espouses entirely new principles with regard to its proper role in the life-cycle, now often committing itself to optimize people's capacities to work, to find work, and even to count on a good job with good pay and working environment [...] the goal is to allow individuals to harmonize working life with familyhood, to square the dilemmas of having children and working, and to combine productive activity with meaningful and rewarding leisure' (Esping-Andersen 1990: 141). When it comes to labor force participation and its interaction with family dynamics, the juxtaposition of Denmark's universalism opposite America's indirect but rather precise differentiation between social insurance and social assistance by (a) gender and (b) traditional family structures vs. single parent families (Orloff 1993, 1996) offers additional insight.

The initial assumptions of the Danish labor force-welfare state are social cohesion (sammenhængskraft), mutual trust and religious uniformity in Protestant ethics stemming from a small and homogeneous population, aided by the Scandinavia-specific set of political alliances in 1930s (Esping-Andersen 1985 [1988]). While disincentives for excellence and different sets of values for the out-group and the in-group are the supposed downsides to the Law of Jante (Sandemose 1933 [1936]), the right to work and right to social assistance are part of the Danish constitution in the name of 'advancing the public interest' (Statsministeriet 2018). Theirs is the coinage of the 'flexicurity' bringing together a flexible labor market and a securing welfare state that will take care of anyone in need and support individual emancipation via universal entitlement to education, healthcare, active labor market policies and cash benefits (Kananen 2014). And supported by the welfare state and employers is the ethos of combining work, family and leisure. The contemporary Danish social contract about paid work is encapsulated in the notion of 'arbejdsglæde' (job satisfaction, happiness at work) including low weekly hours, little overtime, compressed workplace hierarchy, and life-long training in return to doing one's job with seriousness and dignity. It has also become the State's role to emancipate individuals, especially women, from reproductive work with generous reconciliation policies, public care work provision,

and an individual tax code that does not penalize two earner families, leading to notion of *state feminism* (Hernes 1987). This idea that the Scandinavian welfare state had the potential of becoming a 'woman-friendly state' which 'would not force harder choices on women than on men, or permit unjust treatment on the basis of sex' (Hernes 1987: 15) has effectively became, according to Borchorst, 'a partnership between the women and the state' (Ellingsaeter 1993: 379) due to the interdependence of 'the public child-care provision [among other provisions that decrease the care burden of the household that] has aimed at supporting women's economic independence' (Ellingsaeter 1993: 379) and 'women [being] the basic labor force in the public sector' (Hansen 1993: 357).

The United States, on the other hand, have made of the heterogeneous melting pot its identity. The ideal of a small and nonintrusive laissez-faire government, at least on a discursive level, has been part of that identity since the Revolutionary war: 'American thought has always been prone to attribute a special mystique to the market [...] and warned [...] of the pervasive consequences of anything which, in the name of welfare or compassion, might interfere with the free play of market forces' (Galbraith 1958 [1984]: 53) combined with 'the conviction that any American – at a minimum, any properly energetic American of Anglo-Saxon and Protestant antecedents - could by his own efforts be comfortably opulent' (Galbraith 1958 [1984]: 54). This outlook implies that a very flexible labor market is a good thing while the State will do the barest minimum for you only after scrupulous means testing and will add social stigma to the lot for having asked for help (Esping-Andersen 1990). The reining ethos, again, on a discursive level, is that hard work and sacrifice are needed for success (Moen and Roehling 2005), even if success means just maintaining the family afloat. This might entail long weekly hours and overtime, or involuntary part time that excludes benefits (Drobnič and Wittig 1997), whatever the market requires.

But even at the height of the male breadwinner arrangement, the instability of a way of life that simultaneously prescribed hard, honest work and exempted half of population of it was apparent under even minimal level of scrutiny beyond the middle class feminine mystique. For example, if research on 'the function and meaning of work' concluded that 'for most men, working does not simply function as a means of earning a livelihood [...] even if there were no economic necessity for them to work, most men would work anyway' (Morse and Weiss 1955: 198), it logically followed that an adapted research design for women, the desirability bias notwithstanding, starts out

asking 'whether [paid] work supplies bases for feelings of worth which housekeeping fails to supply' (Weiss and Morse 1958: 358) and presents its results as 'good reason for concern about the apparent emptiness of the social roles available to [older unmarried] women' (Weiss and Morse 1958: 365). And beyond the discursive battle about women's ideal role, the proportion of economically active women, when including work in family farms and family businesses and keeping in mind its unequal distribution throughout the life course ((Myrdal and Klein 1956 [1970]; Goldin 1990; Blau et al 2001), only briefly in 1960s dipped below 50 per cent (Ruggles 2015).

While during the brief reign of the male breadwinner model in the labor market these were the troubles of the head of the family and paid work for married women was seen as his unfortunate failure to provide for the family (Coontz 2011; Ruggles 2015), since 'the quiet revolution' (Goldin 2006) attachment to paid work as a desirable source of identity and dignity is the case for women of all social classes (Rubin 1994; Edin and Lein 1997) despite a tax code that still discourages work among secondary earners. The darkest side of the 'pulling oneself up by the bootstraps' American Dream is treating poverty as an individual character flaw and a reluctance to redistribute wealth, leading to high poverty rates and income inequality. In a similar vein of 'promoting autonomy' early emancipation of young people is encouraged, although often funded by parents or (student) debt.

Due to a historically more heterogeneous population with tense race relations, persistent wider income distribution and a residual welfare state, American social science and journalism have extensively researched - to borrow a classical framing of Harrington (1962 [1969]) - 'the other Americas'. Pushing against the notion of poverty and 'broken families' as resulting from character flaws and a pathological culture-of-poverty, high quality research walks us through these realities, starting from Harrington's pre-food stamp (1964), pre-Medicaid (1965) and pre-Medicare (1965) 'other America' (1962 [1969]) and Stack's description of alternative solidarity structures in settings where structural conditions make the nuclear family unable to provide enough resources (1975) to Edin's and Rubin's work documenting the decision making around motherhood and labor force participation among low income women (Rubin 1994; Edin and Lein 1997; Edin and Kefalas 2005).

Denmark offers a stark contrast with its initially homogeneous population with a compressed income distribution and little immigration (Ostby 1993) actively kept that

way by the welfare state expansion since the 1956 Folkepensionsreformen (Andersen 1993; Lidegaard 2009). The essentially 'poverty prevention' work carried out by the welfare state and the flexicurity system has left little space for critical research looking into the 'other Denmarks'

Given these contextual differences, my thesis seeks to map out the labor market trajectories of the cohorts that headed the massive 'quiet revolution' of consistent labor force attachment in Denmark where all incentives were aligned for women to incorporate in the labor force and also in the USA where, very much in line with the logic of the American labor market, they had to figure it out without access to paid maternity leaves, affordable high quality childcare, and ample opportunities to work part-time or in the more sheltered public sector.

#### 1.4 Data and Methods

I wanted to do a very detailed longitudinal work, so it hinged on data availability. As a result, I have poured hours into data cleaning to achieve the best possible result in homogenizing the four available National Longitudinal Surveys of Youth for the USA (and also the Panel Study of Income Dynamics which was first deemed the most appropriate and then turned out to be unusable) and information from the Danish Register. Several compromises had to be made when it came to making my research designs a reality, namely accepting that my efforts of harmonization are heavily limited by the survey designs and often fall short of optimal design, and that the differences between the cases can only be assessed by comparing two different sets of results instead of estimating the differences in the same model due to security protocols for the Danish Register.

I work with data representative of the cohorts in question - big random samples of the Danish Register and representatively sampled American surveys - hence my results offer a representative sketch of the median person. I do my best to gain depth and detail via interactions and special attention to some subsamples, but I surely miss out on a multitude of 'other Americas' and 'other Denmarks' that have fallen through the cracks of either sampling, observation selection or by being simply too marginal to show up as a distinctive reality for a sizeable proportion of the population. Those unobserved are bound to be both extremes of the income distribution, and distinct ethnic or religious

enclaves where the answers to my research questions are different. I have done my best to balance this unavoidable focus on the average with a subgroup-specific literature review. While these median realities might lack the element of surprise typical of work uncovering the struggles or excesses of marginal populations, they are faithful answers to 'what has been the typical way of organizing one's work life in these countries, for these cohorts, and at these ages?' To ensure that the intersectional realities and cumulative disadvantage of several subpopulations is accounted for, I put great emphasis on interacted results throughout the thesis. While it extends the number of tables to be analyzed and complicates the interpretation, this approach ensures that regression model estimates for single variables are not interpreted net of others, as that is not the case for the lived realities (McCall 2005; Cho et al 2013).

I use sequence analysis, an exploratory method for synthesizing the individual life courses and to capture the patterns behind the sequences without loss of detail (Abbott 1995; Abbott and Tsay 2000; Billari 2001; Aassve et al 2007; Barban 2011; Barban and Billari 2012; Widmer and Ritschard 2009) and clustering throughout the thesis to strike a balance between richness of detail and a workable synthesis. It allows me to capture full trajectories, and to assess the relevance of certain sequence states (for example, the absence of part-time work as a long-term strategy in Chapter 4) or narratives found in previous research (for example, the absence of an 'opting out' dynamic in Chapter 3) for the particular sample at a glance. The assumption-free basis of sequence analysis (Abbott and Tsay 2000) has also helped me to accommodate the interpretation of the results and clustering to effects stemming from data flaws and survey design, essential when trying to harmonize up to five different data sets in one chapter. Hence among the large array of specifications available, I've opted for most data-driven sequencing and clustering specifications, aiming at reducing the number of arbitrary decisions along the way and ensuring methodological uniformity across the three empirical chapters.

#### 1.5 Overview of the Thesis

Each of the three empirical chapters of the thesis explores a complementary research question, addressing my interest in women's labor market participation from a different angle. The sub-questions researched are: (1) Under what conditions do mature people stay out of the labor force in Denmark and the USA? (2) Under what conditions do the labor market trajectories of young men and women in the USA converge? (3) Under

what conditions do the labor market trajectories of mature men and women in Denmark converge? The second chapter, entitled 'The Ones Left Out by the Revolution: Who Is Staying Out of the Labor Force in Denmark and in the USA?', explores if the 'profile' of the persons loosely attached to the labor force has been the same for both genders and, in case of a gender gap, to what extent it can be explained by traditional gender roles in family life and the labor market structure. I do that using 1957-1964 birth cohorts from the National Longitudinal Survey of Youth 1979 for the USA and a random sample of the Danish Register data observed between 1986 and 2011 for a longitudinal exploration of the labor market attachment and family life trajectories. I confirm that the norm for these cohorts is being in the labor force, although there is still a gender gap with women spending more time out of labor force than men. And that gender gap is much larger for Americans than for Danes. I also observe the links between absence from the labor force and other sociodemographic variables, confirming that for men in both countries and Danish women absence from the labor force is more of a marker of social exclusion while for American women absence from the labor force is still linked with the normative family life. The third chapter 'Changing Paradigms of Young Women's Labor Market Participation in the USA' compares the labor market trajectories of three cohorts of American young adults looking for signs of gender convergence in labor market attachment. Using the four National Longitudinal Surveys of Youth, I conclude that there is clear gender convergence at the aggregate level while further exploration of race, class and fertility differentials reveal the partial nature of this convergence. The fourth chapter is entitled 'Changing Paradigms of Mature Women's Labor Market Participation in Denmark'. In it I compare the labor market trajectories of two cohorts - 1947-56 and 1960-69 - of Danes observed from their 30s to 50s looking for signs of gender convergence in labor force attachment and the importance of part-time work and public-sector work in achieving it. My results confirm the almost universal permanent attachment to the labor market and the gender bias of public-sector work but not the importance of part-time work as a long-term strategy. However, I observe no big changes between the two cohorts, neither in gender gap nor in the impact that large care burden plays in predicting one's labor force attachment. Finally, the fifth chapter summarizes the contributions and main findings of the previous chapters. Then, I discuss the limitations of my work and provide some possible directions for future research.

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# CHAPTER 2: The Ones Left Out by the Revolution: Who Is Staying Out of the Labor Force in Denmark and in the USA?

#### 2.1 Introduction

Although formal labor force participation of both men and women has been the norm in Western economies for the last five decades, not everybody is strongly attached to the labor market and the selection is not random. In this chapter I look into under what conditions do men and women remain out of the labor force, paying special attention to (a) the importance of gender among other variables and (b) the interaction between gender and family life trajectories.

I am exploring these factors in two countries that were among the pioneers of the gender revolution in labor market participation: Denmark and the USA. Although stemming from two different historical and institutional contexts, the timing of the massive influx of women in the labor force in 1970s coincide in both cases and until 1990s both countries seemed to be well on their way of reaching full gender equality when it comes to women's participation. However, now, when the cohorts that pioneered the 'quiet revolution' (Goldin 2006) in each of the countries have reached the retirement age, it is clear that there are 'pockets of resistance' among women, especially in the USA, that haven't been willing or able to attach themselves permanently to the labor market.

Noting that also among men participation rates are not one hundred per cent, I am interested if - in these two countries and among the pioneering cohorts (1957-1964) of the gender revolution - the 'profile' of the persons loosely attached to the labor force has been the same for both genders and, in case of a gender gap, to what extent can it be explained by traditional gender roles in family life or by labor market structures limiting access to a more flexible labor market attachment. I do that using the National Longitudinal Survey of Youth 1979 for the USA and a random sample of the Danish Register data for a longitudinal exploration of the labor market attachment and family life trajectories. The methodological range of this paper includes constructing full labor force participation sequences, extracting information about absences and then – using sequence analysis and clustering for family trajectories, and OLS regressions - establishing links between absence from labor force and sociodemographic characteristics and family trajectories.

# 2.2 Background

The 1950s and 1960s birth cohorts lie in between the heavily gendered norms of mid-20th century and the current wide acceptance - and expectation - of life-long and full time female labor force participation. They are the cohorts that pioneered the new norm, and now, already in retirement and with rich longitudinal data tracking their lives available, the links between work and family trajectories can be researched at individual level.

Previous research has produced an impressive amount of parallel explanations for gendered differences in labor force participation. For an overview, see, for example, Treas (1987), Abbott (1993), Blau and colleagues (2001), Van der Lippe and Van Dijk (2002), and solid examples include Myrdal and Klein's work (1956 [1970]), new home economics attempts at formalization (Mincer 1962; Becker et al 1977; Becker 1981, 1995), and many later attempts to deepen that work, both with quantitative (for example, Oppenheimer 1970, 1988, 1997; Moen and Smith 1986; Goldin 1990, 2006) and qualitative (examples include Gerson 1985, 2011; Hochschild and Machung 1989; Edin 1991; Edin and Lein 1997; Stone 2008) methods. Yet Abbot in his early review expressed consternation at the simplicity seeked in many attempts to disentangle family and labor force roles for women: 'One cannot discuss this issue without a full analysis of work and family culture, of complexes of structural forces that impinge on the local work world, and of the creative response of family members-men and women alike-to them' (1993: 197).

Most of this research sought to explain the diversity of the women 'lured in' by the labor force before the 'quiet revolution' and without a long-term commitment necessarily (Myrdal and Klein 1956 [1970]; Coontz 2011; Ruggles 2015): the lower classes that would have liked to 'opt out' of their jobs but could not afford such luxury, the lower middle class 'reserve army of labor' ready to pick up a job when the family needed it, the upper middle class women returning to labor force 'to stay active' after raising their families, plus the occasional woman with strong preferences for a profession. Yet when participation rates surpassed 75 per cent and rather consistent labor market attachment became the norm (Blau et al 2001; Goldin 2006), the question has turned to explaining the lack of complete gender convergence – as illustrated by the abundance of work inquiring about the incomplete (Esping-Andersen 2009 [2013]),

uneven and stalled (England 2010, 2011; Pedulla and Thébaud 2015; Thébaud and Pedulla 2016) unfinished (Gerson 2011) gender revolution – and it might make more sense to turn the question of female labor force participation on its head and ask who are the ones staying out.

The overall history of labor force participation in Denmark and the USA is similar right up to the post-1990s female participation rates. For men labor force participation has been the norm since the formalization of paid labor during the Industrial revolution (Ruggles 2015). The selection out of the labor force happened at the margins of the labor force: the very rich, the very poor, those incapable of working and those unwilling. Policy advances such as education expansion and retirement from economic activity (accompanied by old age pensions) have decreased men's labor market activity rates (Blau et al 2001). And, as increases in life expectancy have not been accompanied by increases in working life expectancy (Dudel and Myrskylä 2018), in 2010s men's labor market participation reached its lowest point in the recorded USA history (Ruggles 2015).

The situation of women has been markedly different. The separation of workplace from household, typical of Industrial revolution, also marked change in attitude towards women's participation in the economy, extolling the notion of separated spheres and claiming family wage for men that could protect women (and children before the child labor laws) from the perceived indignity of paid work. Unpaid work in family enterprises was, however, expected, and the most common form of women's labor force activity in the USA until the 1950s. The time of male breadwinner ideal was the all-time low for female labor force participation, at its lowest in 1960s, followed by a massive female influx in the 1960s for Denmark (Blossfeld and Drobnič 2001b, Leth-Sørensen and Rohwer 2001) and 1970s and 1980s for the USA (Ruggles 2015).

The revolution in the labor market has also affected the life at home. The dual earner couples have become the norm, it has been the most common family economics arrangement for American couples since 1961 (Ruggles 2015). The millenials have a broad consensus on best family arrangement in theory – an egalitarian one (Gerson 2011) – but in practice the neo-traditional arrangement is accepted as a valid choice in the framework of 'mommy tracks' and 'opting out' (Still 2006; Stone 2008) if a family can afford it. And the profile of those leaving the labor market for good is rather bimodal: either being at the margins of the labor market where paid work does not offer

much better life than the informal economy and welfare benefits (Edin 1991; Edin and Lein 1997) or being able to live comfortably on partner's income that allows opting out from the labor market when high-level jobs and family become incompatible (Stone 2007).

Denmark saw a similar shift in labor force participation rates since the mid-20<sup>th</sup> century: a lot and upwards for women due to massive incorporation in the labor force, slightly and downwards for men due to later entry and earlier retirement (Transgaard 1981; Hansen 1993). It is now a labor market of almost universal participation, although heavily segregated in private and public sector with a high proportion of public sector employees (Ellingsaeter 1993; Hansen 1993; Bonke 1997). In late 1990s, 30 per cent of the employed worked in public sector and almost 45 per cent of employed women worked in public sector. Labor market attachment is normative and desired, while less education is linked to more unemployment and absence, long term unemployment is linked to childlessness, and higher income is linked to less unemployment and part time work (Leth-Sørensen and Rohwer 2001). Equally biased towards a double earner household model is the individualistic taxing system, and the commonality of such arrangement is confirmed by the finding that couples tend to be homogamous in intense labor force attachment (Leth-Sørensen and Rohwer 2001). The Danish family norm is dual earner couples, 'opting out' being very costly.

But even for the most egalitarian countries - the Scandinavian ones - the almost universal labor force participation masks the divisions inside labor force and the fact that at least up to 1990s - when the cohorts of interest were raising children - 'the rather dramatic increase in female labor force participation [...] has hardly changed women's role as supplementary workers' (Bernhardt 1993: 29) and that 'it is generally acknowledged that Scandinavian women are less dependent on their husbands or partners in financial terms than women in many other Western European countries, but they, by and large, still suppress their own long-term job opportunities, earning profiles, and other job-related interests when they raise young children' (Blossfeld, and Drobnič 2001: 7).

It is clear that people build their lives integrating all spheres, hence the need for a life course and 'linked lives' (Elder 1994) approach. However, capturing the complexity and feedback loops between work and family trajectories empirically is data intensive, endogenous, and always supposes a compromise between the richness of information

and the parsimony of research design. The most similar previous using sequence analysis to look at some aspects of the gendered interactions between work - or linked phenomena such as education or income - and family trajectories are (a) Han and Moen (2001) looking at career and partnership interdependencies in a biased USA sample, (b) Aassve and colleagues looking at work-family links in UK young women (2007), (c) Gauthier and colleagues (2010) exploring the advantages of multichannel sequence analysis in a Swiss sample, (d) Jalovaara and Fasang (2015) examining family trajectories by education in Finland; (e) McMunn et all (2015) looking at destandardization and gender convergence patterns in work–family life courses in Great Britain; (f) Aisenbrey and Fasang (2017) comparing USA and Germany when it comes to linked employment and family trajectories, (g) Sirniö and colleagues (2017) looking at SES-patterns of joint labor market and family formation trajectories among Finns born in 1970s, (h) Jalovaara and Fasang (2018) exploring family life and mid-life earnings, and (i) Visser and Fasang (2018) for the joint employment characteristics of Dutch couples.

The two previous papers looking at USA inform the design of this one. In their highly selected sample of 1923-1945 birth cohorts Han and Moen found that for men there was no clear impact of marriage on work. For women, however, more work attachment tended to bring more marriage instability while the less work-attached got more stable marriages. The link is, of course, endogenous and based on self-selection, but the takeaway finding was that in those cohorts women did not get to have both stable unions and successful careers (2001). Aisenbrey and Fasang, also using NLSY79, found that in USA – as opposed to Germany – 'gender effects are comparably strong for work-family trajectories only in the lowest occupational prestige group' (2018: 1477), in line with arguments that 'the liberal welfare regime [...] refrains from adopting policies that would undermine the opportunities of high-flying women, while at the same time obliging less-fortunate women to pay the price of class inequality' (Mandel and Shalev 2009: 1901) and 'the relative gender-neutrality of liberal regimes of market economies seems to be favorable to women with high skills who are willing to pursue a masculinized employment pattern' (Orloff 2009: 328).

Meanwhile, in absence of similar Danish designs, Jalovaara and Fasang's (2015, 2018) and Sirniö's et al (2017) papers on Finland give an insight about one Nordic case that would nevertheless have to be tested if applicable to the Danish case. They find that

different family structures are class-specific linking stable, normative family trajectories with higher education and being never partnered and childless with lower education, and limited gender differences that nevertheless link single motherhood with lower educated women and no-unions, no-children trajectories with lower educated men (Jalovaara and Fasang 2015). Their research on earnings confirm the class biases of the 'traditional' family even in the context of a Nordic welfare state, and reiterate that single mothers and no unions, no children men are the ones most likely to find themselves at the bottom of the income distribution (Jalovaara and Fasang 2018). Or looking from the opposite perspective of the SES-family structures link, that coming from low-SES families is implies higher likelihood of finding oneself in a trajectory characterized by low education and early single parenthood for women and remaining single and childless for men (Sirniö et al 2017).

In order to interpret the absences from the labor market as choices in settings where participation in labor force is possible, even if limited by one's education or family policy context, it is necessary to make sure that only those able to work are included in analysis. By controlling for health limitations I assume that the net effects observed are expressions of socioculturally and economically constrained decisions, not inability to work. Hence the obvious response to my research question – people unable to work or those to whom paid work is too burdensome are the ones most likely to stay out of the labor force, especially if income replacement is available - is contained in order to see how other variables of interest affect these dynamics.

Due to the important heterogeneities when it comes to the opportunities available in an economy as a whole and jobs - and working conditions - available according to one's training. Hence breaking down labor force experiences by education level, which also serves as a proxy for the socioeconomic status, is crucial. There are important country differences between my two cases stemming from institutional designs, and, aware of the profound differences that the two labor markets and policy frameworks for employment have, I have differentiated expectations about the role these play in pushing people towards participation in labor force or pulling them away from it.

In the social imagination and academic literature, absences and part time is a women's issue, typically researched through the prism of second earners and family obligations. Upon entering in the topic, my first step is to examine this prevailing assumption about the gendered nature of prolonged absences from labor force. Following the literature

establishing Denmark as one of the societies closest to full gender equality and the USA as one of 'stalled', 'unfinished' or 'incomplete' revolution, the gender gap in years spent outside of the labor force should be smaller in Denmark due to the institutional context that promotes labor force participation (Blossfeld and Drobnič 2001) while in the USA the scarcity of family policies pushes many women towards 'mommy tracking' or 'opting out' (Schwartz 1989; Lewin 1989; Belkin 2003; Still 2006; Stone 2008) in order to reconcile at least until the child is old enough to avoid the 'regressive tax on mother's labor supply' that is the cost of day care (Esping-Andersen 1999). However, even in the formally most egalitarian countries there are gendered patterns of labor force attachment, the question here being if these Danish cohorts have equaled their long-term labor force participation. There are other documented differences like glass ceiling, horizontal segregation, reduced hours that differentiate the attachment, the division of primary and secondary earner on a discursive level (Bernhardt 1993; Leth-Sørensen and Rohwer 2001; Orloff 2009; Bloksgaard 2011) but the equality of overall participation has to be established before tackling those issues. Hence my first hypothesis:

H1: When controlling for health limitations, among other sociodemographic factors that affect labor force participation - race, immigration background, education - gender is the one that predicts being out of the labor force the best in both countries, especially in the USA.

Part-time work is an alternative way of limiting one's attachment to the labor force. The use and meaning of part-time work differ significantly in Denmark and the USA (Rosenfeld and Birkelund 1995), and has changed during the time window observed, making the comparison necessary but complex. In Denmark since the early 1990s, normal weekly hours of 37 and overtime premiums have been established through collective bargaining (OECD 1998, Lee 2004), a change that started with the Metal Working Industry Agreement and later spread to other sectors. While this change has made shorter hours the mode of the duration of a full-time working week (Bishop 2004, Lee 2004), in early 2000s almost a third of the men and 10 per cent of the women employed reported having a workweek over 40 hours (Bishop 2004). The growth of women's participation rates has been accompanied by a slight increase in the cross-sectional part-time work for women, although it has to be taken into account that hourwise these are typically 'long part-time hours' (Blossfeld and Drobnič 2001b). And this is the change since the height of the transition during the 1970s and 1980s when first

there wasn't enough part-time jobs for all that wanted them (Transgaard 1981) and afterwards when almost half of employed women was working part-time when 'the demand for labor was adjusted to the changed composition of the labor supply' (Ellingsaeter 1993: 370).

In the USA throughout the years observed the formal threshold for full time work is working 35 or more hours per week. The USA is a case of relatively low part timing among women (around 25 per cent in early 1990s) and relatively high among men (around 10 per cent at the same time), as it fulfills the function of retention and supplemental income for some - the young and the old, the entering and the exiting - while the great majority of part-time jobs are such because of the demand side: it is much cheaper for the employer to have part-time workers as it implies no benefits, including no healthcare coverage (Drobnič and Wittig 1997). Hence not all part-time work is a result of an employee's decision to work fewer hours.

In empirical terms this means that I expect absence from labor force and part-timing to be at least partly interchangeable:

H2: A comparison between the typical labor force trajectories for women will show the Danish doing more part-time work while the Americans will stay out of the labor force altogether if unable or unwilling to commit to the labor force full-time due to limited access to part-time work. I expect it to be more so among the least educated who have an already limited set of opportunities.

Much of the gender effect in labor market attachment, however, has been linked to enduring gendered differences in family responsibilities. As prolonged spells of being out of the labor force due to caretaking responsibilities are mostly taken up by women and thus create a gender gap (Myrdal and Klein 1956 [1970]; Transgaard 1981; Moen and Smith 1986; Ellingsaeter 1993; Drobnič and Wittig 1997; Blossfeld and Drobnič 2001a, 2001b; Leth-Sørensen and Rohwer 2001; Van der Lippe and Van Dijk 2002; Still 2006; Sigle-Rushton and Waldfogel 2009; Stone 2009). Hence my third hypothesis:

H3: When family trajectories are interacted with gender, the widest gender gaps open for those following more traditional family trajectories due to a gender specialization pattern of men fulfilling the 'responsible father' role via labor market attachment and women loosening their labor market attachment. More

traditional family trajectories (stable and early partnerships with children) should be linked to prolonged absences from the labor force among American women but not among the Danish, as Danish women's care burden is greatly alleviated by their partners and the welfare state.

The competing explanation for absence from the labor market is one's lack of options in both markets analyzed, labor and marriage, leading to trajectories where marginal labor force trajectories dominated by absence or unemployment are experienced parallel to marginal family trajectories such as lifelong singlehood or not emancipating from the paternal household (Leth-Sørensen and Rohwer 2001 for Denmark; also Jalovaara and Fasang 2015, 2018; Sirniö et al 2017 for Finland). So I expect:

H4: The profile of being loosely attached labor market trajectories and lack of stable partnerships to appear among both men and women with least education, and in both countries as it singles out individuals who are not valued in either labor or marriage markets.

Single parenthood - which means being a single mother in the majority of cases - in the USA implies a triple bind of contradicting forces of (1) on top on already being negatively selected on lower social class (McLanahan 2005; Härkönen 2018), one has less resources due to living on one income in a society where 2 or at least 1.5 salaries is the norm, hence there is a push towards working and earning as much as possible, (2) a workfare state that since the 1996 welfare reform insists on labor force activity to qualify for benefits (Edin 1991; Edin and Lein 1997; Corcoran et al 2000) combined with (3) 'a fragmented early childhood education and care system, of wide-ranging quality and with skewed access' (Kamerman and Gatenio-Gabel 2007: 23; also Esping-Andersen et al 2012). In stark contrast, in Denmark 'targeting within universalism with respect to the design of their family benefits' (Morrisens 2018: 377) situates Danish single parents among those with the lowest poverty rates among single parents in Europe, although both cases share the class bias towards the least educated women being most likely to become single mothers (Härkönen 2018). Hence:

H5: Assuming that lower class single mothers face additional factors that pull them out of the labor force - namely access to reliable and affordable childcare and work in unstable low-wage jobs - that are not the same across other SES, I expect American single mothers with the least education to have a positive association between proportion of observed time spent as a single mother and

the years spent out of the labor force while there should be none or negative relationship for those with more education for whom there are more opportunities in the labor market. On the other hand, I expect a very attenuated or no such link in Denmark due to universal access to early childcare and a flexicurity safety net.

#### 2.3 Data and Methods

I use two longitudinal data sources for this research design - the Danish Register data available for 1986-2011 and National Longitudinal Survey of Youth 1979 (NLSY79) restricted to 1986-2011. The Danish register data are located on the Statistics Denmark servers, hence it is impossible to merge the two datasets and estimate the differences, but the research designs for the two datasets are as similar as possible making the two sets of results comparable. As the main aim of this chapter is cross-national comparison, selection of the working samples is driven mainly by the data availability. Danish Register data limit the observed years to 1986-2011, while NLSY79 limit the birth cohorts to 1957-1964, as – out of the three waves of the National Longitudinal Surveys of Youth – this is the one that fits best with the observed years of the Danish Register data (see table 2.1).

Survey	Birth cohorts	Ages observed between 1986 and 2011  Not observed due to survey discontinuation in 1981.	
NLSYM (Only men)	1941 - 1952		
NLSYW (Only women)	1943 - 1953	33-60, discontinued in 2003.	
NLSY79	1957 - 1964	22-54 (22-47 for the youngest cohort, 29-54 for the oldest)  13-31, survey starts in 1997.	
NLSY97	1980 - 1984		

Table 2.1: Characteristics of the three National Longitudinal Surveys of Youth corresponding to the years available from the Danish Register.

The full main sample for NLSY79 is 6111 observations but the attrition is already present in 1986, and requiring that all observations have a known labor force status for

at least one year reduces the observations with information available for 1986 to 5613. In the Danish Register there are 580093 individual records that that fulfill the criteria of being born between 1957 and 1964 and having been observed in 1986. In order to make the two designs as comparable as possible, I work with a random subsample of the Danish register consisting of 6000 observations. The comparison between the population and sample can be found in table 2.4 in the Annex. I have chosen to drop further 283 observations whose education level is unknown, a marker of a highly uncommon life course in a context of register data. An overview through basic variables of interest for this chapter - early death or disappearance from the register, early pensions, years spent out of labor force, and family trajectories dominated by attrition, singlehood and partnerships where both partners are welfare-reliant - indicate that those are a very selected group from the margins of the Danish society that cannot be merged with other educational categories, and most likely their equivalents in the USA haven't been captured by the NLSY79 due to difficulty to reach them and keep in the sample.

Keeping the observation window down to 1986-2011, those born in 1957 are observed between the ages of 29 and 54, and those born in 1964 – between 22 and 47. The only other potentially available American dataset for such analysis – the Panel Study of Income Dynamics - being household oriented, contains too few individual observations that have been followed in detail for a significant window of time.

Being a long-running panel, NLSY79 has several shortcomings that complicate longitudinal analysis. (a) As could be expected with any panel, non-random attrition is a key feature, especially in the later years of the survey. In 1986 attrition is 8 per cent and in 2014 it's up to 30 per cent. In line with general assumption about survey sampling, especially in longitudinal designs, being non-random and class-biased, I've proceeded accepting that the very extremes of the income distribution are not covered by this survey, and that lower SES observations with above average geographic mobility and, probably, more intermittent working and family lives are the ones lost to attrition. Hence my final results are likely to underestimate the turbulence in trajectories, as the survey design facilitates data collection from observations with fewer changes throughout their life courses and higher commitment with the survey, most likely stemming from SES-specific notions of public good. (b) NLSY79 started as a yearly survey but changed to a biennial design after 1994. This means that all sequences have gaps in all odd years since 1995. While it is possible to retrieve some key information

via calendar data and arrays created after data collection, a lot of information for noninterview years is missing. Combined with the practice of asking about, for example, last year's income instead of current, this creates a situation where some variables have answers only about non-survey years while others have answers only for survey years (i.e. in 2010 survey respondents answer questions about their 2009 income and 2010 education enrollment status while there is no information about their income in 2010 and education enrollment in 2009). It has been possible to construct full labor force participation sequences but family sequences required more effort (see section 2.3.5 Family Trajectories for full details and possible biases). Maintaining the sequences by calendar years - and assume that the seven year difference between the oldest and the younger cohort is small enough to treat them as a homogenous-enough cohort - instead of converting them to age helps to avoid false age effects and have the gaps affecting the whole sample in the same way. (c) Questionnaires are not necessarily harmonized across years, so questions might be asked differently or not at all in subsequent waves. So, although a question with supposedly the same content might be asked throughout the waves, slight variations in item coding can cause noise.

Danish Register data, due to its administrative nature, has far fewer shortcomings. There is no attrition, no sampling bias, and no unanswered questions. While there are some administrative mistakes and missing information if people have been invisible to the Danish state (by residing abroad, for example), the number of those is trivial. Nevertheless, there is also no information on opinions or explanations of behavior available and some variables of interest are imputed by Statistics Denmark, for example, those in unregistered cohabitation, due to lack of such information and others are completely invisible, for example, partnerships living apart together, or have to be proxied using the administrative data available, as I am doing in this chapter with health limitations. For this particular design an ampler observation window covering the early twenties for the oldest cohorts and years beyond their fifties would have offered a marginal benefit of observing the actual full labor market trajectory starting from exiting the education and finalizing with retirement. Such research designs will be possible for later Danish cohorts, but for this chapter attention to the key cohorts of interest was more important than maximum scope. In any case, I still cover a span of 26 years throughout the typically most active ages both in labor force and in family formation.

#### 2.3.1 Years out of Labor Force

My dependent variable is the sum of years spent out of labor force during the 26-year observation window between 1986 and 2011: not being employed, nor formally unemployed, not in school, and still present in the data. Early retirement, however, is included, because the Statistics Denmark coding of these states across the years and several reforms makes them undistinguishable. Formal leaves are also included, although, of course, these people have a link with an employer and appear as employed in the national statistics. However, as the goal of the chapter is to compare the two cases with very different levels of 'permissiveness' when it comes to formally 'unproductive' spells of absence, and as one of the hypothesis is about family care burden and fertility-related leaves, I had to count Danish leaves as being out of labor force so that the sums of years would be comparable with those of their American peers.

While using the longest spell (in years) out of the labor force could offer a separation between those with intermittent labor force attachment as opposed to those who are decidedly out of the labor force and the basic labor force participation information being available even for the non-interview years, the biennial design of NLSY79 since 1995 make it impossible to properly control for the duration of health limitations. The sum of out of labor force years in both American and Danish samples range from 0 to 26, with 43.5 per cent and 68.4 per cent of each respective sample not having even one out of labor force year in the observation window. For the ease of interpretation, and because information for all 26 years is available for both cases, I keep the sum of years spent out of the labor force measured in years.

As the last draft in the USA took place in 1972 (to report for duty in 1973) for the cohort of 1952, armed forces is a fully professionalized occupation, hence included as 'working', although in most cases without information on hours worked.

As my observed years coincide with the rise of mass incarceration in US (Bureau of Justice Statistics 1996, 2005, 2010, 2012; Haney 2018), there are 15 to 54 (0.3 to 1 per cent of the sample) respondents in jail for each survey year. Although NLSY79 would code most of them as being out of labor force, for the purposes of my research question - identifying formally voluntary absence from the labor market - I move them to an 'unknown' state to make sure that the count of years out of labor force include only those when the respondent had any choice about it. However, it is impossible to identify

the imprisoned for the nine years without a survey, hence in non-survey years the 'out of labor force' category is bound to contain imprisoned population and be included in some people's sum of years outside the labor force. I keep the observations with prison records in my dataset, as they are few and very likely victims to mandatory sentencing laws and other particularities of USA judicial system that has made incarceration so frequent in comparison with other countries. Only 3.6 per cent of trajectories have any jail time, and only 0.3 per cent have been imprisoned for a total of five or more years across the 17 observed years. Likely, those with long prison sentences or decidedly delinquent life course are lost in attrition or never sampled.

#### 2.3.2 Part Time Work

Until 1997 in Danish register the only dedication differentiating variable is an aggregate defining those working 27 or more hours as full time workers. For 1997-2011 I use a combination of this variable and the yearly hours worked divided by the typically worked 47 weeks. In the USA data there are worked hours available for every year, making it possible for the researcher to set the thresholds of interest. Hence the only way to measure part-time work in the same way across all years and both datasets is to define it as having worked less than 27 hours. This codes as full-timers people who might legally be part-time workers, making part-timers in this chapter a much smaller and more select group than they are - those truly working much shorter hours instead of just reduced hours (thinking in full days worked - 7.4h in Denmark - this would be the difference between working 3 or 4 days per week). And in the USA it filters out of the part-time category most of the involuntary part-time: in years when the questions about willingness to work more hours are asked (only in 1994, 1996, 1998, and 2006), most of those willing to work more hours are classified as working full time, working between 27 and 35 hours.

# 2.3.3 Education

I use a four-category educational credentials variable measured at the end of the observation period throughout the chapter. I separate (1) those with less than secondary education, (2) those with completed secondary or a vocational alternative, (3) those with post-secondary education, either vocational training or two-year college, that doesn't achieve a tertiary level, and (4) completed tertiary education. For cases of attrition I use the last known education level achieved.

There are no missings in these variables in the NLSY79 but 4.7 per cent of observations in the Danish subsample were lacking them and were dropped from the subsample. Given the nature of the register, the only possible explanation for not knowing person's education could be a migration history or not having had any formal education. Closer inspection of those observations revealed high correlation with early pensions and early deaths, suggesting them to be a marginal subgroup not comparable with any subgroups of the American sample and not mergeable with the lowest educated group. See table 2.4 in the Annex for comparison of the subsamples before and after deletion of these observations.

#### 2.3.4 Health Limitations

In this chapter I control for health limitations throughout. While health is not the main point of interest, it is a crucial control that sets limitations to all other considerations regarding labor force participation. As my focus is on choices and limitations in the opportunity structure pushing people out of the labor force, I have to be sure that this absence is not dictated by health considerations.

The only coherent variable throughout the NLSY79 that allow to identify health limitations of the respondent is a 'Health limitations check' indicating a positive answer to either (a) 'Would your health keep you from working now?', (b) '(Are you/Would you be) Limited in kind of work due to accident or injury?' or (c) '(Are you/Would you be) Limited in amount of work due to accident or injury?'. While keeping in mind that the health limitations captured with this variable do not necessarily imply currently being out of labor force due to disability (there could be people working despite their disability and disabled people out of labor force because of other reasons), the health limitations check results in a time series ranging from 5.2 per cent of valid observations having health limitations in 1986 to 11.7 per cent in 2010. To account for the differences in the information availability in comparison with the Danish data - only for the survey years of NLSY79, 17 out of 26 years observed - I convert the measure into proportion of years with reported health limitations out of the 17 available.

The more objective measure through disability benefits received is impossible due to fact that SSI and SSD payments, veterans' benefits and worker's compensations are treated in the household income section of the survey asking if the respondent or the

spouse received such payments and impossible to discern who is the recipient of the benefits.

It is possible to achieve a tighter health limitations control by narrowing the 'health check' down to self-reported health limitations from 1986 to 1990 and including only those that have said they had health limitations and received a 'health check' from the interviewer. This time series range from 1.4 per cent of the valid observations in 1986 to 3 per cent in 2011, and perform better in regression models (around 0.1 additional points in adjusted R2). However, I opt for maintaining the more ample definition instead of one where disability or difficulty to work is registered only if clearly observed by the NLSY79 interviewer also due to its consistency throughout the survey.

For Denmark I use reception of an early pension as a marker of state-recognized incapacity to earn a living, as there are no other variables capturing health limitations to work and the health data available are too health-care facility focused (for example, all hospital visits for each year which would downplay the chronic conditions that do not need frequent supervision or hospitalization) to construct a reliable and parsimonious indicator for health limitations to work. As the ages under observation range between 22 and 54, there is no overlap with the retirement pensions, even the early voluntary retirement schemes, and very limited overlap with early retirement for other reasons (even though it was also used in Denmark to deal with the long-term structural unemployment). Less than 1 per cent of the valid observations in Danish subsample were receiving an early pension in 1986 and 6.9 per cent did in 2011.

As the two health limitation variables measure two different things, also their cumulative distributions differ. In the Danish subsample 7.8 per cent of all observations had had at least one year of early pension, 2.2 per cent of the subsample had had pension for at least 13 of the 26 years observed and 0.4 percent or 22 observations had had it during all observed years. In the American data 32 per cent of the interviewees had had at least one year with health limitations, 1.1 per cent had the 'health limitations check' for most years observed (9 out of 17), and 0.04 per cent or 2 interviewees had had health limitations throughout all years observed.

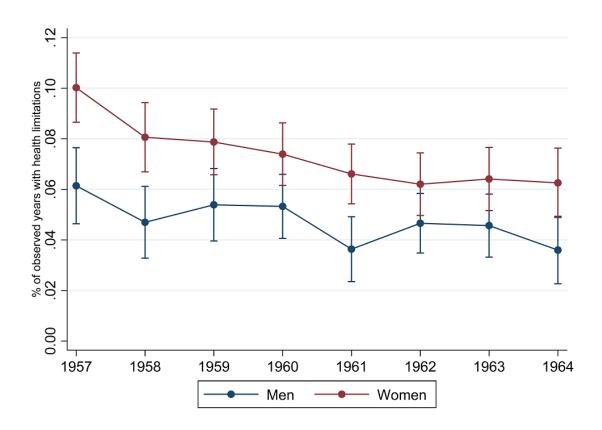


Figure 2.1: Adjusted predictions for the proportion of observed years spent with health limitations in the USA data by year of birth and gender (95% CIs).

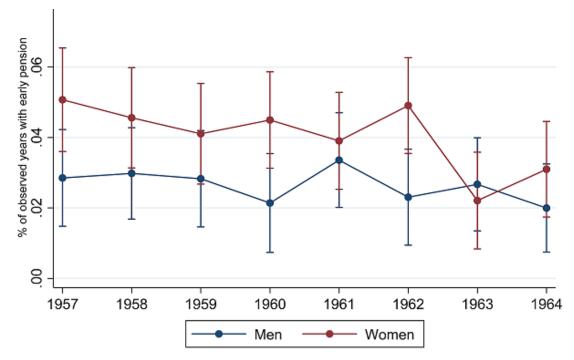


Figure 2.2: Adjusted predictions for the proportion of observed years spent with early retirement pension in the Danish subsample by year of birth and gender (95% CIs).

The possible biases stemming from the differing measurements are overestimating the health limitations in the American sample, i.e. people able to work and active in the labor force might be excluded from the final results, and the contrary might be biasing Danish results: only state-recognized inability to work will put one into this category. One can imagine a 'gray zone' of disability or chronic condition that is not enough for complete retirement but restricts ones labor market decisions. However, both of these possible biases go contrary to the general expectation for the cases at hand, USA being the case with infamously expensive and arbitrary healthcare system and Denmark having a generous welfare state and universal healthcare system, hence I assume that the risk of these measurement bias intervening with the substance of the results are minimal.

As you can see in figures 2.1 and 2.2 (and table 2.5 in the Annex), upon regressing the proportion of years with health limitations by birth year and gender, both variables are statistically significant and the estimated effect sizes are between 4 and 10 per cent. Consistently with research on gender differences in health (Read and Gorman 2010; Crimmins et al 2011), women report more health limitations in the USA data, although statistically significant for only three of the years observed, and the overall effects increase with age. Women in general also receive somewhat more early retirement benefits in the Danish subsample, however, here the standard errors for men and women overlap and there are no statistically significant gender differences.

As expected, having health limitations and being out of the labor force is highly correlated. In the USA data the correlation between the number of years out of labor force and the percentage of years with health limitations is 0.44, in Danish register the correlation between the number of years out of labor force and the proportion of years with an early pension is 0.81. The difference between the two lies in the fact that (a) the Danish measure is a more precise variable, marking those with a state-recognized disability and right to a replacement income because of it, and (b) the nine missing survey years of the USA data affect the intensity of absence visible during the later years observed.

# 2.3.5 Family Trajectories

I construct sequences (R Development Core Team 2011; Gabadinho et al 2011) for the whole observation window that capture (1) being in partnership or not, without making any distinctions by civil status, (2) presence of minors in the household, and (3) if the partner works (see table 2.2). To capture the true care burden of single parenthood and the time squeezes of running a household, all variables are contingent of having established an independent household and not living with one's parents. This might lead to overlooking multigenerational households and situations where presence of one's parents means an additional care burden instead of a reduced one, but introduction of another dimension into the sequence was beyond the requirements for parsimony.

In the USA data constructing a partnership sequence took a lot of effort and made me bring together all available variables capturing some aspect of being in a partnership, be it legally recognized by the state or not, knowing that cohabitation is a reality that cannot be ignored but has additional measurement complexities (Manning and Stykes 2015; Manning et al 2019). Thanks to event history information available and a combination of several other variables, I've been able to establish this basic sequence of partnership status. This sequence is a mix of self-reported relationship status, marriage and cohabitation history module, and information gathered from the household roster (especially relevant for data until early 1990s when cohabitation is finally recorded in the marriage module), as information for household composition is available only for the survey years - biannually since 1994. Hence, while partnerships are overwhelmingly characterized by sharing a dwelling, being partnered according to this sequence does not necessarily entail cohabiting or having legal obligations towards the partner. Due to the same issue of information availability for non-survey years, the observed complexity of the NLSY79 families is distorted towards less detail and complexity as sequences because after the survey became biennial the presence of children is known only for the survey years and partner's labor force status for the year prior to the survey. This implies that trajectories have to be interpreted with this prior knowledge and not at their face value.

In Danish data the only slight uncertainty surrounds the unregistered cohabitation, as all unions have to be used due to the commonality of cohabitation and its social equivalence to other forms of households (Matthiessen 1993; Østby 1993; Leth-

Sørensen and Rohwer 2001) but the register data imputes unregistered cohabitation: Statistics Denmark assumes that two formally single persons of opposite sex and with an age difference of less than 15 sharing a dwelling are cohabiting. Apart from some false positives among unregistered cohabiters, the rest of information is reliable and offers full traceability of all household members.

1	Single or any other family situation while living with one's parents			
2	Single - children in household			
3	Partnered - LF status of the partner unknown - no children in household			
4	Partnered - LF status of the partner unknown - children in household			
5	Partnered - partner worked - no children in household			
6	Partnered - partner worked - children in household			
7	Partnered - partner did not work - no children in household			
8	Partnered - partner did not work - children in household			
9	Death or attrition			

Table 2.2: Sequence states for the family sequence, identical for the Danish and the USA data.

With this sequence I aim to synthesize the family trajectories simultaneously according to the care burden (presence of children, especially if single parenthood) and the model of economic participation (the interaction of gender and labor force participation). All sequences are constructed from the point to view of the observation, and identities of partner or children present in the household are not covered beyond the attributes mentioned in Table 2.2. A level of detail is necessarily overlooked, such as that from one observed year to another the partner could be another one or the child in household could've been a nephew temporarily residing with the observation. In similar vein, no specific sequence states are allocated for divorced, separated or step families, both to keep the sequences parsimonious and to avoid additional data noise due to incomplete information. Taking into account the complex data manipulation involved in sequence construction, I opt for the most data-driven optimal matching. My optimal matching substitution costs are the transition rates observed in the datasets and my indel costs are one (Gabadinho et al 2009, 2011)

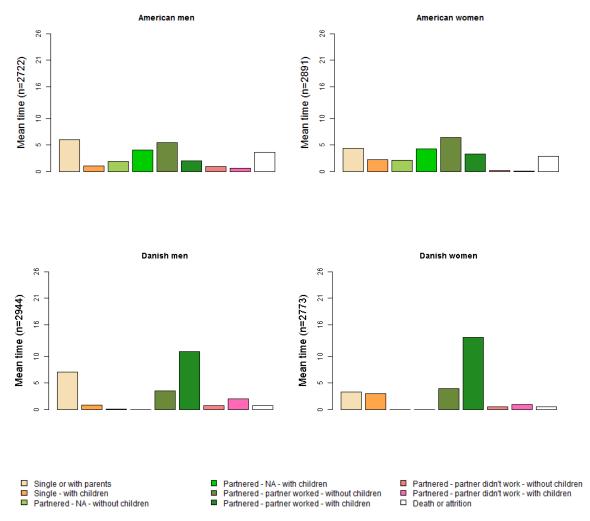
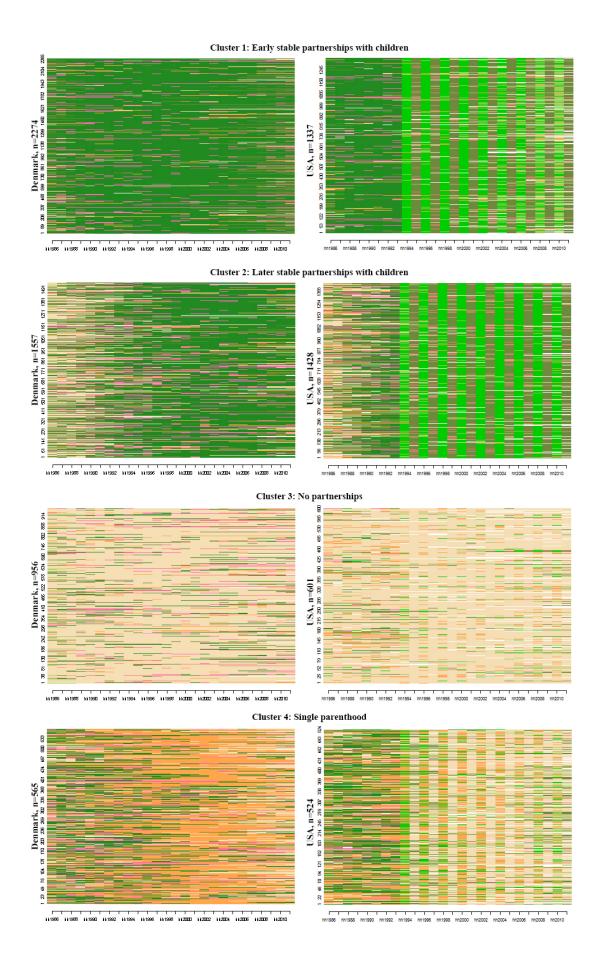


Figure 2.3: Mean years (of the 26 observed) spent in each family composition state by case and gender.

The graphs summarizing the mean number of years spent in each sequence state (see figure 2.3) clearly show the more complete nature of the Danish data but also give substantial information about family life patterns in both datasets. In both countries and for both men and women, being in partnership with a partner active in the labor force and with children, although with some variation, is the typical trajectory. A significant proportion of trajectories is dominated by not establishing an independent household or staying single. However, there are only occasional blips of other household configurations such as single parenthood or inactive partner when looking from this bird's eye perspective (and also keeping into account that the USA sequences have reduced complexity due to data availability issues).



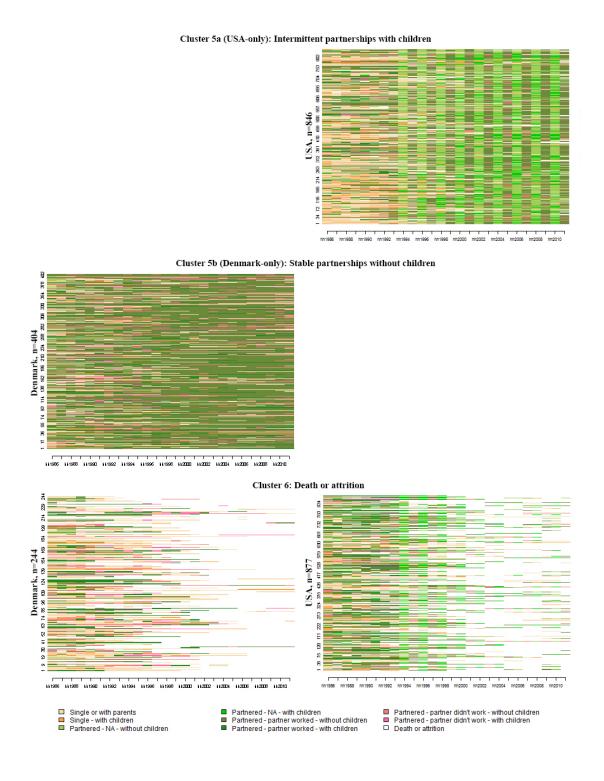


Figure 2.4: Index plots for the six cluster solution for each case.

A substantial and reliable difference between the two countries is the timing of entry in partnerships. As the observation window starts between ages 22 and 29 depending of the year of birth, we still observe many Danes, especially men, entering partnerships. At the same ages the USA cohort is already mostly settled in a partnership. In both datasets staying with their parents or staying single are more common among men than among

women. And, while the American data don't reveal such differences, the Danish most common states show some of the expected gender dynamics: single parenthood appears more among women and inactive partners - among men.

	Denmark		USA	
	Of all	Of valid	Of all	Of valid
	observations	observations	observations	observations
Early stable partnerships with children	38%	39%	24%	28%
Later stable partnerships with children	26%	27%	25%	30%
No partnerships	16%	17%	11%	13%
Single parenthood	9%	10%	9%	11%
Intermittent partnerships with children	-	-	15%	18%
Stable partnerships without children	7%	7%	-	-
Death or attrition	4%	-	16%	-
Total	100%	100%	100%	100%

Table 2.3: The distribution of observations in family trajectory clusters for both cases, including and excluding the cluster dominated by missing observations from the total.

For the clustering of the family trajectories (Studer 2013) I've chosen the six cluster solution for both cases. After exploring a range of possible cluster solutions, the six cluster solution offers a number of substantially interesting clusters. Six clusters is the best choice for Danish data according to several quality of partition measures (see figure 2.12 in the Annex), including the average silhouette width (Kaufman and Rousseeuw 1990 [2005]). Given the incomplete information available for the American trajectories, the weaker clustering for them is not surprising, and I have based my decision of the optimal number of clusters on the formal quality of partition criteria see figure 2.12 in the Annex), visual inspection all cluster solutions ranging from three to ten (available upon request), and comparison with the Danish cluster solution (see figure 2.4 and table 2.3).

Several clusters in each dataset can be characterized along the lines of the normative and most common cluster of being in a partnership with a partner active in the labor force and with children with light variation in timing, due both to age affects and personal circumstances or preferences. However, for this chapter it is more interesting to juxtapose those typical trajectories with those that diverge from the 'model work and model family' narrative. Although emerging in different order, the alternative trajectories that are big enough clusters in both datasets are those dominated by singlehood or staying with one's parents, and single parenthood, be it following a partnership or singlehood. The additional marginal clusters are those dominated by death or attrition.

As for case differences, five out of six clusters coincide substantially across the cases, and even the relative distribution of the proportion of observations in each of them is comparable in most clusters once the higher attrition in USA data is taken into account (see table 2.3).

# 2.3.6 Analytical Strategies

A series of simple OLS estimations will clarify the first hypothesis. The dependent variable in all models is the sum of years out of labor force; the controls are the proportion of observed years with health limitations (for the USA data) or an early pension (for Danish data) and the year of birth. All initial models contain gender and only one other independent variable - race (only for the USA data), immigration background, education level - and their interaction. I then compare the gender gap with the other gap in labor force participation revealed by the model: by education, race, and immigration background.

For the second hypothesis I estimate the average time spent in each labor force participation state (working full-time or part-time, being unemployed, out of labor force, or in school) by gender both in full sample and only among the least educated, with special attention to part-time work.

For the family trajectory hypotheses I estimate the gender gap for each of the clusters, looking at links between gender, family trajectories and absence from the labor market. In the family trajectory cluster models I keep the other sociodemographic variables constant at the most favorable category (tertiary educated, non-black non-Hispanic and without recent immigration family history) estimating the effects of different family trajectories to those with most resources to negotiate them, and pay special attention to

the other end of the resource spectrum where absence from labor force is expected to coincide with non-mainstream family trajectories.

I then proceed to look at single motherhood in particular to address the fifth hypothesis exploring to what extent absence from the labor force is propelled by single parenthood as such or by SES limitations prior to it.

# 2.4 Results

# 2.4.1 The Role of Gender among Other Variables

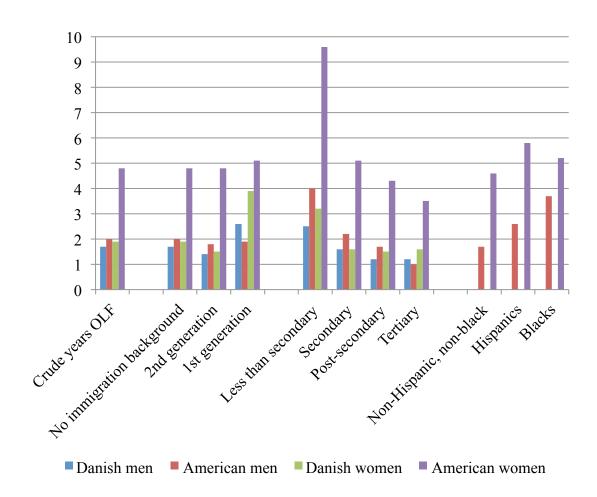


Figure 2.5: The number of estimated years spent out of labor force by case and sociodemographic subgroup. Separate OLS models for each variable controlling for the proportion of observed years with health limitations (for the USA data) or an early pension (for the Danish data) and the year of birth.

When regressing the years spent out of labor force by gender only with the two basic controls, American men have spent out of the labor force 2.0 years and women 4.8 years. Meanwhile the numbers for Denmark are 1.7 and 1.9 respectively (see figure 2.5). In the USA women of this generation have spent on average more than twice the years that men have while the gender difference between Danes is not even half year (mind that leaves while attached to an employer, including maternity leaves when they have been captured in the data, are included as years outside labor force). Even so, sample averages gloss over more complex realities where access to labor market is stratified and might have different meaning in population subgroups.

In both cases the lowest educated women are the ones who spend most years out of labor force. In American data there is a clear education gradient among both men and women. In this sample women with less than secondary education have spent 9.6 years out of labor force, women with secondary education - 5.1 years, those with post-secondary education - 4.3 years, and women with 4-year college or more education - 3.5 years out of labor force. For men the respective numbers are 4.0, 2.2, 1.7 and 1.0. Both Danish men and women are situated closer to American men having spent out of labor force 2.5, 1.6, 1.2, 1.2 and 3.2, 1.6, 1.5 and 1.6 years respectively. The big difference is clearly between the lowest education level and the rest.

I explore race only in the USA data, due to its crucial importance as stratifier of opportunities in the USA and due to fact that Statistics Denmark do not routinely collect information on one's skin color. American data reveal a pattern of racialized lack of opportunities, but even so women spend more time out of labor force than their male peers. The estimated time spent out of labor force is 1.7 years for non-black non-Hispanic men, 2.6 years for Hispanic men, 3.7 for black men vs. 4.6 years for non-black non-Hispanic women, 5.8 for Hispanic women and 5.2 for black women. The gender gap between black men and women is 1.5 years while all other gender gaps estimated for Americans range between 2.5 years (tertiary educated) and 5.6 (less than secondary education). There, however, it is more important that black men are behind only the least educated in spending the most time out of labor force of all men sub-categories (the others range from 1.0 for the tertiary educated to 2.6 for the Hispanic; 4.0 for those without secondary education). Hispanic women are the second subgroup with most years spent out of labor force among women, after women with least education.

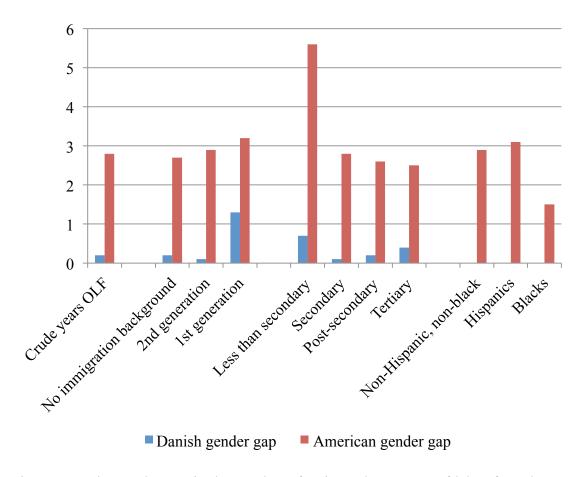


Figure 2.6: The gender gap in the number of estimated years out of labor force by case and sociodemographic subgroup. Separate OLS models for each variable controlling for the proportion of observed years with health limitations (for the USA data) or an early pension (for the Danish data) and the year of birth.

For the sake of simplicity I use a blanket 'born abroad' variable and that aggregates people with all kinds of migration trajectories: economic migration, highly educated expats, and the quite intense migration between Scandinavian countries. When divided in three categories to capture possible differences between immigration background in family and direct immigration experience, in American data 9.6 per cent of the final sample have any immigration background, 5.5 per cent having at least one foreign born parent and 4.1 per cent having been born abroad. In the Danish sample it's 1.6, 0.3 and 1.3 per cent respectively, in line with the official statistics at the beginning of the time window observed (of the total population in 1986 the proportion was 96.6 per cent natives, 0.5 per cent second generation and 2.9 per cent first generation migrants (Statistics Denmark 2018)). In the USA data immigration background does not significantly stratify the years spent out of the labor force. Men with no recent family

migration history have spent 2 years out of labor force, second-generation migrants 1.8 years and first-generation migrants 1.9 years.

The gender gap hovers around the sample average, as the respective estimates for women are 4.8, 4.8 and 5.1, marking a slightly increasing gender gap for those with more recent immigration background (see figure 2.6). Despite capturing cohorts prior to the massive immigrant influx and probably exactly due to this high selectivity, immigration background turns out to be the salient variable for the Danish sample, especially taking into account the generally compressed estimates. It's the first-generation migrants who have spent the most years out of labor force - 2.6 years for men and 3.9 years for women (for the 'natives' it's 1.7 and 1.9 years respectively, and for the second-generation - 1.4 and 1.5 years). The first generation migrants are also the ones with the biggest gender gap (1.3 years), almost doubling the next biggest gender gap, that between men and women with less than secondary education (0.7). While this gap is much smaller than the American average of 2.8 years, it's clear that this is the variable where a significant gap in labor force attachment lies, especially so when it comes to first-generation immigrant women.

The results for the USA in this first part of the chapter are mostly in line with Hypothesis 1 about gender as the predominant differentiating variable between those that stay out of the labor force and those that don't: there is significant gender gap throughout the subgroups fluctuating ranging from 2.5 to 5.6 years with the exception of black men and women where it drops to 1.5 years due to the prolonged absences of black men. Yet the intra-group gaps are also important in case of education and race: 6.1 years between women with most and least education, 2.9 years between men with most and least education, and two years between black and non-black non-Hispanic men.

The results for Denmark refute the Hypothesis 1. The estimations of the gender gap in years outside labor force range between 0.1 and 0.7 years with the only subgroup with a wider gender gap being the first-generation migrants (1.3 years). The intra-group gaps are wider, though. First-generation immigrant men spend out of labor force 0.9 years more than the natives, and for the women it's two years more. And the lowest educated men and women have spent out of labor force respectively 1.3 and 1.5 years more than the highest educated.

Although the intra-group estimates are smaller in Denmark than in the USA, the even smaller gender gap makes them more salient. So the case of Denmark refutes the expected dominance of gender in predicting the intensity of labor force attachment while the American data show a rather stable gender gap of 2.5-3 years which then operates in interaction with other disadvantages (race, low education) in labor market creating even bigger gaps for specific subgroups.

# 2.4.2 The Role of Part-Time Work

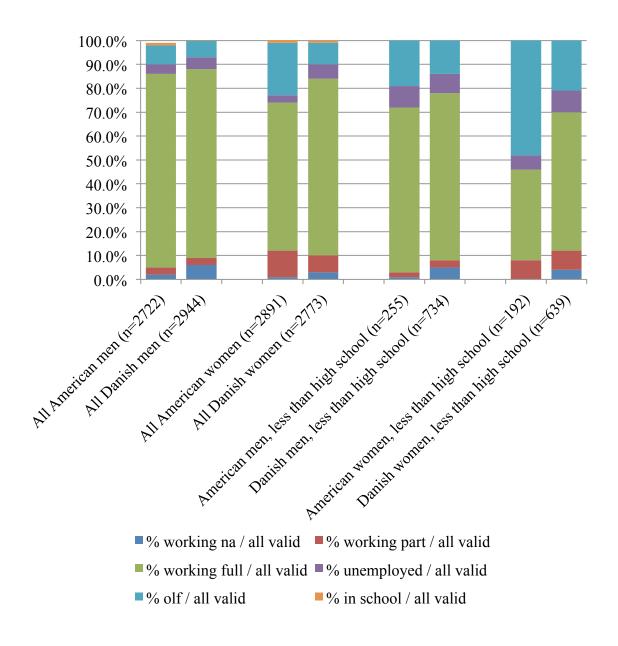


Figure 2.7: Mean proportions of the valid years observed spent in each labor force state by gender and country, all observations and only the least educated, excluding missings.

Trying to understand if access to part-time is the key difference between the two cases, I estimate the mean labor market trajectory by gender, paying special attention to those with education below secondary to see if it could be the scarcity of significantly less than full time attachment to the labor force (less than 27 hours per week) is what pushes women out of the labor force. As a robustness measure and to see if the issue might be more SES- than gender-driven, I also estimate the mean labor trajectory for men, all and the least educated ones in particular. As discussed earlier, it has to be taken into account that 27-hour differentiation underestimates the proportion of part-timers and makes them into a more select group than the conventional 35-hour cut.

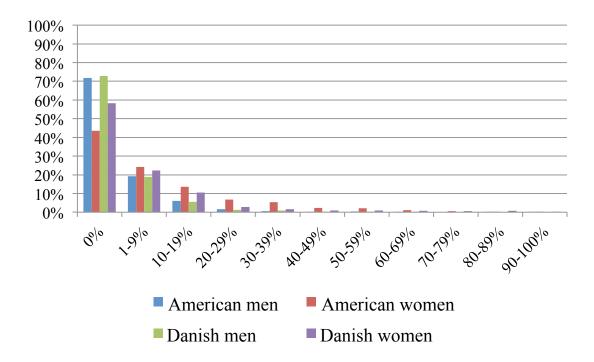


Figure 2.8: Distribution of the proportion of time observed spent working part-time by case and gender.

The similarity of results for men (see figure 2.7) suggests a solid baseline to compare women and the least educated against. When it comes to part-time work, in both cases women with least education have spent on average 7.8 per cent of the time observed working part-time. However, there is a 26 percentage point difference between the time that American women with less than secondary education spent out of labor force and what their Danish peers did. Although there is more part-time work in Danish trajectories, the time that their American counterparts have spent out of labor force exceeds it more than twice the time that Danish women spent out of labor force. It's 2.5

times for women in general, and 2.2 for women with least education. Even taking account that some of the out of labor force is due institutional differences in assigning unemployment status (in all four groups Danes have spent more time being unemployed, ranging from 1.2 to 1.9 times), there is still a big difference in out of labor force time unaccounted for. Hence the conclusion here is that across these two cases being out of labor force is not a straightforward result of differences in access to part-time work, refuting the Hypothesis 2.

I also observe that there is no bifurcation in part-timing as a proportion of observed years, dividing women in ones using part-time work as a transient strategy and ones being 'permanent' part-timers. For both USA and Denmark, the great majority of observations have spent no (ranging from 73 per cent of Danish men to 44 per cent of American women) or little (among men not even one per cent had worked part-time for more than half of the time period observed, only 3.3 per cent of Danish women and 4.3 of American women had) time part-timing. And the distribution of time spent working part-time is clearly concentrated in the lowest values and unimodal (see figure 2.8).

# 2.4.3 Gender and Family Trajectories

In the American data looking at family trajectories to explain the number of years spent out of labor force first of all reflect the gender and education differences: for almost all family trajectories women have spent more years out of labor force than men and least educated – more than their gender on average (see figure 2.9 and table 2.10 in the Annex). The only exception is the 'no partnerships, no children' cluster proving how family life and care burden pushes men towards less years outside the labor force (and towards more years in their absence) while for women it is the caretaking burden - be it in a traditional family setting or as a single mother - that is linked with more years outside the labor force. For women the 'no partnerships, no children' trajectory is linked with spending the least years outside labor force. This observation is in line with the polarized marriage markets explanation: we could be observing men that neither labor force, nor potential partners find attractive, and women that compensate the normative trajectory - solid partnerships with children - with intense labor market participation as there is no time squeeze due to double burden and no other provider. The 'no partnerships, no children' is also the only one that has no significant gender gap, neither between men and women of the whole sample nor among the least educated. The widest gender gap is observed in those clusters characterized by a traditional family composition, and more so among the least educated. However, for both men and women the highest number of average out of labor force years estimated for any family cluster in the full sample is lower than the lowest estimate for those with less than secondary education, marking an important class difference.

As discussed earlier, the overall gender gap in sum of years out of labor force is much smaller in the Danish subsample, and so are the effect sizes linked to family dynamics (see figure 2.10 and table 2.11 in the Annex). Even so, there are some links between family and labor market trajectories. In the whole sample those with family trajectories characterized by 'no partnerships, no children' have a negative gender gap (0.5 years) and those with solid partnerships without children have no gender gap. Those with traditional family trajectories have a gap of 0.5 years and the biggest Danish gender gap in out of labor force years by family trajectory is between single fathers and single mothers, single mothers having spent a year more out of labor force. With the exception of single parenthood for women that surpasses the 'no partnerships, no children' in estimated years out of labor force, the overall results for the full Danish sample reflect a link between less normative family trajectories and more years out of labor force.

The estimates for the least educated in Denmark replicate exactly the same pattern but with wider differences. Also among the least educated Danish women the pattern of links between years out of labor force and family trajectories is the same as for the average woman of the subsample but with at least two more years spent out of labor force. Hence being at the margins of both labor force and partnership market is confirmed as one pathway of linking absence from the labor force and family trajectories, in line with the Hypothesis 4. I observe this link among American men and among both Danish men and (with the single parenthood caveat) women, suggesting that only American women go by the logic of either labor force participation or traditional family, in line with Hypothesis 3. More traditional family trajectories - stable and early partnerships with children - are linked to prolonged absences from the labor force among American women but not so among the Danish. For the Danish seems that parenthood and paid work are both merged in the good citizen norm and go hand in hand. Among Danish women, only single parenthood pulls them out of labor force for additional couple of years over the expected 1.5-1.7 year absence in the general population or 3.6-4 years among the least educated.

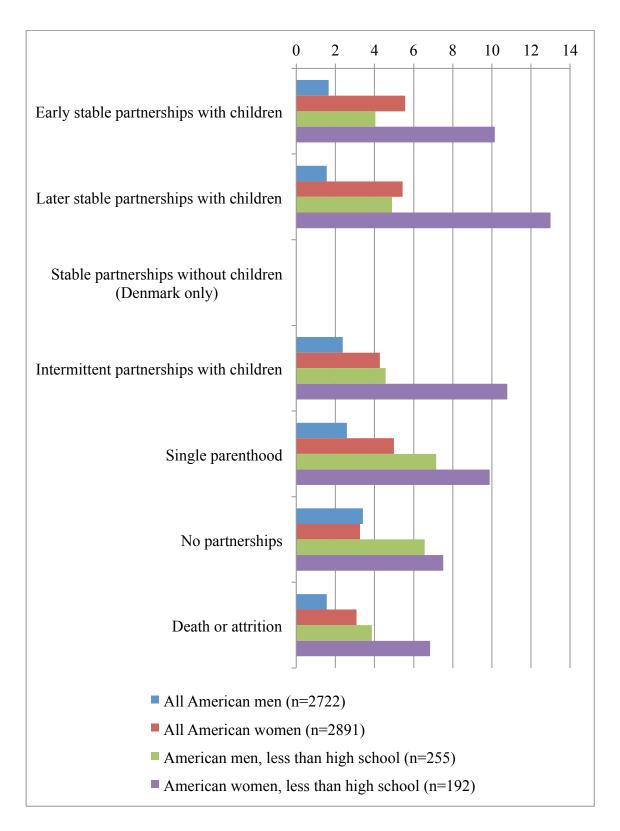


Figure 2.9: The number of estimated years out of labor force in the American data by family trajectory cluster, gender and education level, controlling for the proportion of observed years with health limitations, the year of birth, race (reference category: non-black, non-Hispanic), and immigration background (reference category: no immigration background).

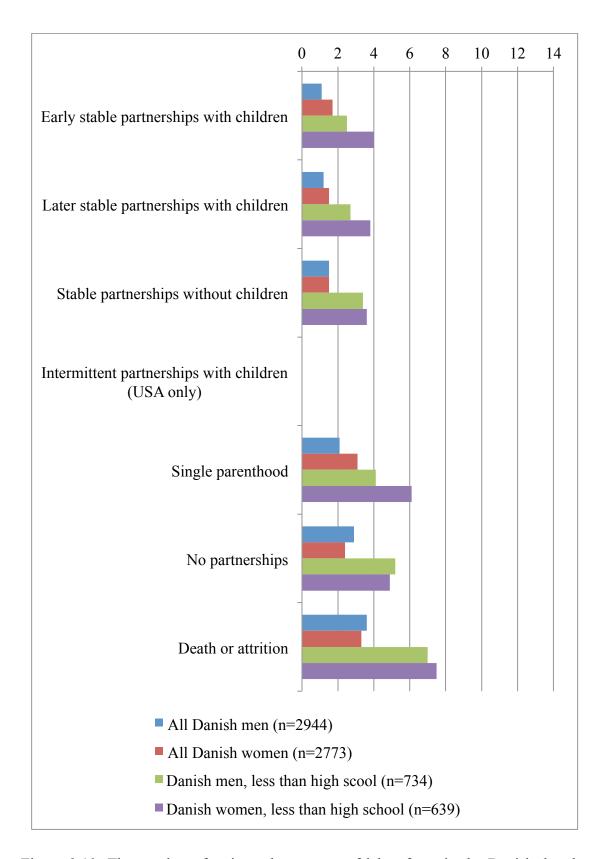


Figure 2.10: The number of estimated years out of labor force in the Danish data by family trajectory cluster, gender and education level, controlling for the proportion of observed years with an early pension, the year of birth, and immigration background (reference category: no immigration background).

### 2.4.4 Women and Single Motherhood

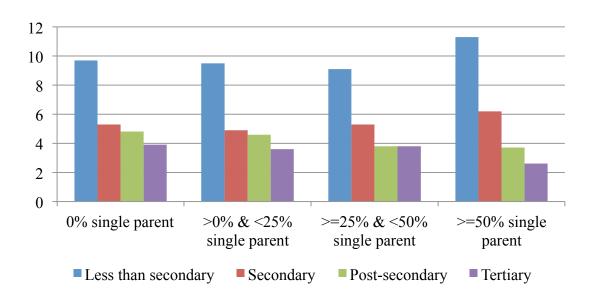


Figure 2.11: The number of estimated years out of labor force among American women by proportion of years spent as single mother and education level, controlling for the proportion of observed years with health limitations, the year of birth, race (reference category: non-Hispanic non-black), and immigration background (reference category: no immigration background).

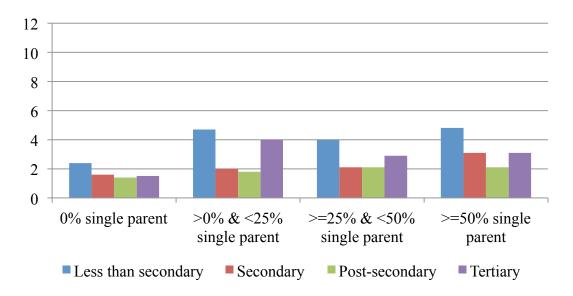


Figure 2.12: The number of estimated years out of labor force among Danish women by proportion of years spent as single mother and education level, controlling for the proportion of observed years with early pension, the year of birth, and immigration background (reference category: no immigration background).

I look at the relationship between the proportion of observed years spent as single parents and years spent out of the labor force by education only among women due to the fact that only 37.2 per cent of American men and 25.4 per cent of Danish men have any single parenting experience with only 1.3 and 0.8 per cent respectively having been single parents for half or more years observed; the percentages for women are 50.2 and 7.4 for American women and 40.6 and 8.3 for the Danes. I mostly observe the education effects commented upon above, though (see figures 2.11 and 2.12, and table 2.12 in the Annex). American women with less than secondary education have spent largely the same years out of labor force if they haven't been single mothers for any of the years observed (9.7) or for 25 to 50 per cent of the years observed (9.1 years), although there is an uptick for those who have been single mothers for more than half of the years observed - 11.3 years.

This relationship for the rest of educational levels suggest that, despite the wide standard errors of the results due to small numbers of women with high education and big single motherhood experience, as only 7.4 and 8.3 per cent of all women in the USA and Danish samples respectively have spent more than 50 per cent of the observed years as single parents (3.4 and 5.4 per cent respectively among the tertiary educated), there is a division between having secondary and post-secondary education where the relationship between the proportion of observed years spent as single parents and years spent out of the labor force is positive up to secondary and then turns negative for those with post-secondary or tertiary education. Although it is an uncertain result in this sample, it is in line with the expectation of the Hypothesis 5 that there are contradictory - and class-specific - mechanisms at work when women have to reconcile single parenthood and paid work. For Danish women there is a general positive relationship for all education levels, although also here the uncertainty is high, especially for the tertiary educated. So much so that the only significantly higher estimates for years spent out of labor force are for women with less than secondary education who have spent no or less than 25 per cent of the observed years as single mothers.

#### 2.5 Discussion

There are several answers to the question 'Who stays out of the labor force?' offered by this chapter. First of all, in both countries the 1950s-1960s cohorts observed here

suggest that in general 'almost nobody' is the answer, in line with previous research for both countries (Aisenbrey et al 2009; Esping-Andersen 2009 [2013]). When out of 26 years observed during the peak years of family formation women have spent on average 1.9 (in Denmark) or 4.8 (in the USA) years out of labor force (when men have spent 1.7 and 2 respectively), this indicates generalized labor market attachment with small breaks instead of a wholehearted opting out. While the sequence state 'partner did not work' does appear in some trajectories marking partnerships with one or no breadwinner, no clusters characterized by this state have emerged among the most common clusters for each case. Only one such cluster appears if clusters solutions are explored up to eight clusters. It is in Danish data and linked to social exclusion and both partners being scarcely employed instead of a male breadwinner model. Hence the stalled and unfinished revolution argument - although a valid policy concern in other areas, such as horizontal occupation segregation, reaching leadership roles, or still gendered dynamics of care work - is not that relevant for general labor market attachment. Although these results reflect the labor market trajectories of women born between late 1950s and early 1960, they give a life course perspective answer to the recent 'opting out' and 'leaning in' discourses. While there could, of course, be fluctuations and trend reversals for subsequent cohorts, these cohorts have been firmly attached to the labor force.

However, there is a clear difference between the two countries when it comes to the gender gap in years absent from the labor market observed throughout the chapter. While Danes have a residual gap that exceeds half a year only for the least educated and a year only for the first-generation migrants, Americans have a consistent gender gap of at least 2.5 years among the tertiary educated and reaches 5.6 years among the least educated, the only exception being the gap between black men and women of only 1.5 years due to long absences of black men. Hence the Hypothesis 1 about the salience of gender gap is confirmed for the USA but not for Denmark. This is in line with the notion of Danes as the forerunners of gender egalitarianism, and of the expectations stemming from the literature describing the impact of welfare state designs on women's – mostly understood as mothers' in this context – employment. The gender gaps observed coincide with the parental leave and early childhood education practices in each country (Esping Andersen et al 2012). An average Danish woman has been absent more than the average Danish man for less than the duration of a maternity leave, the

data issues in observing leaves shorter than a year notwithstanding. Meanwhile the observed difference between the average American woman and the average American man is more than two years, the time it takes for a helpless newborn to become a toddler that can be enrolled in preschool.

Keeping in mind that we are talking about short interruptions in the great majority of cases - 65.5 per cent in the American and 86.2 per cent in the Danish data have spent three years or less of the 26 out of the labor force - the second answer to my research question goes along the lines of 'those that face obstacles in the labor market'. Even a brief look at sociodemographic subgroups reveal that the well known stratification of opportunity due to race, education and immigration background interferes with people's labor market trajectories and interacts with gender, closing the gender gap via male disadvantage in case of blacks in the USA or reinforcing disadvantage for the first-generation migrants in the Danish subsample.

A glance at the question if maybe the considerably longer spells out of labor force among American women is a supply side issue due to unavailability of part-time work suggests that that is not the issue. At least with the variables available the proportions of the time window observed are comparable when it comes to part-time work and formal unemployment, hence in principle American women draw their extra time out of labor force years from the time that their Danish peers spend formally attached to the labor force. Hence Hypothesis 2 is refuted. More specific datasets would be needed to ascertain if these years are taken to compensate for lack of maternity leaves, the high cost of childcare if that is to be externalized, or are a reflection of normative beliefs about motherhood and personal preferences. Another obstacle to face-value interpretation of these results are the differences in measurement described in section 2.3.2, and the well-known problem of involuntary part-time in USA (Drobnič and Wittig 1997).

The third answer to who stays out of the labor force in relationship to family trajectories is 'depends on the country'. For these cohorts, American women's' absences from the labor market are matched with the normative family life and vice versa, suggesting that Han and Moen's findings on choosing - or being forced to chose by the circumstances – career or family life (2001) still hold, although in a much more attenuated way. Yet for the same cohorts in Denmark strong labor force participation and normative family life

are both part of the typical life course, although in this chapter I am not looking at the labor conditions or more intricate intra-family dynamics, as suggested by Bernhardt (1993), Leth-Sørensen and Rohwer (2001), Orloff (2009), or Bloksgaard (2011). And marginal trajectories in both labor market and family life are the ones linked to each other, an interlinked 'double failure' in a society where both labor force participation and family life is expected, in line with previous research on Finland (Jalovaara and Fasang 2015, 2018; Sirniö et al 2017). Hence Hypothesis 3 is confirmed and so is Hypothesis 4 for American men and Danes in general, but not American women.

For Hypothesis 5 I find only tentative results suggesting that there might be at least two different, class-specific mechanisms at play linking single motherhood and absence from the labor force pulling the rare highly educated single mothers towards more labor market participation and pushing the least educated even further away from stable labor force participation.

Together these findings fit in with the strain of literature looking at class and gender interaction, suggesting that the life courses of lower SES women are still heavily gendered while the higher SES women have the resources to escape these effects (Mendel and Shalev 2009; Orloff 2009; Aisenbrey and Fasang 2017). To an extent it is an answer to the stalled and unfinished gender revolution concern: a repeated confirmation that family structures are not SES-neutral and that ever so often class and gender inequality go hand in hand, as exemplified by the first generation migrants in Denmark.

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## 2.7 Annex

	Population (N = 580093)	Random sample (n = 6000)	Known education subsample (n = 5717)
Gender: % women	48.99	47.98	48.50
% Birth year 1957	12.22	11.57	11.21
% Birth year 1964	13.23	13.75	13.89
Sum of years OLF: % 0 years	64.82	66.23	68.38
Sum of years OLF: % 1 year	11.44	10.63	10.50
Sum of years OLF: % 26 years	0.74	0.77	0.58
Proportion of years with an early pension: 0%	91.15	91.25	92.20
Proportion of years with an early pension: ≤ 50%	97.48	97.55	97.83
Proportion of years with an early pension: 100%	0.33	0.50	0.38
Immigration background: % born abroad	0.33	0.32	0.31
Immigration background: % parents born abroad	4.09	3.88	1.28
Education completed: % No information	4.59	4.72	0.00
Education completed: % Less than secondary	23.51	33.88	24.02
Education completed: % Secondary or pre-sec vocational	44.49	45.90	48.17
Education completed: % Post-sec not tertiary	20.06	19.63	20.61
Education completed: % Tertiary	7.36	6.87	7.21

Table 2.4: Descriptives of the Danish registered population of these cohorts, the random sample, and the random sample after exclusion of those with an unknown education level.

		USA			Denmark	
	Coef.		SE	Coef.		SE
Gender	0.038	***	0.010	0.020	*	0.010
Birth year: 1958	-0.015		0.011	0.020		0.009
Birth year: 1959	-0.008		0.011	0.001		0.010
Birth year: 1960	-0.008		0.010	-0.005		0.010
Birth year: 1961	-0.025	*	0.010	-0.008		0.009
Birth year: 1962	-0.015		0.010	-0.001		0.010
Birth year: 1963	-0.016		0.010	-0.002		0.009
Birth year: 1964	-0.026		0.010	-0.007		0.009
If woman x 1958	-0.005		0.014	-0.009		0.014
If woman x 1959	-0.013		0.014	-0.002		0.014
If woman x 1960	-0.018		0.014	-0.001		0.014
If woman x 1961	-0.009		0.014	-0.005		0.014
If woman x 1962	-0.023		0.014	0.002		0.014
If woman x 1963	-0.020		0.014	-0.023		0.014
If woman x 1964	-0.012		0.014	-0.009		0.013
Constant	0.062	***	0.008	-0.025		0.007
Adj.R <sup>2</sup>			0.0142			0.0022
N			5613			5717
			* p	<0.05 ** ]	p<0.01 ***	* p<0.001

Table 2.5: Regression output for health limitations (proportion of observed years with a 'health limitations check' in the USA data and proportion of observed years with an early pension in Denmark) by gender and year of birth.

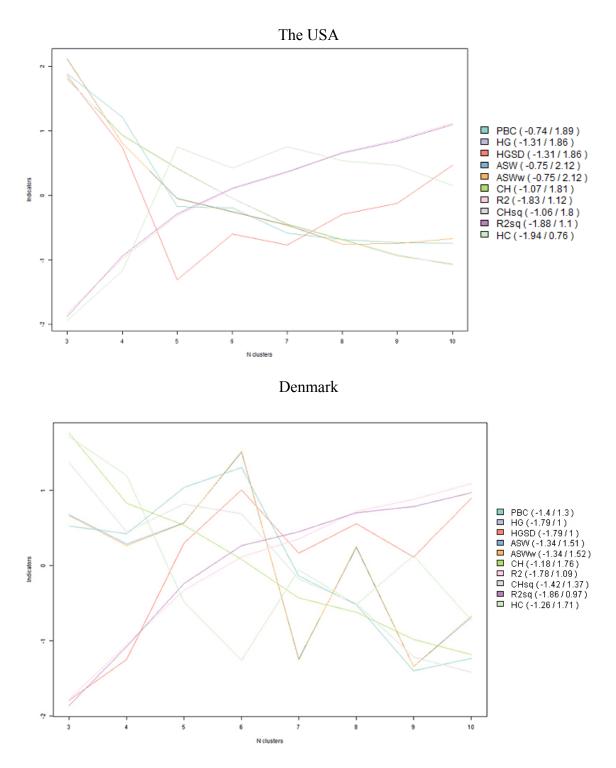


Figure 2.13: A graphic representation of the quality of a partition for cluster solutions from 3 to 10 for family sequences in standardized values. The cluster quality measures depicted are (from top): Point Biserial Correlation, Hubert's Gamma, Hubert's Somers D, Average Silhouette Width, Average Silhouette Width weighted, Calinski-Harabasz index, Pseudo R2, Calinski-Harabasz index squared, Pseudo R2 squared, Hubert's C. For a discussion on the particularities of these measures, see Kaufman and Rousseeuw 1990 [2005], Studer (2013), and IDEMO (2018).

		USA			Denmark				
	Coef.		SE	Coef.		SE			
% health limitations	17.956	***	0.494						
% early pension				28.709	***	0.280			
Birth year	0.035		0.028	0.040	*	0.015			
If woman	2.755	***	0.124	0.219	**	0.070			
Constant	-68.518		55.124	-77.227	*	29.950			
Adj.R <sup>2</sup>			0.2622			0.6495			
N			5613			5717			
	* p<0.05 ** p<0.01 *** p<0.001								

Table 2.6: Regression output for years out of labor force by gender controlling for health limitations (proportion of observed years with a 'health limitations check' in the USA data and proportion of observed years with an early pension in Denmark) and year of birth.

	USA									
	Coef.		SE	Coef.		SE				
% health limitations	16.642	***	0.484							
% early pension				27.595	***	0.282				
Birth year	0.035		0.027	0.047	**	0.015				
If woman	2.481	***	0.230	0.450		0.261				
If less than secondary	2.950	***	0.328	1.311	***	0.192				
If secondary	1.174	***	0.206	0.385	*	0.178				
If post-sec non-tert	0.668	*	0.294	0.053		0.207				
If woman x less than secondary	3.127	***	0.486	0.222		0.296				
If woman x secondary	0.357		0.285	-0.368		0.279				
If woman x post-sec non-tert	0.119		0.392	-0.206		0.304				
Constant	-68.152		53.392	-92.648	**	29.325				
Adj.R <sup>2</sup>			0.3080			0.6646				
N			5613			5717				
	* p<0.05 ** p<0.01 *** p<0.001									

Table 2.7: Regression output for years out of labor force by gender and education (reference category: tertiary education) controlling for health limitations (proportion of observed years with a 'health limitations check' in the USA data and proportion of observed years with an early pension in Denmark) and year of birth.

	USA					
	Coef.		SE			
% health limitations	17.846	***	0.492			
Birth year	0.035		0.028			
If woman	2.905	***	0.138			
If hispanic	0.919	*	0.346			
If black	1.997	***	0.275			
If woman x hispanic	0.210		0.483			
If woman x black	-1.447	***	0.373			
Constant	-67.649		54.826			
Adj.R <sup>2</sup>			0.2709			
N			5613			
	* p<0.05	5 ** p<0.01 *	*** p<0.001			

Table 2.8: Regression output for years out of labor force by gender and race (reference category: non-Hispanic non-black) in the USA controlling for the proportion of observed years with a 'health limitations check' and year of birth.

		USA			Denmark	
	Coef.		SE	Coef.		SE
% health limitations	17.974	***	0.495			
% early pension				28.729	***	0.280
Birth year	0.036		0.028	0.040	*	0.015
If woman	2.721	***	0.131	0.208	**	0.071
If immigration background	-0.226		0.385	-0.338		0.839
If born abroad	-0.173		0.443	0.886	*	0.416
If woman x immigration background	0.215		0.541	-0.113		1.258
If woman x born abroad	0.525		0.625	1.139		0.629
Constant	-68.941		55.183	-76.679	*	29.901
Adj.R <sup>2</sup>			0.2618			0.6507
N			5613			5717
			* p<	0.05 ** p	<0.01 ***	p<0.001

Table 2.9: Regression output for years out of labor force by gender and immigration background (reference category: both parents native) controlling for health limitations (proportion of observed years with a 'health limitations check' in the USA and proportion of observed years with an early pension in Denmark) and year of birth.

	(all edu	USA cation	levels)	USA (less tan high		
	Coef.		SE	Coef.		SE
% health limitations	17.264	***	0.493	29.565	***	1.950
Birth year	0.036		0.028	0.275	*	0.120
If woman	3.906	***	0.258	6.103	***	1.031
If hispanic	1.109	***	0.255	1.996	*	0.782
If black	1.243	***	0.189	2.809	***	0.695
If immigration background	-0.227		0.274	-0.283		1.097
If born abroad	-0.174		0.321	-1.088		1.234
No partnerships	1.742	***	0.311	2.528	*	1.067
Single parenthood	0.935	*	0.425	3.112	*	1.534
Intermittent partnerships with children	0.715	*	0.301	0.530		1.146
Later stable partnerships with children	-0.091		0.265	0.850		1.139
Death or attrition	-0.094		0.290	-0.176		1.044
If woman x No partnerships	-4.043	***	0.466	-5.164	**	1.890
If woman x Single parenthood	-1.507	**	0.510	-3.371		1.852
If woman x Intermittent partnerships with children	-2.009	***	0.405	0.116		1.635
If woman x Later stable partnerships with children	-0.032		0.352	2.007		1.768
If woman x Death or attrition	-2.387	***	0.403	-3.124		1.694
Constant	-69.928		55.327	-538.504	*	234.42 0
Adj.R <sup>2</sup>			0.2903			0.5035
N			5613			447
			* p<0.0	5 ** p<0.0	)1 ***	p<0.001

Table 2.10: Regression output for years out of labor force by gender and family trajectory 6-cluster solution (reference category: Early stable partnerships with children) for the USA for all sample and the least educated controlling for the proportion of observed years with a 'health limitations check', year of birth, immigration background, and race.

					Denmark han high school		
	Coef.		SE	Coef.		SE	
% early pension	27.835	***	0.278	26.248	***	0.508	
Birth year	0.041	**	0.015	0.128	*	0.046	
If woman	0.523	***	0.112	1.497	***	0.355	
If immigration background	-0.241		0.604	-0.953		1.344	
If born abroad	1.348	***	0.301	-0.325		1.266	
No partnerships	1.720	***	0.132	2.671	*	0.370	
Single parenthood	0.968	***	0.248	1.573		0.627	
Stable partnerships without children	0.327		0.201	0.907		0.568	
Later stable partnerships with children	0.045		0.122	0.191	***	0.415	
Death or attrition	2.464	***	0.256	4.448	***	0.666	
If woman x No partnerships	-0.986	***	0.231	-1.838	**	0.642	
If woman x Single parenthood	0.440		0.284	0.516		0.735	
If woman x Stable partnerships without children	-0.516		0.280	-1.331		0.799	
If woman x Later stable partnerships with children	-0.200		0.176	-0.393		0.639	
If woman x Death or attrition	-0.856	*	0.415	-0.993		1.115	
Constant	-79.780	**	29.948	-250.135		90.331	
Adj.R <sup>2</sup>			0.6745			0.7099	
N			5717			1373	
		:	* p<0.05	** p<0.01	*** [	0.001	

Table 2.11: Regression output for years out of labor force by gender and family trajectory 6-cluster solution (reference category: Early stable partnerships with children) for Denmark for all sample and the least educated controlling for the proportion of observed years with an early pension, year of birth, and immigration background.

	USA (o	nly w	omen)	Denn		
	Coef.		SE	Coef.		SE
% health limitations	16.586	***	0.759			
% early pension				27.417	***	0.361
Birth year	-0.008		0.047	0.044	*	0.021
If less than secondary	5.747	***	0.676	0.915	**	0.277
If secondary	1.339	***	0.333	0.110		0.255
If post-sec non-tert	0.877		0.447	-0.016		0.266
If hispanic	0.408		0.428			
If black	0.134		0.314			
If immigration background	-0.099		0.460	-0.970		0.901
If born abroad	-0.087		0.536	2.336	***	0.455
If >0% and <25% single parent	-0.368		0.417	0.513		0.514
If >=25% and <50% single parent	-0.177		0.677	1.388		0.801
If >=50% single parent	-1.356		1.063	1.626		0.878
If less than secondary x >0% and <25% single parent	0.137		1.059	1.778	**	0.571
If less than secondary and >=25% and <50% single parent	-0.424		1.317	0.198		0.865
If less than secondary and >=50% single parent	2.933		1.587	0.798		0.939
If secondary x >0% and <25% single parent	0.007		0.537	-0.065		0.546
If secondary x >=25% and <50% single parent	0.232		0.815	-0.824		0.838
If secondary and >=50% single parent	2.266		1.190	-0.146		0.921
If post-secondary x >0% and <25% single parent	0.112		0.714	-0.192		0.562
If post-secondary x >=25% and <50% single parent	-0.818		1.022	-0.749		0.862
If post-secondary and >=50% single parent	0.247		1.425	-0.937		0.950

Constant	19.046		91.225	-86.727	*	42.119		
Adj.R <sup>2</sup>			0.2140			0.7241		
N			2891			2773		
* p<0.05 ** p<0.01 *** p<0.001								

Table 2.12: Regression output for years out of labor force for women only by case, the proportion of years spent as single mother and education level, controlling for the proportion of observed years with health limitations (proportion of observed years with a 'health limitations check' in the USA data and proportion of observed years with an early pension in Danish data), the year of birth, race in the USA data (reference category: non-Hispanic non-black), and immigration background (reference category: none).

# CHAPTER 3: Changing Paradigms of Young Women's Labor Market Participation in the USA

### 3.1 Introduction

This chapter explores gender differences in labor market trajectories in one of the pioneer countries of the gender revolution, the United States of America. Depending on the aspects of gender equality one prioritizes, it can be called both leader and laggard (Orloff 2008, 2009) of gender equality in the labor market. The country is home to both the quiet gender revolution (Goldin 2006) as well as concentrates on its case much of the writing about the uneven and stalled (Hochschild 1989; England 2010, 2011; Pedulla and Thébaud 2015; Thébaud and Pedulla 2016), incomplete (Esping-Andersen 2009 [2013]), and unfinished (Gerson 2011) gender revolution. In this chapter I map out gender convergence in labor market attachment during the second half of the 20th century. Comparable data from the three waves of National Longitudinal Surveys of Youth (NLSYM and NLSYW, NLSY79, and NLSY97) permit me to construct longitudinal labor market trajectories of young adults and estimate the gender gap between the cohorts. Major changes have taken place during the lifetime of these cohorts for both men and women, and my research interest lies in the conditions under which labor market trajectories of young women have converged with young men's. These data sets allow comparing three consecutive cohorts at the same ages, revealing the cohort effects and controlling the age effects.

A life course approach is especially relevant here, as previous research has found women's labor market trajectories to be dynamic to an extent that preferences stated early in life, or even behavior at some point, hold little predictive value over the later life course, can be adjusted ad-hoc, and are revealed only under certain contextual conditions (Gerson 1985; Goldin 1990; Hakim 1996, 1997 [2001], 2002; Blau et al 2001; Stone 2007; García-Manglano 2015). Hence I do not hypothesize about the links between people's actions and preferences, but focus on the behavior and chose to observe a trajectory instead of a cross section. Throughout the paper I compare the trajectories of young women with those of their male peers. (The ideal-typical) men's labor market trajectories typically serve as the implicit or explicit benchmarks for women's achievements, and in this case I opt for a comparison with actual peers.

During the observed period male labor market trajectories also have changed and are even less like the ideal-typical Mincer curves now (1958; Heckman et al 2003), the trend being towards shorter careers, mostly due to education expansion and earlier retirement (Blau et al 2001), and much more uncertainty (Heckman et al 2003).

Education expansion (Shavit et al 2007) for both young men and women and postponed fertility have turned youth into a period where there should be the least gender gap in education-labor force trajectories, or at least not one clearly linked to care work and raising a family. I include education in the labor market activity sequence as a prelude to relationship with the labor market. Educational achievement creates a path-dependency and must be regarded as endogenous to career decisions. On one end of the distribution, the lack of educational credentials restricts one's career opportunities. On the other hand, investment in education tends to signal an intention to pursue a career and serves as an incentive to get returns from one's investment, as women with most investment in education are routinely found to be more likely to be strongly attached to the labor market (Han and Moen 2001; Goldin 2014). In empirical terms, when viewed as part of a sequence of labor force activity during a set age window for young adults, in the great majority of cases prolonged full-time education postpones access to full-time employment and shortens the spell of years spent working while increasing the likelihood of higher quality employment after completion of a degree.

### 3.2 Background

In absence of early gendered effects, young adults would be expected to have the same education and labor force trajectories through their late teens, their twenties and early thirties. Judging from a contemporary perspective, for the great majority of survey respondents this should be a part of life course free of active caretaking or accumulated gender inequality. And a compilation of all National Longitudinal Surveys of Youth allows for an interesting contrast of birth cohorts: those born in the 1940s, those born in late 1950s and early 1960s, and those born in 1980s. While the three cohorts are all still relatively recent and have all lived through major social changes during the second half of 20th century, the changes in milieu when it comes to women's labor force participation between the 1960s when the cohorts of the first wave entered the labor force and the 2000s when the cohorts of the last wave did is well documented, although not linear (Cotter et al 2011).

The first cohort available for this research design was born between 1930s and 1950s (see Figure 3.1 for a graphic representation of the three cohorts), socialized in and aspiring to the 1950s-1960s ideal of a male breadwinner model in a full employment society (Ruggles 2015). Up to 1960s women's employment was mostly temporary and age-specific, regarded as unfortunate if prolonged in time signaling failure in the marriage market, be it through failure to marry or failure of the husband to provide enough, response to economic necessity or, in rare cases, pursuit of personal fulfillment. Women were the biggest 'reserve army of labor', after all, available when families or economies needed them but not a permanent presence (Myrdal, Alva and Viola Klein 1956 [1970]; Goldin 1990; Blau et al 2001; Ruggles 2015). Even after the widely publicized women's mobilization for the industry during the Second World War, those workers were sent back home as soon as men returning from the front wanted their jobs back (Myrdal, Alva and Viola Klein 1956 [1970]; Milkman 1987; Goldin 1991).

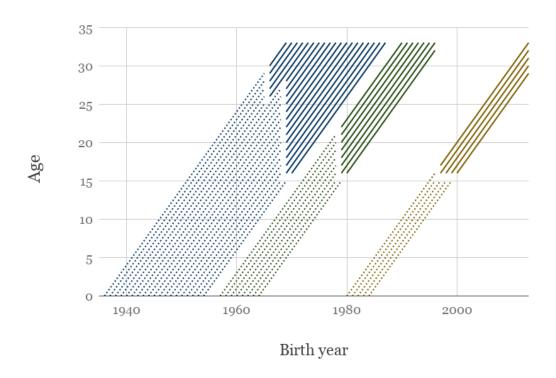


Figure 3.1: A graphic representation of the three NLSY cohorts used for this paper, NLSYM/W in blue, NLSY79 in green, and NLSY97 in brown. The dotted areas represent the prior life experiences to the survey, and solid lines – the years observed.

This cohort is a mix of the last birth years of the Silent Generation and the Baby boomers, and it lived through several exogenous shocks that profoundly changed gender relations, labor market, and families. Although gradually and by no means

homogeneously across the population, sexuality was separated from reproduction and family formation: in 1957 FDA approved Enovid, the first combined oral contraceptive, the first no-fault divorce was passed in 1969 in California, and abortion rights were recognized in 1973 Roe vs. Wade Supreme Court sentence.

A change in cultural and political milieu since 1950s was marked by the civil rights movement, the assassination of John F. Kennedy in 1963, the signature of Civil Rights Act of 1964, the race riots of summer of 1967, and the assassination of Martin Luther King Jr. in 1968. At the same time key social policies were put into place: food stamps (1964), Medicaid (1965) and Medicare (1965). Anti-discrimination measures were written into law: the Equal Pay Act of 1963, the Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, and the Executive Order 11246 of 1965 establishing requirements for non-discriminatory practices in hiring and employment on the part of U.S. government contractors. Protests against the war in Vietnam since 1964, the Summer of Love in San Francisco in 1967 and Woodstock in 1969 marked the beginning of a mass youth counterculture. However, also the value changes were class-sensitive and first caught on among the college-educated middle classes (Komarovsky 1962 [1987]).

College-educated women were experiencing the ambition gap between the quality education they had received (Goldin and Katz 2008) and the 'feminine mystique' (Friedan 1963) with what they were expected to comply once graduating with a 'Mrs. Degree' (Horowitz 1987; Holland and Eisenhart 1990). However, for this generation the conflict with being 'just a housewife' was a middle-class problem (Komarovsky 1962 [1987]). In marked difference with Hochshchild's work 20 years later (1989) and Gerson's after 20 more (2011), the blue-collar equilibrium was that of Beckerian specialization: well delineated spheres — often jealously guarded against other's interference — of responsibility where the other could step in to 'help' if need be (Komarovsky 1962 [1987]). But when married blue-collar mothers worked, the reasons they gave were largely the same as men (Morse and Weiss 1955):

Of course, because they desire what money can buy [but also appreciate] the sheer pride of earning is itself another reward [and] the enjoyment of social life on the job, the pleasures of workmanship, the bracing effect of having to get dressed up in the morning, some relief from constant association with young children, and "having something

interesting to tell my husband." (Komarovsky 1962 [1987]: 68; also Weiss and Morse 1958).

However, as in premonition of 2000s 'mommy wars' (Williams et al 2006; Stone 2007, 2008; Cotter et al 2011; Damaske 2013), the 'correct' way of being a mother, a wife and a woman was hotly debated, at least at the discursive level:

Much of women's envy of men, which undoubtedly was a strong undercurrent in the earlier feminist movement, has changed its direction and turned to envy of one group of women against another: working women begrudge housewives their freedom to do things in their own time and in their own way, and possibly also the prestige that tends to go with greater leisure; whereas housewives envy employed women their financial independence, the greater variety of their social contacts, and their sense of purpose. (Myrdal and Klein 1956 [1970]: 10)

Yet the labor market participation rates for women in the USA rose steadily until the 1990s, especially for married women and women with young children (Goldin 2006; Esping-Andersen 2009 [2013]; Cooke 2011; Landivar 2017).

The second NLSY wave, although very close to the first one in birth years (see Figure 3.1), had a different set of circumstances that marked their work and family lives, and different expectations (Goldin 2006). With continued change in values and family relations underway (Bolzendahl and Myers 2004; Goldin 2006), deindustrialization combined with the first big economic slumps after the boom years following the World War II – with recessions hitting repeatedly in 1974-75, 1980, 1982, 1991 (and then 2008-2009) (World Bank 2019) - radically changed the employment prospects for both men and women (Oppenheimer 1994; Ruggles 2015). The full employment transition towards a service economy that had first pulled many women in the labor force to do – often part-time - clerical and service work (Oppenheimer 1970; Goldin 2006) now turned into a more precarious labor market where 1.5 or 2 incomes is often a necessity and not an occasional strategy (Warren and Warren Tyagi 2004). This late 1970s shift from taking up an occasional job to a life-long attachment to the labor force has been named 'the quiet revolution' by Claudia Goldin (2006), the quietness of this change stemming from the fact that it was not primarily driven by a discourse of labor market participation as an emancipatory practice in the battle for gender equality but by a chain of rational decisions taken about one's future prospects:

No longer was women's labor supply highly elastic. It was influenced even less than before by husband's earnings. The earnings of women rose relative to those of men, occupations changed from more traditional ones to those that had been considered nontraditional. [...] As opposed to the noisy revolution, the quiet revolution was accomplished by many who were unaware that they were part of a grand transformation. They were the unwitting foot soldiers of an upheaval that would alter women's employment, education, and family. (Goldin 2006: 33)

This, in turn, is associated with more purposeful investment in human capital, and the development of professional identities and attachment to paid work among women of all social classes (Rubin 1994; Edin and Lein 1997; Goldin 2006; Edin and Shaefer 2015; DeLuca et al 2016). Paid work is not a transitory phase in a woman's life anymore (Goldin 2006). The second NLSY cohort is the one where many classic women's labor market participation debates stem from: the 'having it all' debates and researchers' insistence on capturing the relative weight preferences and external pressures have in women's decision making (Gerson 1985; García-Manglano 2015), the 'second shift' guilt (Hochschild 1989), motherhood penalty (Sigle-Rushton and Waldfogel 2006; Correll et al 2007; Aisenbrey et al 2009; Budig and Hodges 2010; Cooke 2014; Kahn et al 2014), and questions about 'doing gender' (West and Zimmerman 1987) as a compensation for the newly blurred gender roles in an 'unstable equilibrium' (Esping-Andersen et al 2013).

The third NLSY cohort – born in early 1980s and farther removed from the previous one – was right censored at the time of writing this paper (see Figure 3.1), hence the trajectories of this early millenials are still unfinished. However, several phenomena have already marked this cohort. This is the first generation that was raised by working mothers and socialized in egalitarian gender values (Gerson 2011). While their childhood pathways indicate that children can thrive in all kinds of family structures, Gerson's research also picks up remains of the second shift conflict. Across all family backgrounds and SES, while both young men and women indicate that an egalitarian household arrangement is their ideal, they differ starkly when it comes to their second choice: young men's dominating fallback position is a (neo)traditional arrangement but their female peers claim that their prefer to be single instead (Gerson 2011). The 2008-2009 recession complicated many transitions from education to paid work, and further

exacerbated the student loan problem. Yet the federal minimum wage hasn't been raised since 2009, and there have been no great strides in work-family legislation.<sup>1</sup>

A commonly used mental schema for analysis, a yardstick to estimate the advancement of the gender revolution in the labor force is to assume that it happens in 'steps', although with ample variation: first attachment at all, typically sporadic, then part-time work turns into full-time, and then horizontal and vertical segregations are addressed. USA is a rather atypical case when it comes to part-time work, with relatively low part timing among women (around 25 per cent in early 1990s) and relatively high among men (around 10 per cent at the same time). Until the 1940s those women who were gainfully employed – typically young, single and poor – worked full time. Throughout the 1950s and 1960s, however, part-time grew faster than full-time, reflecting the availability and the wish to take upon that clearly secondary earner role of many women. From the supply side this expansion part-time it was driven by changes in family life (divorces, empty nests, single parenthood) and education expansion (students working part-time). However, this dynamic has lost its importance since the 1980s (Drobnič and Wittig 1997).

The great majority of part-time jobs are demand side driven, though, as part-time workers are cheaper to the employers because they are not required to be paid a health insurance. Hence there are numerous involuntary part-timers trying to make the ends meet. In especially hard place are poor single mothers that either stay on benefits or have to find a full time position that covers life and childcare that would compensate for the loss of welfare does give Medicaid coverage that comes with being on welfare (Drobnič and Wittig 1997). Given their typically low education levels, this is unlikely (Burtless 1995; Edin and Lein 1997).

On the other hand, 'the gender pay gap and other gender differentials in life chances are largely a function of [occupational sex] segregation [hence] the occupational structure is [...] the backbone of the gender stratification system' (Grusky and Levanon 2008: 813). Although occupational sex segregation — along with many other gendered practices - exist in USA, in the 1980s it was one of the least segregated industrialized countries (Charles 1992). At the same time, a comparison of occupational sex segregation

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<sup>&</sup>lt;sup>1</sup> Several key experiences have marked these cohorts since the end of the observation window in 2013. They also saw the 2013 Affordable Care Act goes into effect, widening the medical insurance coverage considerably. A Supreme Court decision in 2015 legalized same sex marriage. The possibility of social

between the decades of 1950 and 1970 reveal an increase in occupational sex segregation (Charles 1992). This finding is in line with the shift towards a service economy and with the accompanying influx of women in those clerical, sales and service positions: those much fewer women working beforehand were differently selected and hence more likely to be in professional, managerial or production occupations. The trend since 1970s has been mostly feminization of traditionally male (health) professions, especially since 2000 (Roos and Stevens 2018). The moves towards feminization and masculinization have been also SES-sensitive: 'those in feminizing occupations are more likely to be white, US citizens, educated, currently married/with spouse, working in a professional/managerial occupation, and working full time [...] those in masculinizing occupations are more likely to be black, Hispanic, persons speaking English poorly, working for wages (as opposed to self-employed), foreign-born, and in poverty' (Roos and Stevens 2018: 147), indicating that those in disadvantaged labor market position are the ones taking up traditionally feminized (care and service) work.

A key aspect of the American context, often blamed for capping the labor market attachment and achievements of women, is its lack of work-family policies. Only since 1993 there is a federal law - Family and Medical Leave Act - that, under certain restrictions, such as business size, guarantee 12 weeks of unpaid leave (new mothers not eligible for leave coverage would typically get 6 weeks of medical disability leave associated with childbirth, which, of course, excludes the other parent or adoptive parents). This creates a unprovided for care vacuum that several states have filled with state legislation for paid leaves, paid leaves in some cases are included in collective bargaining agreements or employer policies (as 'perks'), but often is the sole responsibility of the family (Berger and Waldfogel 2004; Still 2006). As a result, American women who are attached to the labor market typically have very short spells of absence due to childbirth (Berger and Waldfogel 2004).

In contrast with this, both in 1990s and 2000s more than half of children less than one year old and 45-50 per cent of 1 and 2-year-olds were having parental care only (Kamerman and Gatenio-Gabel 2007). Early childhood education and care in the USA is a fragmented system 'of wide-ranging quality and with skewed access': 'a wide range of part-day, full-school-day, and full-work-day programs, under educational, social welfare, and commercial auspices, funded and delivered in a variety of ways in both the

public and the private sectors, designed sometimes with an emphasis on the "care" component of ECEC and at other times with stress on "education" or with equal attention to both' (Kamerman and Gatenio-Gabel 2007: 23; also Esping-Andersen et al 2012).

In this paradox of high general labor market participation of women combined with lack of quality universal childcare - and the discourse of 'intensive mothering' on top of that - lays the most recent iteration of 'mommy wars': 'opting out'. What started in 2003 with The New York Times Magazine article describing top-school graduates and professionals 'opting' to downsize or abandon their careers to dedicate their time to motherhood: 'it's not just that the workplace has failed women [...] it is also that women are rejecting the workplace [...] why don't women run the world? Maybe it's because they don't want to' (Belkin 2003), 'shifted the cultural frame for understanding women's workforce participation' (Williams et al 2006). These polemics abut women's role, however, have been a staple media narrative at least since the 1950s (Williams et al 2006; Graff 2007), putting the responsibility as squarely on women's 'choices' as 'mommy tracking' did in the 1980s (Schwartz 1989; Lewin 1989). Although there has been evidence that the fertility and labor force decisions of the more recent cohorts have changed (Vere 2007), the right-censoring makes it difficult to give a definite interpretation. The overall empirical reactions to the 'opting out' discourse using crosssectional data have been debunking the idea that 'opting out' is a mass-phenomenon (Antecol 2010; Kreider and Elliott 2010), instead linking the overall fall of women's labor market participation with the 2001-2004 economic cycle when men's rates fell even more, interpreting this as a gender convergence in the labor market (Boushey 2005).

The profile of the women more likely to 'opt out' appears to be bimodal. Part of those most likely to be out of the labor force are young, poorly educated and with little labor market prospects (Kreider and Elliott 2010), although it is debatable to what extent this profile is covered by the notion of 'opting out' (Kossek et al 2016) as qualitative work about lower SES women's have illuminated the purely rational calculus in cases when potential wages do not cover the social security benefits and work-related expenses, namely childcare (Edin and Lein 1997). On the other side of the SES gradient are the 'white college educated married women in male dominated occupations' (Antecol 2010), or, according to qualitative research they are 'highly educated, affluent, mostly

white, married women with children who had previously worked as professionals or managers and whose husbands could support their being at home' (Stone 2007; also Stone 2008; Meg and Stone 2011; Stone and Hernandez 2012), as indeed the initial Belkin piece (2003) described it. In other words: 'the forces for retrenchment under this story are set in motion not because of any real deterioration in the opportunities for women, but only because opportunities prove not to be as substantial as had been anticipated' (Grusky and Levanon 2008: 819). Some have used the occasion to talk about the failure of the USA to instate policies that would permit to combine paid employment and family life, reminding about the precarious situation of so many families who cannot afford to opt out in any way but also can barely sustain their everyday arrangements (Still 2006; Williams 2006; Williams et al 2006).

In line with the American free market ethos (Galbraith 1958 [1984]) and helped by supply-side economics and monetarism, 1970s and 1980s also marked a turn towards 'starving the beast' budgeting (except for military purposes) and 'workfare' social policies. The already lean American welfare state was shrunk and private initiative - lauded. Clinton's administration did not change that but followed course (Corcocan et al 2000). The already limited life chances of both AFDC and TANF recipients, mostly low-SES single mothers and often women of color, were not systematically reversed (Burtless 1995; Edin and Lein 1997; Corcoran 2000). Meanwhile young men of color have been disproportionately affected the rise of mass incarceration in US (Bureau of Justice Statistics 1996, 2005, 2010, 2012; Pettit and Western 2004), disrupting their family and work trajectories (Western and Wilderman 2009; Haney 2018).

For all three cohorts, descriptions of persistent pockets of poverty and marginal existence can be traced from Harrington's 'other Americas' (1962) to Rubin's revelations of white working class struggles of the 'invisible Americans' (1976) to Stack's description of alternative solidarity structures in African-American extended families where structural conditions make the nuclear family unable to provide enough resources (1975) to more recent work documenting the everyday life in poverty and near-poverty in urban and rural America (Rubin 1994; Edin and Lein 1997; Edin and Kefalas 2005; Edin and Nelson 2013; Edin and Shaefer 2015). Much of these are descriptions of the insufficiencies and failures of the very patchy American social security set.

Aiming to first establish a general narrative about gender convergence, I start by comparing the labor force trajectories of young men and women to see to what extent the narrative gender convergence across the three cohorts examined fits the overall population. Hence, in line with the previous literature focusing on the cohorts entering in the labor force in the last third of 20<sup>th</sup> century having radically changed the previous labor attachment patterns (Goldin 2006; Ruggles 2015),

H1: I expect to observe less gender differences between labor market trajectories with each subsequent cohort. And, although convergence could move both ways, it is expected that the convergence has happened because women have changed their labor force attachment pattern (Blau et al 2001; Goldin 2006; England 2010, 2011).

Yet structural inequalities affecting the life chances of individuals are a widely recorded phenomenon in the USA, making it very probable that an overall gender convergence is concealing great inter-group variance. The key variables affecting labor market opportunities of young people identifiable across the four surveys are race, parental education, and, specifically for young women, timing of motherhood.

An essential element for this kind of analysis applied to the USA is race that has limited labor force participation opportunities and created a smaller in-group gender gap at the same time (Landry 2000; Blau et al 2001). Although the data do not allow for a fine grained comparison among all races and ethnicities found in the country, I am able to account for the best documented racial divide: the blacks and non-blacks, which in a representative sample is a group made up of mostly whites, although the effects for whites are bound to be underestimated due to this binomial division. The myriad of expression of racial disadvantage is well documented, and directly affects labor force attachment for both men and women. Examples range from prejudice in hiring (Blau et al 2001) to mass incarceration of black men (Bureau of Justice Statistics 1996, 2005, 2010, 2012; Pettit and Western 2004; Western and Wildeman 2009), to higher poverty rates and resulting reliance on social assitance and the extended kin or friendship networks instead of a nuclear family (Stack 1975; Tach and Edin 2011; Edin and Nelson 2013; Haney 2018). As convergence can happen both in advantage and disadvantage, I propose two hypotheses for the links between race and labor force trajectories:

H2a: Due to structural privilege experienced by non-black women in a context of systemic racism (The Aspen Institute 2016), across the three cohorts their labor market trajectories converge 'upwards' towards non-black men.

H2b: Due to structural disadvantage experienced by black men and women in a context of systemic racism (The Aspen Institute 2016), the labor force attachment of young black men is less intense than that of non-black men, bringing them closer to black women, and pushing black women towards more labor force attachment to compensate for their peers at the household level or to maintain an independent household.

Opportunities provided by higher social class stratify labor market attachment. On one hand, as the upper classes act according to a discourse of vocation, obtain university education and enter into professions, making work attractive as means of selfexpression and realization, it is not surprising that one of the catalysts of the second wave of feminism is frustration of university graduates relegated to the role of homemakers (Friedan 1963; Coontz 2011). On the other hand, while lower classes might be less attached to their professional identity as workers, they are the ones negotiating the tension between more acute need for income and the poor working conditions of their contracts. Previous research, however, has found that 'worker identity' is very important also for women doing low-skill jobs due to socially assigned superiority of paid work as opposed to unpaid work, although the activities carried out might be very similar (Myrdal and Klein 1956 [1970]; Komarovsky 1962 [1987]; Rubin 1976; Transgaard 1981; Coontz 2011). In more recent cohorts women's absence from labor force is concentrated at the extremes of the income distribution of their partners: 'the only groups in which stay-at-home mothers outnumber those who combine paid work with parenting is women married to the most poorly paid men in the country [...] the second highest percentage of stay-at-home moms is found in families where the husband is in the top 5 percent of earners' (Coontz 2011: 181).

Using parental education as a class marker distinguishes between those that are tightly bound to labor force, by necessity or vocation, but reaping significant gains in form of wages - the case of the general population, and especially higher SES women and men - and those whose attachment is more intermittent. Lower SES men and women having low skills and potential labor force income that scarcely outweigh public assistance

(Burtless 1995; Edin and Lein 1997) find it more difficult to stay attached to the labor force. Parental resources also constitute a direct security net for young people, providing resources for staying in education or launch a career, while absence of such resources limits the future opportunities (Sohn 2019). Hence my third hypothesis:

H3: I expect parental education to be a significant predictor of the early life labor market trajectory, linking higher SES with longer time spent in education and more consistent labor market attachment once in the labor force.

As the cohorts of this chapter are observed only until their thirties, these are incomplete labor market and family trajectories. In my wish to explore the links between labor market trajectories and family events most likely to interfere with consistent labor market attachment, I've opted for early parenthood as the only one not suffering from right censoring as other markers such as divorces, single parenthood, or high completed fertility vs. childlessness were inaccessible for the most recent cohort.

Early parenthood for young women can be both a cause and effect of disadvantage, responding to the care work that affects education and labor force participation (Duncan et al 2018), and reflecting the reality of motherhood as an easy-access respectable adult role for disadvantaged young women (Edin and Kefalas 2005). Certain women have children early because the calculation of motherhood being an educational or professional impediment is not a concern taking into account their limited opportunities. These children are born into subcultures where early maternity is not perceived as a problem (Stack 1974; Edin and Kefalas 2005), and, once a child is there, the opportunities to advance educationally or professionally are even more limited. While personal and parental resources moderate each other when they are at odds (Pöyliö and Van Winkle 2019), the more common situation – alignment between the parental and child's SES, especially when the child is still young, and reproduction of fertility patterns typical of the social class of origin – is the expected pathway.

While early parenthood ought to entail similar problems for young fathers too, early childbearing typically happens in (virtual) absence of a partner and has a powerful class component, bringing together the risks of the professional path dependency discussed above, the burden of single motherhood, and poverty risk (Edin and Kefalas 2005; Härkönen 2018). Hence men are used as a benchmark here and the expectation is that

only those women who postpone their fertility converge with the average man's labor market trajectory or surpass it. Hence my fourth hypothesis:

H4: Early entrance in motherhood will be linked to lower probability of gender convergence in labor force due to SES-differentiated patterns of fertility and additional care burden it supposes.

#### 3.3 Data and Methods

As change across the life course and intra-cohort heterogeneity are key characteristics of women's labor market trajectories, the method of analysis has to be one that maintains the complexity of trajectories in a longitudinal analysis (Aassve et al 2007; Widmer and Ritschard 2009; Barban 2011). Sequence analysis directly addresses the notion that the life course consists of sequences of events, and is able to capture the patterns behind the sequences (Abbott 1995; Abbott and Tsay 2000; Billari 2001; Aassve et al 2007; Widmer and Ritschard 2009; Barban 2011; Barban and Billari 2012). I apply sequence analysis to create a longitudinal trajectory, one that synthesizes labor market experiences (R Development Core Team 2011; Gabadinho et al 2009, 2011).

	NLSYM	NLSYW	NLSY79	NLSY97
Gender of the interviewees	Men	Women	Men and women	Men and women
Birth years	1936-1952	1941-1954	1957-1964	1980-1984
Sample (excluding oversamples)	5225	5159	6111	6748
Time span of the survey	1966-1981	1968-2003	1979-2012	1997-2013
Age span of the survey	14-40	14-60	14-55	12-33
Number of waves	12	22	25	16
Time span used in this chapter	1966-1981	1968-1988	1979-1996	1997-2013
Age span used in this chapter	16-33	16-33	16-33	16-33

Table 3.1: Characteristics of the four National Longitudinal Surveys of Youth used in this chapter.

The three waves of National Longitudinal Surveys of Youth follow a representative sample of a set of birth cohorts since their early teens (see table 3.1 for more details).

The age span covered by each survey is not the same, but all four surveys cover ages between 16 and 33, allowing to explore cohort differences during that age window. Although the observed years exclude events typical of later life stages, experiences at the observed ages are likely to create path dependencies for the outcomes further on. I observe people moving through secondary and tertiary education, entering the labor market and, even for those pursuing higher education, up to ten years after graduation. When it comes to childbearing, I should be able to observe entrances into parenthood for the majority of observations, as the average age at third birth, though with considerable non-random variation linked to social class and education, was below 30 as recently as in 2014 (Mathews and Hamilton 2016).

I also cleaned the Panel Study of Income Dynamics (PSID) to check for its potential use in this design. Apart from the usual panel issue of attrition, the household-focus of PSID made it impossible to use. The final PSID sample of 1941-1980 birth cohorts viable for sequence analysis was of 8953 respondents who had responded as heads or 'wives' of the household for 11 or more years (to have a reasonable-length sequence) of the 38 waves of PSID observations (of the 71283 initial ones). This reduction is due to the fact that very little individual information had been gathered about the household members who were not identified as one of the 'majors', either heads or 'wives'. And for the first ten years of PSID the information on basic relationship with the labor market is available only for those designated as heads of the households. Furthermore, due to ever-expanding sample of households in PSID, they reduced the number of households to be followed in 1997. This left me with a sample of 5851 observations. While the final sample is balanced by gender, it is skewed by birth year with very poor coverage of the youngest respondents - only 252 observations were born between 1971 and 1980.

NLSY79 and NLSY97 contain monthly information about enrolment in education and weekly information about labor market attachment. However, NLSYM and NLSYW have data only about the week prior to the survey interview. NLSYM interviews took place between October and December, and NLSYW - between January and March. In order to harmonize the information, I have extracted yearly information for all time-varying variables for NLSY79 and NLSY97. Having had to chose one week in a year in particular to extract information, I've chosen week 45 of each year. Week 45 always falls in November which is a month that is in-between the typical seasonal job and education status changes: beginning of summer, beginning of the school year, beginning

of the calendar year, and until 2005 Black Friday was not a key date in commerce. This also helps to harmonize data throughout my thesis, as all Danish labor market data are drawn in November. I end up with a sequence of 18 spells that cover ages 16-33.

The design of the surveys introduces several data limitations. The most important is the upper age limit of 33 dictated by NLSY97 while a similar design using only the first two cohorts - born between 1940s and early 1960s - would be too removed from current labor market dynamics. Additionally, all these panel studies have attrition issues, especially NLSYM, and have years when the survey was not carried out. On top of that, conversion from calendar years to age imply that for many observations there are invisible tails due to the fact that their first interview was after age 16 (in NLSYM and NLSYW the oldest participants were 24 when interviewed for the first time, 22 in NLSY79, and 17 in NLSY97) or the last interview took place before reaching the age of 33. I do not impute missing values, as it would not add anything to the data but probably induce a level of artificial homogeneity. As I work with responses organized by age – not the year of survey - the gaps created by surveys not being carried out in certain years at least do not create false cohort effects.

To facilitate reading, from now on I'll refer to the surveys by the birth cohorts they contain. Therefore my six basic birth cohort by gender categories are: men and women born in 1940s (NLSYM and NLSYW), men and women born in 1950s and 1960s (NLSY79), and men and women born in 1980s (NLSY97).

### 3.3.1 Labor Market Sequences

Labor market activity sequences cover formal education, the relationship with the labor market and the intensity of that attachment. Unfortunately, even beyond its limited relevance for the USA labor market, inclusion of the public/private sector work was impossible due to the poor quality of answers of those born in 1950s and later. My methodological approach – sequence analysis – allows checking the power of the partand full-time divide in the USA labor market during the descriptive part of the chapter without necessarily using up degrees of freedom in the second part – regression analysis. Six substantial sequence states permit me to encompass the whole range of possible answers (see table 3.2). Although part-time work is not widespread in the USA, where it occurs it may signal mommy tracking and looser ties to the labor market, voluntary or not (Drobnič and Wittig 1997). Short leaves are invisible in the sequences,

as information is gathered yearly or biennially when there are gap years between survey waves. However, detectable absence identifies substantial hiatuses in labor market trajectories.

Birth year of 1952 was the last one drafted in 1972 to report for duty in 1973. The cohorts of NLSYM cover the scope of 1941-1952. 'Armed forces' appear in only two follow-up interviews for the noninterviews in the previous survey carried out in 1978 and 1980 (asking about the 'activity most of survey week' in 1976 and 1978 respectively). There are 30 such observations in the 1978 survey and 14 in 1980 survey, and they are treated as missings due to inconsistencies across the survey and doubts about the professional nature of the service. For the following cohorts armed forces is a fully professionalized occupation, hence included as 'working', although in most cases without information on hours worked. Also the methodology for NLSY79 and NLSY97 is more solid and being in the armed forces is a activity status routinely appearing in the year of survey.

1	Working full-time
2	Working part-time
3	Working unknown hours
4	Unemployed
5	In education
6	Out of labor force
7	Missing

Table 3.2: States of Labor Market sequence.

I have opted for the most data-driven optimal matching. My optimal matching substitution costs are the transition rates observed in the datasets and my indel costs are one (Gabadinho et al 2009, 2011). The final cluster solution has four clusters grouped around sequences characterized by (1) education followed by full time work, (2) prolonged education followed by full time work, (3) being out of labor force, and (4) dominated by attrition and invisibility due to survey design. Given the differences in attrition rates (especially for men born in the 1940s) and invisibility (especially for those born in 1980s) issues across the four surveys, and the well-known fact that attrition in such panels is not random, I keep attrition in the dataset to assess the impact

that data quality has on my results. See figures 3.2 and table 3.4 in Results sections for details of cluster solution.

# 3.3.2 Clustering of the Labor Market Sequences

The substitution matrix for the sequence analysis is data driven, based on the transition rates found in the data. I clustered the samples using partitions around medoids (Studer 2013), and decided the number of clusters using quality of clustering diagnostics and visual inspection to account for effects stemming from survey design.

An algorithmic exploration of best cluster solution for this sequence suggests that between five and seven might be the optimal number of clusters (see figure 3.2). Yet, a visual inspection of the five, six and seven clusters reveals that much of the clustering is driven by survey design: nonresponse and lack of observations for certain ages. An additional requirement for further analysis of this sample is that each cohort is represented in every cluster.

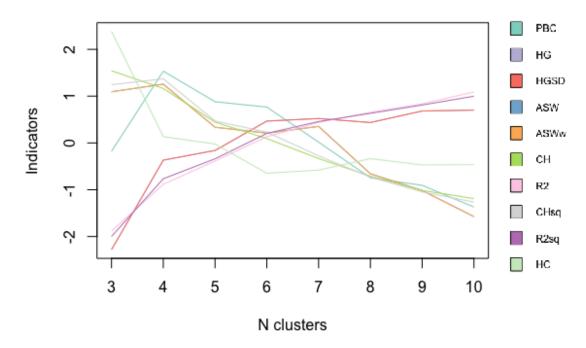


Figure 3.2: A graphic representation of the quality of a partition for cluster solutions from 3 to 10 for Labor Market sequences in standardized values. The cluster quality measures depicted are (from top): Point Biserial Correlation, Hubert's Gamma, Hubert's Somers D, Average Silhouette Width, Average Silhouette Width weighted, Calinski-Harabasz index, Pseudo R2, Calinski-Harabasz index squared, Pseudo R2 squared,

Hubert's C. For a discussion on the particularities of each measure, see Kaufman and Rousseeuw 1990 [2005], Studer (2013) and IDEMO (2018).

A cluster solution that covers all these issues is a four cluster solution grouped around sequences characterized by (1) education followed by full time work, (2) prolonged education followed by full time work, (3) being out of labor force, and (4) education followed by intermittent attachment to the labor market mostly dominated by attrition (see figure 3.2 in Results sections for a visualization).

The basis of the final clustering used in the chapter is the 6-cluster solution with (a) category 'late work' (where educational trajectory is invisible due to late first interview) merged with the normative 'education - work', and (b) category 'sparse – intermittent' (sparse due to missing interview years) merged with 'education - intermittent'. This cluster solution also complies with the requirement to have observations for all cohorts by gender cells (see Table 3.4) and serves as the dependent variable for a multilogit regression analysis.

I keep the attrition cluster in the regression analysis in order to detect non-random attrition when it comes to the key variables of interest. This issue is explored in the Results section.

## 3.3.3 Independent Variables

My aim is to capture the change in gender dynamics and possible convergence in Labor Market cluster membership, so gender differences and their change across the three cohorts is what interests me above all in these models. Hence the interaction between gender and cohort is present in all models.

Although the only way to harmonize race across the four surveys is a binomial variable for being black or not, hence hiding a lot of diversity among the non-blacks, I include it in my analysis because of the profound ways in which race stratifies relationship with the labor market in the USA. The non-homogeneous 'non-black' category is bound to underestimate the effects for white Americans, hence any significant differences found will be reliably robust.

Parental education is included as a proxy of social class. As more selective parental education variables enlarge the standard errors beyond workable in the most complex

model, I have opted for using the most generous division: either at least one of the parents (I use the information about the parents the youth resides with if these differ from the biological ones) of the respondent has high school education - true for 65.6 per cent of the total sample, ranging from 50.3 per cent among the oldest cohort and 81.5 among the youngest - singling out those with a truly disadvantaged background. However, I've carried out the same triple interaction analysis with variables dividing parental education at both 2-year college and 4-year college and differences in coefficients are negligible while standard errors grow bigger.

Changes in fertility timing for American women is a concern while trying to capture the interaction between early motherhood and labor force trajectories due to the limited observation window for the youngest cohorts (until 29-33 years). One way to take into account the SES-related variance in timing of the motherhood and explore the early labor force trajectories of women in connection with their family trajectories is to carry the analysis out by the age at first birth. More reliably than the total number of children at the end of the reproductive years, age at first birth - if it occurs early - marks a strong path dependency for her education and labor force trajectories. The average for all men serves as a baseline to compare four possible ages at first birth: below 20, 20-24, 25-29, 30 or later (for those older cohorts observed beyond 30) or never (for the right-censored trajectories). I am aware that treating men as one homogeneous group ignores the variance among them, but for this particular exercise focused on women's trajectories statistical artifact of 'the average man' serves only to anchor the estimations for women. To make sure that the effects observed are not due to composition effects, I proceed to explore this variable in depth in Annex sections 3.7.2 and 3.7.5.

# 3.3.4 Analytical Strategies

I estimate four multilogit models, one for each of the hypotheses (see table 3.3 for an overview of the variables included and Results sections for the adjusted predictions). The labor market attachment cluster dominated by education followed by full time work is the normative cluster and also the most numerous, so it serves as the reference category in all four multinomial logit regression models. Although final regression models are rather cumbersome due to all the interaction terms, this approach allows me to quantify change across the cohorts and to respond to the research question about the extent of gender convergence. Full regression output can be consulted in the Annex

section 3.7.3. A robustness check using propensity score matching for the model including early fertility can be found in the Annex section 3.7.5, and confirms that age cut at first birth in this case is a variable measuring cohort effects and not composition changes.

Independent variables	Model 1	Model 2	Model 3	Model 4
Cohort	1	1	1	1
Gender	1	1	1	1
Race	0	1	0	0
Parental education	0	0	1	0
Age at first birth	0	0	0	1

Table 3.3: Dependent variables of each regression model estimated.

#### 3.4 Results

### 3.4.1 Labor Market Sequences and Clustering

At this descriptive level the results are in line with the gender convergence narrative proposed by the Hypothesis 1 (see Figure 3.3). Ignoring the survey design effects (delays in first response and larger amount of missing information among those born in 1940s), there are substantial gender differences among the three cohorts. In all three cohorts women are more likely to be out of labor force than men, but the gap seems to be closing from both sides. Among men the change – much less pronounced, though – has been towards more varied trajectories, and educational expansion, especially intense among the third cohort, is observable for both men and women.

The mean years spent in each state by cohort (see figure 3.4) show the most relevant substantial sequence states for each cohort and the amount of missing observations due to both survey design and attrition. This graph suggests hegemony of full-time work, limited but increasing importance of part-time work, educational expansion for the 1980s cohort, stability of the mean years out of the labor market, and an attrition problem among those born in 1940s-1950s.

Each of the four clusters is dominated by one of the four major dynamics observed previously (see Figures 3.5 and 3.6): (1) the ideal-typical trajectory of consistent labor force attachment dominated by full time work (41.2 per cent of the sample), (2) a

trajectory characterized by prolonged education followed by full time work (14.5 per cent), (3) a trajectory dominated by being out of the labor force (13.6 per cent), and (4) a trajectory characterized by attrition (30.7 per cent).

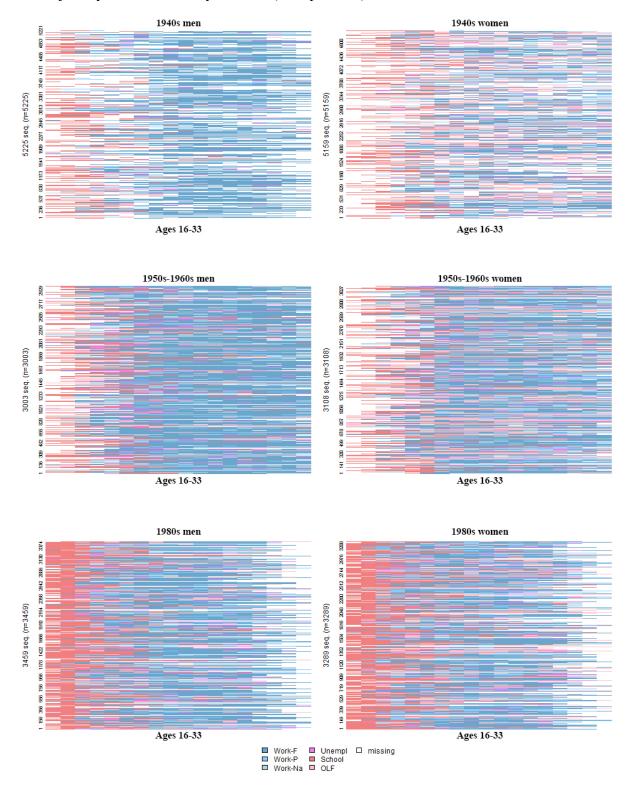
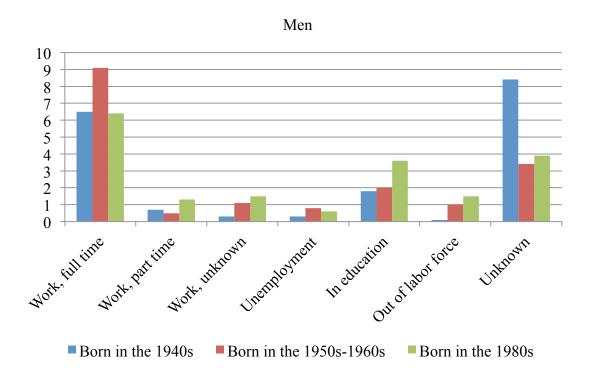


Figure 3.3: Index plots of the labor force sequences by gender and cohort.



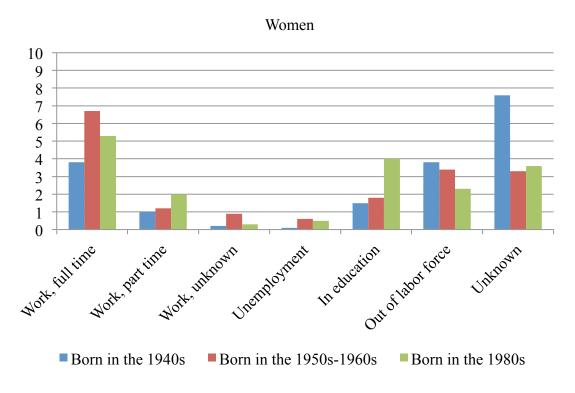


Figure 3.4: Mean years (of the 18 observed) spent in each state by cohort and gender.

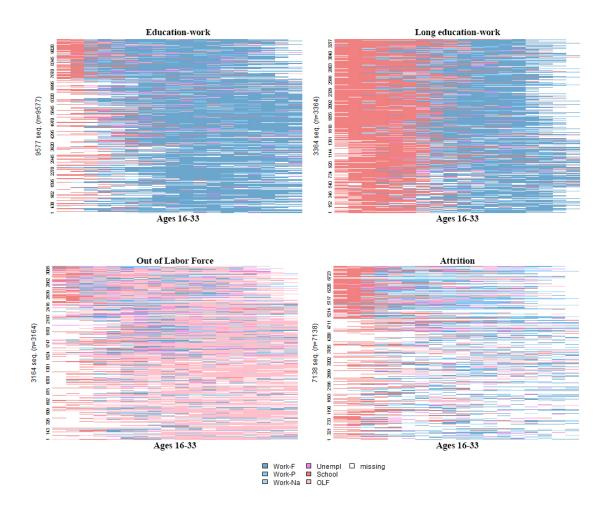


Figure 3.5 Index plots of the labor force sequences by cluster.

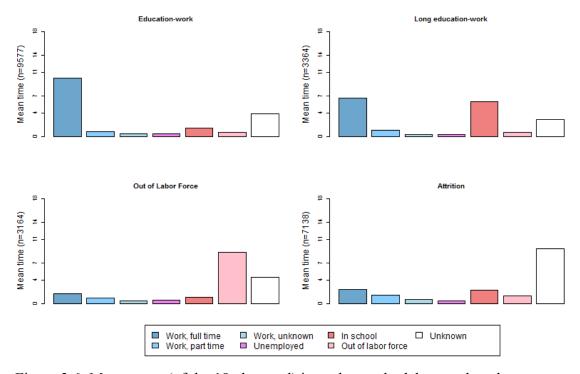


Figure 3.6: Mean years (of the 18 observed) in each state by labor market cluster.

An exploration of the clusters by cohort and gender (see table 3.4) show the evolution of gender dynamics across the three cohorts. Although there are survey design effects at play too - especially due to longer survey duration and less attrition for the 1950s-1960s cohort in comparison with the 1980s and 1940s cohort respectively - the intra-cohort gender dynamics observed are reliable and so is the overall move towards more education and changes in absence from the labor force towards less for women and more for men. Attrition is a salient feature of these four surveys and probably not random.

	1940s		1950s and 1960s		1980s		
	Men	Women	Men	Women	Men	Women	Total
Cluster 1: Education-work	48.7	21.7	71.9	50.4	38.7	25.8	41.2
Cluster 2: Prolonged education-work	9.3	6.0	11.6	9.9	26.2	30.7	14.5
Cluster 3: Out of labor force	0.3	29.4	5.2	25.8	7.0	13.0	13.6
Cluster 4: Attrition	41.7	42.8	11.4	13.9	28.1	30.5	30.7
Total	100	100	100	100	100	100	100

Table 3.4: The four cluster solution for Labor Market sequences by gender and cohort.

At this point it is curious to note two absent findings. The first absence is trajectories dominated by consistent part-time work. Part-time work appears in the sequences but does not drive cluster divisions. Second, I do not observe mommy tracking and opting out as driver of cluster division. And this is not only case for this cluster solution but at least up to division in 10 clusters, the interrupted trajectory does not appear as a category on its own. The logic observed in this sample and this age window is that of either consistent full-time Labor market attachment or absent-intermittent trajectory from the outset. An alternative explanation, following Stone's qualitative work on opting out among highly educated and successful women (2007) could be that the opting out comes after the ages I am able to observe, as it is more likely to happen among the highly educated who postpone childbearing and are more likely to be in a high-earning homogamous couple that makes scaling down one of the careers an option.

# 3.4.2 Regression Analysis

All four models reflect educational expansion for the youngest cohort and a trend towards gender convergence across the three cohorts among at least some of women. However, the other independent variables introduce nuance in the narrative and reflect how the gender revolution in the labor market interacts with race, class, and motherhood. Educational expansion attenuates the results for the youngest cohort throughout the models, as they are both less likely to be either in the labor market or formally out of it. First, Model 1 (see figure 3.7) gives a straightforward answer to the first Hypothesis: there is clear gender convergence across the three cohorts. Especially the results for the Out of Labor Force cluster show a clearly diminishing gender gap in the probability of having spent the observed ages out of labor force and education.

However, these seemingly straightforward results get much more complex when race is introduced. As results for Model 2 (see figure 3.8) show, part of the gender convergence observed in the first model is due to black men losing their foothold in the labor market. Exactly opposite to men, while among the older cohorts the non-black women were the ones more likely to stay out of the labor market, both groups of women have converged in the youngest cohort. At the same time black and non-black men have been diverging in their likelihood of being active in the labor market. As stated before, the impossibility to separate white observations from Hispanics and other races and ethnicities means that these results are underestimated and would be even more marked comparing black and white observations.

Model 3 (see figure 3.9) looks at the same labor force dynamics separating out those with parents with very little education as marker of social class. Access to prolonged education is clearly linked to more parental education throughout the three cohorts, confirming the Hypothesis 3. Those with more educated parents are more likely to be in the Prolonged Education-Work cluster and, hence, less likely to be in the Education-Work cluster. Meanwhile, women with least educated parents are the ones most likely to stay out of the labor force in all three cohorts while the rest of women are converging with men in reducing their likelihood of having trajectories dominated by absence from labor force. And the likelihood of having had labor market trajectories dominated by being out of the labor force has become higher for men with little educated parents of the most recent cohort.

Model 4 (see Figure 3.10) explores the links between early motherhood and labor market attachment in youth, and suggests that throughout the three surveys, there are no statistically significant differences in the probability of being in the normative Education-Work cluster among women who became mothers before turning 30. At the same time men and women who became mothers after 29 or never are significantly more likely to be in this cluster if they are from the first two cohorts. For the youngest cohort men are still the ones most likely to be in the Education-Work cluster while late or never mothers are the ones least likely to belong to the Education-Work cluster and, together with those who became mothers between 25 and 29, most likely to be in the Prolonged Education-Work cluster. Across the three surveys I observe an increase of the probabilities of having had a trajectory characterized by prolonged education, in line with the literature on educational expansion. Tertiary education having been also a marriage market for higher SES families for the older cohorts analyzed, it is not surprising that there is only one divide in the probabilities of those born in 1940s of being in this cluster. Women who entered motherhood before turning 25 have a very low likelihood, while men and women who became mothers after 24 or never have higher likelihood with no statistically significant differences among them. For the 1950s-1960s cohorts there are significant differences between each subgroup of women, neatly linking increasing probabilities of prolonged education with later age at first birth. The probability of men of being in this cluster overlap with that of women who gave birth for the first time between 25 and 29, and women who gave birth after turning 30 or never already have a higher probability of being in this cluster. Among those born in 1980s, every subgroup observed has a higher probability of being in the Prolonged Education cluster than in previous cohorts, but also differences are bigger. Women who gave birth before turning 25 have lower probabilities of being in this cluster, and teen mothers have them significantly lower than those who gave birth at ages 20-24. The estimated probabilities for men are between women having given birth at 20-24 and later. The probabilities of being in the Prolonged Education-Work cluster overlap for women who gave birth after 24 or never. Knowing that 4-year tertiary education is usually completed before one turns 25, this lack of differentiation between those aged 25-29 or over 30, or foregoing motherhood suggests that once over the critical ages when childbearing would conflict with education opportunities, age at first birth does not matter that much. Hypohtesis 4 is confirmed as the women who gave birth the youngest are the ones most likely to be in the Out of Labor Force cluster in all three

cohorts. The Out of Labor Force cluster that supported the gender convergence narrative in the first model, now reveals that this convergence is true only for those women who delay motherhood until age 25 or later. Even more, although the likelihood of having had a trajectory dominated by absence form labor force has declined also for them, the distance between them and women who became mothers older has increased. In the youngest cohort, the likelihood of being in the Out of Labor Force cluster is indistinguishable for men, women who became mothers after 29 or never, and women who became mothers between 25 and 29. Significant distance separates them from those women who became mothers between 20 and 24, and even more from those who became mothers in their teens, confirming the links between inconsistent labor market attachment and early entrance in motherhood.

The attrition cluster serves as a check for the extent of non-random attrition, especially due to known attrition issues in the two oldest surveys. The adjusted predictions for the four models (see figure 3.11) suggest that even for the 1940s cohort there are only two instances of significant differences in the probability of having had trajectories dominated by attrition. Black men and late mothers and childless women born in 1940s are significantly more likely to have disappeared from the survey than the rest of their peers. While racial bias can be assumed to spring from the same structural disadvantage discussed earlier, the disappearance of late mothers and childless women is less straightforward to explain as it is not a marginal group (1900 observations or 36.8 per cent of the women of 1940s cohort) and the survey is still relatively recent (starting in 1968). These women are more educated than their peers who had given birth at early ages. 50.4 per cent of them has high school education or less, 34.2 per cent has four or more years of college while among those of the 1940s cohort that gave birth below twenty 85.7 per cent had high school education or less and only 5.6 per cent - four or more years of college. And only 20.7 per cent of the late or never mothers in this cohort are black, as opposed to 44.8 per cent among the teen mothers of this cohort. In principle they should have been easier to retain in the survey. One possible source of self-exclusion could have been lingering expectations about women's roles after the peak 'feminine mystique' of 1950s and 1960s and hence the unwillingness to answer a survey with a great focus on household composition and family life.

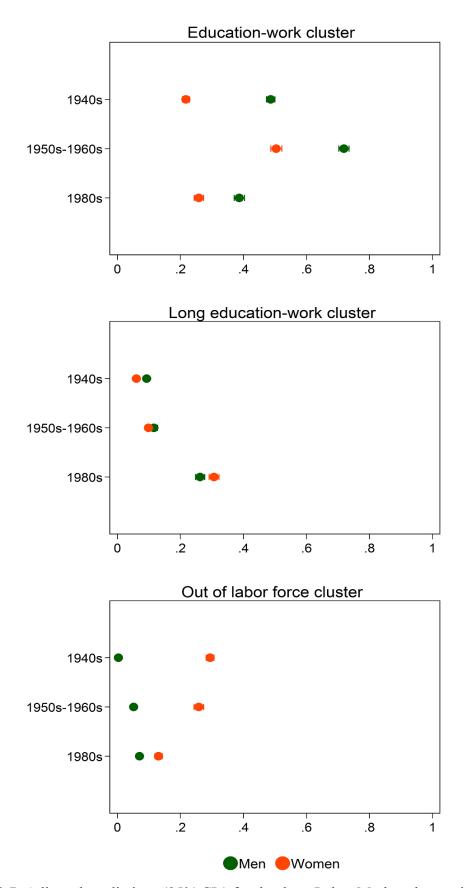


Figure 3.7: Adjusted predictions (95% CIs) for the three Labor Market clusters in Model 1 (by cohort and gender).

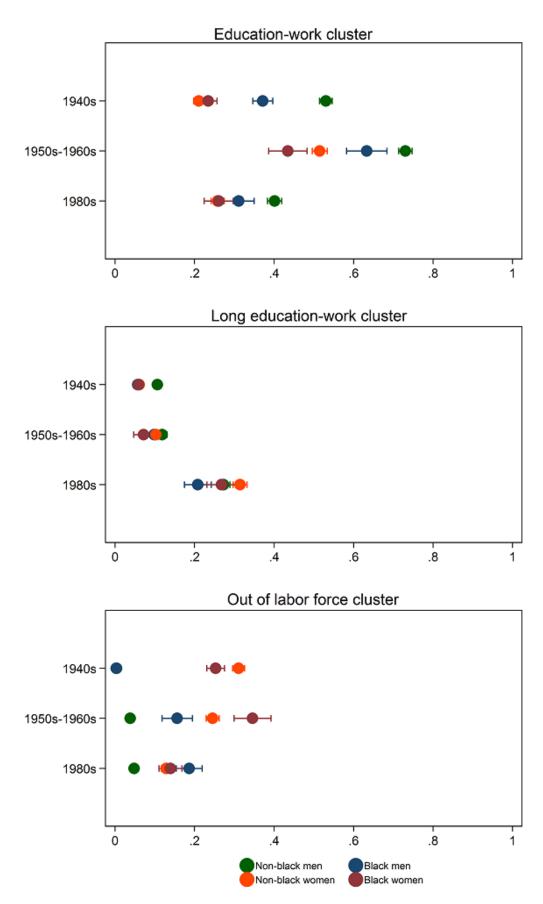


Figure 3.8: Adjusted predictions (95% CIs) for the three Labor Market clusters in Model 2 (by cohort, gender, and race).

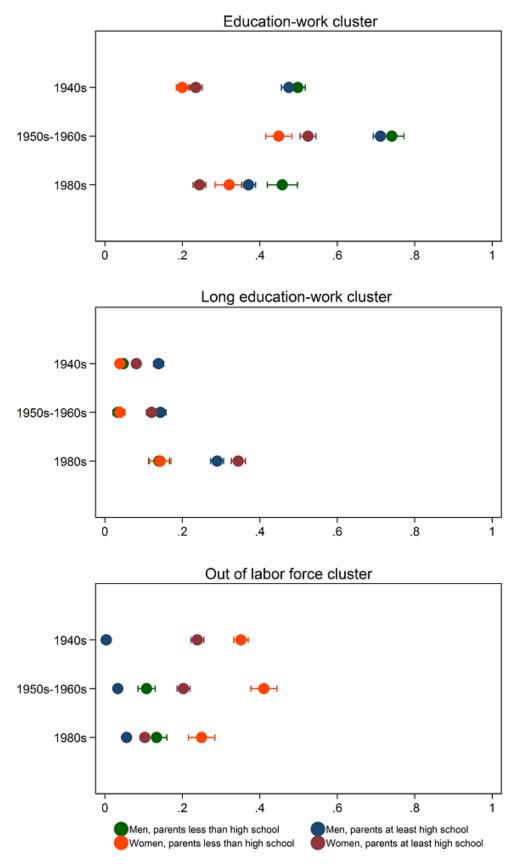


Figure 3.9: Adjusted predictions (95% CIs) for the three Labor Market clusters in Model 3 (by cohort, gender, and parental education).

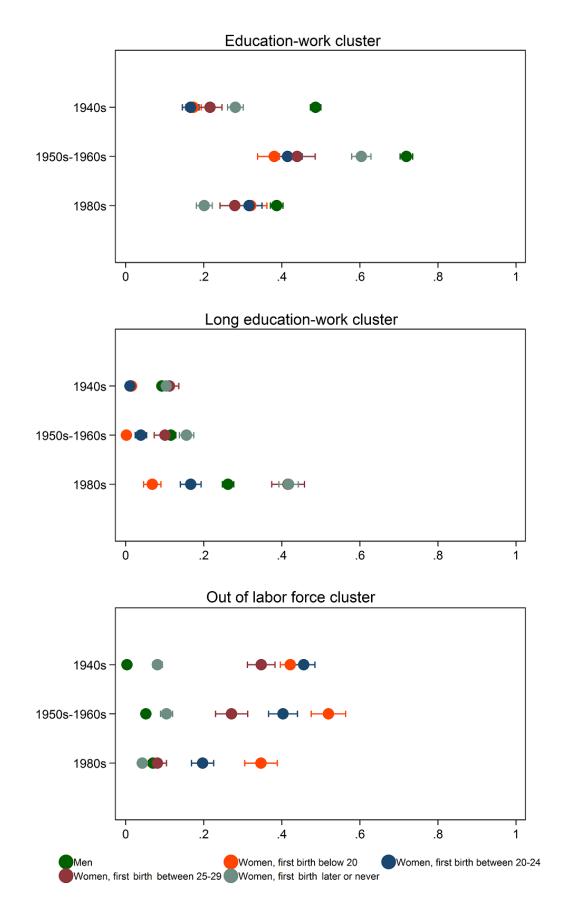


Figure 3.10: Adjusted predictions (95% CIs) for the three Labor Market clusters in Model 4 (by cohort, gender, and age at first birth).

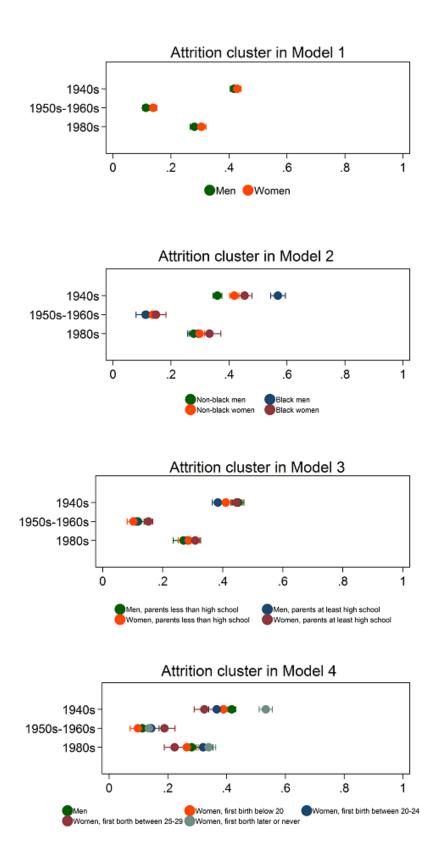


Figure 3.11: Adjusted predictions (95% CIs) for the Attrition Labor Market cluster in the four models.

#### 3.5 Discussion

The findings of this chapter echo the mixed gender revolution discourse present in current academic literature. Overall, the gender gap has been closing across the three cohorts but introduction of additional key variables indicates the partial nature of the gender revolution where those with less obstacles to intense labor market attachment – better opportunities in the labor market or lack of any care burden at home – are the ones most likely to be the attached ones.

This opens another window into the 'stalled' revolution discussion and the extent to which there is 'some type of "natural rate" of female labor force participation [that] has been reached. Since participation rates are bounded above by one, the question is really whether the natural rate is lower than some had thought it would be' (Goldin 2006: 25). The overall response here would be that, the average American Millennial woman currently in the labor force - when white, educated, in stable partnership and consciously postponing childbearing – is very likely to find herself on equal footing, or even better positioned, in the labor market as her male peers at least until her 30s, and, at least when it comes to labor force attachment, has closed the gender gap. Out of the possible additional factors that might have slowed down the completion of the gender revolution, such as different aggregate preferences of American women as opposed to other countries or lack of welfare state support, this paper confirms the importance of social class in accessing those converging trajectories. I find that markers of social disadvantage - being black, coming from a low SES family, and giving birth while teenager – are linked to not only gender gap but also intra-group gap between different women.

Introduction of race in the models – even with its effects probably underestimated, discussed before – reveals a more complex picture, in line with previous qualitative observations about the effects that systematic racism has had on the labor market trajectories of the black Americans (Harrington 1962 [1969]; Stack 1975; Edin and Lein 1997; Landry 2000; Pettit and Western 2004; Edin and Kefalas 2005; Western and Wilderman 2009; Tach and Edin 2011; Edin and Nelson 2013; Haney 2018). Across the three cohorts observed, black women have become more likely to find themselves in Education-Work (especially between 1940s and 1950s-1960s cohorts) and in Prolonged Education-Work (especially between 1950s-1960s and 1980s cohorts) clusters. Among

those born in the 1980s, young black women's labor force attachment patterns are statistically indistinguishable from non-black young women and black men. Meanwhile, young black men of more recent cohorts - especially between 1950s-1960s and 1980s cohorts - are more likely to find themselves Prolonged Education-Work and Out of Labor Force clusters, in line with discourses about contemporary polarized labor market as opposed to the full employment economy that the first cohort entered (Ruggles 2015), with those with more resources following a tertiary education path while for those with less resources face bleak labor market prospects and – in the context of mass incarceration (Bureau of Justice Statistics 1996, 2005, 2010, 2012) – 'the experience of imprisonment in the United States emerges [is now] a key social division marking a new pattern in the lives of recent birth cohorts of black men' (Pettit and Western 2004: 165).

When measured according to this research design, the likelihoods of young black men and women to having had early labor market trajectories are now statistically indistinguishable. Part of this convergence, however, is young black men's higher probabilities of having the observed years dominated by being out of the labor force (and these are the probabilities comparing them with all other men, including Hispanics and other racialized minorities) as opposed to previous maximum attachment to labor force (although almost always in inferior positions facing discrimination). This is in line with previously observed smaller intra-group gender gaps in labor market markers among blacks largely due to the discrimination faced by black men (Landry 2000; Blau et al 2001).

The effects of class are observed both via the education expansion cluster and the parental education variable. Educational expansion is naturally suppressing the labor market participation rates for the youngest cohort, as they are postponing their entrance in to the labor force. Higher parental education, reflecting the human and other types of capital available to the respondents, is linked to more intense labor force attachment and a significantly higher likelihood of being in the Prolonged Education-Work cluster. Likely mechanisms at work here range from different parenting and early education patterns fomenting academic achievement (Lareau 2003; Esping-Andersen et al 2012; Heckman and Raut 2013; Heckman et al 2013) to actual economic – and probably also social – capital to support the offspring well into adulthood (Sohn 2019).

I observe how in the youngest cohort class effects overpower gender effects in access to prolonged education and staying out of the labor force. Young women with educated parents are the ones most likely to have a prolonged education trajectory, followed by young men with educated parents, reflecting the new imbalance in tertiary education credentials (Breen and Goldthorpe 1997; Quadlin 2016). Young men and women with parents with less than high school education have had the same probabilities of prolonged education across the three cohorts, but, among those born in 1940s, the probabilities of young women with educated parents to have a prolonged education were closer to children of uneducated parents than to their male peers. Daughters of educated parents are also the ones that have made the biggest leap in reducing their probability of having a trajectory dominated by being out of the labor force.

Age at first birth in this case captures the change in the relationship between family life and labor force attachment. Starting with cohorts characterized by early marriage and childbearing (Komarovsky 1962 [1987]), across the three cohorts observed there has been a clear realignment among women where giving birth after 24 is linked to gender convergence while early births still go hand-in-hand with intermittent labor market attachment. As discussed throughout the chapter, here it is impossible to disentangle what has come first for these young women: childbearing that has limited their opportunities or structurally limited opportunities that have made early childbearing a reasonably attractive option, although the in-depth exploration of fertility changes and the propensity score matching robustness check confirm that the differences observed are due to cohort effects and not composition changes.

In this data there is no trace of massive exits from labor market, supposedly coinciding with childbearing, and part-time work does not play an important role as stratifier of labor market trajectories. The dynamic seems to be that of an early path dependency either towards being fully attached to the labor market or very intermittent commitment from the outset, heavily leaning towards full time employment throughout the observed years as the norm. I have explored cluster solutions to up to 10 clusters in none of them a prominent transition pattern from paid employment to being out of labor force appears.

An alternative explanation is that this transition happens after the observed age window, but such a strategy could fit only for cases of postponed childbearing, most probably among those born in 1980s and not earlier cohorts. It could be that the highly educated women of Prolonged Education-Work cluster opt out of labor market in bigger numbers after the observed ages. However, this chapter shows that at least up to the ages of average population completed fertility, there are no clusters of women opting out. Full time labor force participation is well established as the normative mode of interacting with the labor market for American women.

### 3.6 References

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#### 3.7 Annex

# 3.7.1 Changes in Fertility Patterns across the Three Cohorts Observed

The big American fertility dip following the Baby Boom took place between 1960 (fertility rate 118 births per 1000 rep-age women) and 1976 (fertility rate 65). That means that only the first National Longitudinal Survey of Youth, the one interviewing women born between 1943 and 1953 and entering motherhood in mid-1960s to mid-1970s, captures experiences of women having significantly fewer children than the cohorts preceding them. The fertility rates of the subsequent cohorts have not experienced big changes in fertility. The annual fertility rates since the mid-1970s have fluctuated between the high peaks of 70.9 (in 1990) and 69.5 (in 2007) and low 62.0 (in 2016) (National Center for Health Statistics 2018), indicating that fertility changes in last 40 years have more to do with tempo than with quantum.

Mean age at first birth in the USA has risen from 21.4 in 1968 to 26.6 in 2016, with means for blacks and Hispanics also moving up but lagging behind the national mean by 2-3 years (National Center for Health Statistics 2018). The pooled NLSY survey data also show the postponement of entrance in to motherhood between the cohorts born in 1940s-1950s and 1950s-1960s (See figure 3.8). As these two surveys follow women until the end of their reproductive years, we know that 23.1 per cent of women born in 1940s-1950s and 20.4 per cent of women born in 1950s-1960s that stayed in the survey sample until these ages had not given birth. Research on population-wide childlessness for these birth cohorts suggest 10 per cent among the 1943 cohort, 18 per cent among the 1953 cohort, and hovering around 17 per cent for the 1960 cohort (Frejka 2017). Knowing that attrition, a big problem in the 1940s-1950s survey, is not random and apparently less common among childless women, which makes sense in correlation with higher education levels and the choice to be made between family life or a career prior to women's massive entrance in the labor force (Han and Moen 2001), childlessness rates observed in data make sense when taking account the selection bias in the sample.

The data for those born in the early 1980s present a problem, though. As the interviewees are observed only until their late twenties or early thirties and fertility postponement is a well documented phenomenon, it is impossible to know what proportion of 34.9 per cent of women born in 1980s who were childless when last observed will give birth in years to come.

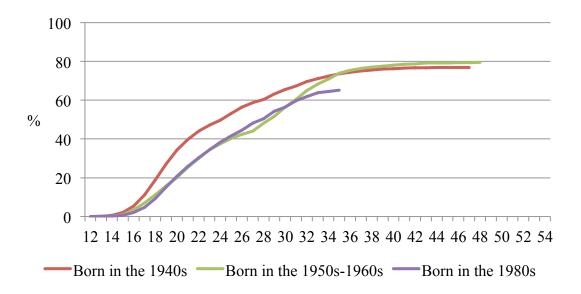


Figure 3.12: The cumulative percentage of women entering motherhood by age and cohort in National Surveys of Youth.

However, if I work with only the spell visible and divide all women in four groups according to age at first childbirth, grouping both births after 29 and no births into one category to explore early motherhood, we see that major changes have occurred between those born in 1940s-1950s and those born in 1950s-1960s (see figure 3.9). The in-between age groups of becoming mother in the twenties have stayed largely the same proportion for each survey sample, although the composition might have changed. However, the proportion of women having become mother in their teenage years is 11.2 percentage points lower among those born in 1950s-1960s in comparison with the previous survey. The proportion of women becoming mothers aged over 30 or never is 11.5 percentage points higher among those born in 1950s-1960s in comparison with the previous survey. Those born in the 1980s have proportions very similar to those of the 1950s-1960s born respondents.

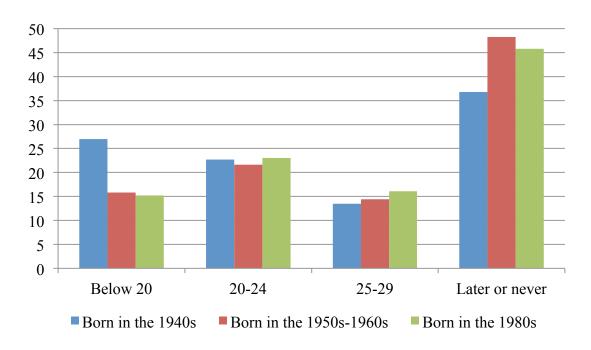


Figure 3.13: Age at first childbirth among NLSY women by age group and cohort.

As the official mean age at first birth statistics suggested, there are racial differences. Due to survey design, the only separable race category across the three surveys is the dichotomy of blacks and non-blacks. 28.3, 13.0 and 16.8 percent of the women interviewees in each respective survey are identified as black. While the graph for non-blacks reflects the survey averages seen above, the graph for black women shows a different reality of much earlier motherhood (See figure 3.10). Among those born in the 1940s-1950s, black women had more than twice the proportion of women who have had teenage births than the rest of the sample (42.8 and 20.8 percent respectively). While this proportion is down to 24.8 percent among those born in 1980s, it's still much higher than in the rest of the sample (13.3). The proportion of women having had children before reaching 30 has stayed at around 50 percent among non-blacks starting with those born in 1950s-1960s, and among blacks it's equally stable at 67-68 percent.

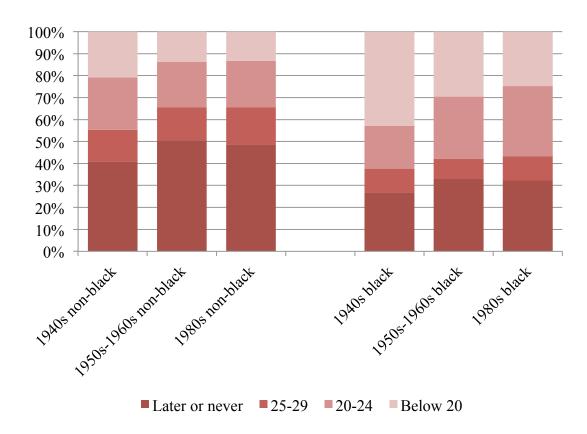


Figure 3.14: Age at first childbirth among NLSY women by race.

SES-stratification of women by age at first birth is even more stable across the three surveys (see figure 3.11). There is a clear gradient linking higher parental education (highest level achieved between the two parents) with later first births. Although educational expansion has happened in parallel, and 26.7 percent of women born in 1980s have at least one parent with four or more years of college education in comparison with 9.8 percent of women born in 1940s-1950s (the proportions for parents with less than high school education is 13.6 and 41.6 percent respectively), the link between social class and postponements of first birth is stable across the three cohorts.

To make sure that changing composition across the cohorts are not distorting the estimations for young mothers, and to check to what extent more recent early mothers might be 'left behind' because of their much more selected SES profile, I select a subsample of NLSY97 women who gave birth before the age of 25 and, using propensity score matching on age at first birth, race, parental education and migration history, construct balanced subsamples of women from the other two surveys. The comparative analysis of the balanced and unbalanced samples is to be found in section 7.5.

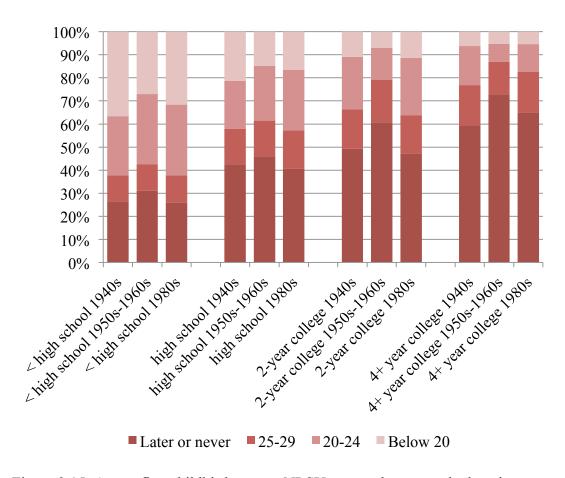


Figure 3.15: Age at first childbirth among NLSY women by parental education.

# 3.7.2 Regression Output

	Long ed	lucation	on-work	Out of labor force			Attrition			
	Coe	f.	SE	Coe	ef.	SE	Coef		SE	
Being a woman	0.371	***	-0.081	5.311	***	-0.247	0.832	***	-0.047	
1950s-1960s cohort	-0.169	*	-0.076	2.374	***	-0.257	-1.692	***	-0.065	
1980s cohort	1.268	***	-0.066	3.297	***	-0.253	-0.166	**	-0.051	
Being a woman x 1950s-1960s cohort	-0.179		-0.118	-3.345	***	-0.264	-0.275	**	-0.092	
Being a woman x 1980s cohort	0.188		-0.103	-4.284	***	-0.263	-0.348	***	-0.078	
Constant	-1.657	***	-0.05	-5.007	***	-0.243	-0.153	***	-0.029	
Pseudo R <sup>2</sup>									0.1101	
Observations									23,243	
	*** p<0.001, ** p<0.01, * p<0.05									

Table 3.5: Regression output for labor force trajectory cluster by gender and cohort.

	Long education-work			Out of labor force			Attrition			
	Coe	f.	SE	Coe	ef.	SE	Coef		SE	
Being a woman	0.360	***	0.093	5.429	***	0.282	1.074	***	0.056	
1950s-1960s cohort	-0.215	**	0.082	2.085	***	0.296	-1.473	***	0.071	
1980s cohort	1.219	***	0.071	2.913	***	0.292	0.022		0.058	
Being a woman x 1950s-1960s cohort	-0.152		0.129	-3.214	***	0.304	-0.533	***	0.102	
Being a woman x 1980s cohort	0.224		0.116	-3.998	***	0.303	-0.561	***	0.089	
Being black	-0.268	*	0.131	0.146		0.574	0.814	***	0.066	
Being a woman x being black	0.134		0.193	-0.459		0.581	-0.840	***	0.103	
Being black x 1950s- 1960s cohort	0.226		0.234	1.409	*	0.602	-0.679	***	0.196	
Being black x 1980s cohort	0.252		0.184	1.468	*	0.594	-0.502	***	0.136	
Being a woman x being black x 1950s- 1960s cohort	-0.281		0.346	-0.585		0.621	0.948	***	0.265	
Being a woman x being black x 1980s cohort	-0.288		0.265	-1.086		0.62	0.626	**	0.199	
Constant	-1.606	***	0.055	-5.040	***	0.278	-0.387	***	0.035	
Pseudo R <sup>2</sup>									0.1171	
Observations									23,243	
	*** p<0.001, ** p<0.01, * p<0.05									

Table 3.6: Regression output for labor force trajectory cluster by gender, race and cohort.

	Long ed	lucation	on-work	Out of labor force			Attrition			
	Coe	f.	SE	Coe	ef.	SE	Coef		SE	
Being a woman	0.715	***	0.145	5.541	***	0.339	0.820	***	0.067	
1950s-1960s cohort	-0.743	***	0.225	3.044	***	0.355	-1.737	***	0.122	
1980s cohort	1.163	***	0.154	3.74	***	0.357	-0.431	***	0.105	
Being a woman x 1950s-1960s cohort	-0.076		0.311	-3.699	***	0.367	-0.463	**	0.179	
Being a woman x 1980s cohort	-0.337		0.228	-4.556	***	0.377	-0.402	*	0.157	
Parents at least HS education	1.119	***	0.111	-0.067		0.488	-0.114		0.058	
Being a woman x parents at least HS education	-0.547	**	0.176	-0.482		0.494	0.035		0.094	
Parents at least HS education x 1950s- 1960s cohort	0.371		0.241	-1.066	*	0.516	0.102		0.146	
Parents at least HS education x 1980s cohort	-0.177		0.171	-0.59		0.510	0.376	**	0.122	
Being a woman x parents at least HS education x 1950s- 1960s cohort	0.04		0.339	0.755		0.530	0.221		0.212	
Being a woman x parents at least HS education x 1980s cohort	0.76	**	0.259	0.527		0.532	0.050		0.184	
Constant	-2.352	***	0.094	-4.975	***	0.334	-0.099	*	0.040	
Pseudo R <sup>2</sup>									0.1234	
Observations									23,243	
	*** p<0.001, ** p<0.01, * p<0.05									

Table 3.7: Regression output for labor force trajectory cluster by gender, parental education and cohort.

	Long ed	lucation	on-work	Out o	Out of labor force			Attrition		
	Coe	f.	SE	Coe	ef.	SE	Coe	ef.	SE	
Women, birth below 20	-0.788	***	0.233	5.895	***	0.255	0.961	***	0.083	
Women, birth between 20-24	-1.051	***	0.291	6.015	***	0.257	0.942	***	0.091	
Women, birth between 25-29	1.003	***	0.148	5.482	***	0.265	0.559	***	0.109	
Women, birth later or never	0.664	***	0.097	3.771	***	0.260	0.793	***	0.061	
1950s-1960s cohort	-0.169	*	0.076	2.374	***	0.257	-1.692	***	0.065	
1980s cohort	1.268	***	0.066	3.297	***	0.253	-0.166	**	0.051	
Women, birth below 20 x 1950s-1960s cohort	-2.618	*	1.031	-2.951	***	0.285	-0.476	*	0.191	
Women, birth below 20 x 1980s cohort	-0.372		0.303	-4.107	***	0.286	-0.834	***	0.150	
Women, birth between 20-24 x 1950s-1960s cohort	0.507		0.360	-3.410	***	0.284	-0.159		0.160	
Women, birth between 20-24 x 1980s cohort	0.800	*	0.314	-4.777	***	0.286	-0.610	***	0.136	
Women, birth between 25-29 x 1950s-1960s cohort	-0.649	**	0.229	-3.330	***	0.301	0.440	*	0.180	
Women, birth between 25-29 x 1980s cohort	-0.217		0.187	-5.008	***	0.324	-0.466	**	0.170	
Women, birth later or never x 1950s-1960s cohort	-0.193		0.135	-2.889	***	0.286	-0.439	***	0.115	
Women, birth later or never x 1980s cohort	0.453	***	0.127	-3.615	***	0.302	0.047		0.104	
Constant	-1.657	***	0.050	-5.007	***	0.243	-0.153	***	0.029	

Pseudo R2							0.1453
Observations							23,243
			*** p	<0.001,	** p<0	.01, *	p<0.05

Table 3.8: Regression output for labor force trajectory cluster by gender, age at first birth and cohort. Reference category: men.

# 3.7.3 Robustness Check with Propensity Score Matching

Knowing that selection into early motherhood has changed across these three cohorts, I wish to focus on the cumulative disadvantage of early motherhood, be it a 'side effect' of a low SES or a 'random' obstacle in one's otherwise promising life chances. Being unable to observe the completed fertility of the most recent NLSY cohort, I select a subsample of women of 1980s cohort who gave birth before the age of 25 and using propensity score matching on age at first birth, race, parental education and migration history, construct balanced subsamples of women from the other two surveys. The full sample is vulnerable to composition effects as we don't know if the early mothers are the same type of young women as they were in previous cohorts, so with propensity score matching I select the most similar girls to see what has been happening to that profile of young women across the three cohorts

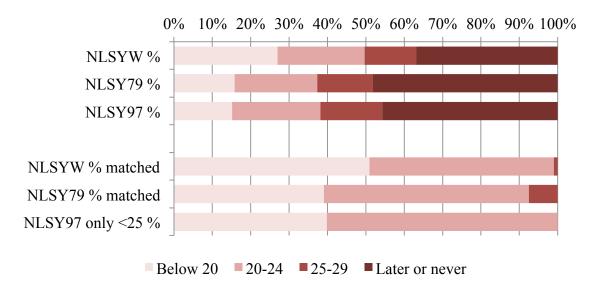


Figure 3.16: A comparison between unmatched and matched samples by cohort and age at first birth.

The matching algorithm does the expected of reducing the other two subsamples almost to only early mothers (see figure 3.13). For race (a dummy for black) and immigration background (at least one parent born abroad), the balanced subsamples are closer to the 1980s cohort than the original subsamples (see table 3.9). Also for parental education the balancing efforts also have achieved more similar subsamples (see figure 3.14).

	NLSYW	NLSY79	NLSY97	NLSYW matched	NLSY79 matched	NLSY97 only <25
Black	28.3	13.0	16.4	23.1	19.1	24.9
Foreign born parent	74	9.0	13.5	10.0	9.3	13.6

Table 3.9: A comparison between the unmatched and matched samples by cohort, race, and immigrant background (%).

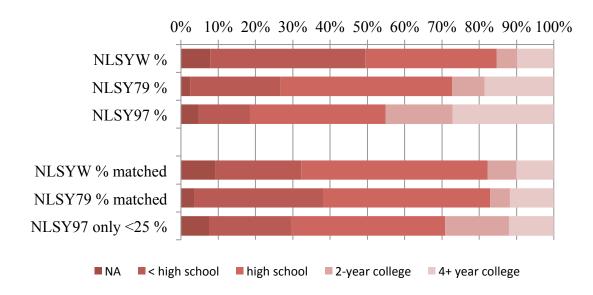


Figure 3.17: A comparison between unmatched and matched samples by cohort and parental education.

The subsample of only young mothers from 1980s cohort and their matched peers from the other surveys suggest similar albeit less pronounced developments across the three cohorts - in line with what would be expected dealing with a less privileged subsample. However, the comparison between the subsamples matched on propensity scores and subsamples simply censored at motherhood below 25 reveals that the only noticeable difference between the matched subsamples and just selection on age at first birth are that in the matched subsample of 1950s-1960s women are (a) slightly more likely than the 1940s cohorts to have had a labor force trajectory dominated by prolonged

education than in the selected subsample and (b) slightly less likely than 1940s cohorts to have labor force trajectories dominated by being out of labor force. In the subsample selected only on age at first birth it is the other way around, hence the 'gender revolution' is slightly more prominent in the matched subsample. One can observe the similarity of results when carrying out a basic null model regressing labor force cluster membership on cohorts in each subsample (see figure 3.15 and table 3.10). These results of propensity score matching justify the rationale of using age cut at first birth as a variable measuring cohort effects and not composition changes.

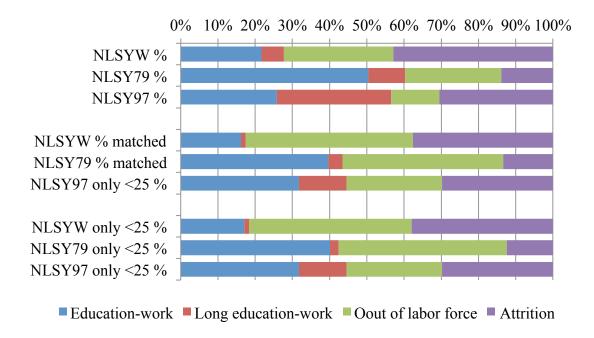


Figure 3.18: A comparison between unmatched, matched, and restricted to early motherhood samples by cohort and labor force attachment cluster.

	Long education-work			Out of labor force			Attrition		
	Coeff.		SE	Coeff.		SE	Coeff.		SE
1950s-1960s cohort	0.180		0.301	-0.937	***	0.103	-1.93	***	0.122
1980s cohort	1.627	***	0.276	-1.236	***	0.111	-0.908	***	0.111
Constant	-2.541	***	0.260	1.022	***	0.082	0.844	***	0.084
Pseudo R2									0.0555
Observations									3765

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Table 3.10: The regression output of labor force attachment cluster by cohort in the matched subsample.

	Long education-work			Out of	`laboı	force	Attrition			
	Coeff.		SE	Coeff.		SE	Coeff.		SE	
1950s-1960s cohort	-0.293		0.266	-0.822	***	0.085	-1.972	***	0.111	
1980s cohort	1.640	***	0.201	-1.157	***	0.094	-0.864	***	0.092	
Constant	-2.554	***	0.178	0.943	***	0.056	0.799	***	0.058	
Pseudo R <sup>2</sup>									0.0573	
Observations									4981	
	*** p<0.001, ** p<0.01, * p<0.05									

Table 3.11: The regression output of labor force attachment cluster by cohort in the subsample restricted to early mothers (<25) only.

# CHAPTER 4: Changing Paradigms of Mature Women's Labor Market Participation in Denmark

#### 4.1 Introduction

Explanations for women's labor market attachment are more complex than those used for men (Goldin 1990; Blau et al 1998), and they reveal interactions between personal preferences and structural constraints. As the cohorts who pioneered lifelong full-time labor market attachment are ending their careers, now is the time to map out the advancements women have made towards convergence with men in labor market achievements.

In this chapter I use Danish register data to explore the extent of convergence of the labor market trajectories and closure of the gender gap in Danish labor market for the 1940s-1960s birth cohorts. Denmark offers a very specific welfare state and labor market context as the background to the gender revolution similar to the ones that left the American 1930s-1960s 'counterrevolution' of domesticity (Millet 1969; Cooontz 1992 [2016]; Coontz 2011; Ruggles 2015) and Swedish 'return home' (Haavio-Mannila 1971) behind: early adoption of gender egalitarian values (Transgaard 1981; European Values Study 2019), generous welfare and family policies (Esping-Andersen 1990 [1991]; Gornick and Meyers 2004), high labor market participation rates (Van der Lippe and Van Dijk 2002; OECD Statistics 2016), having passed through but left behind high part-timing rates for women (Bonke 1997), but still working in very much horizontally segregated labor market (Esping-Andersen 1993, Leth-Sorensen and Rohwer 2001, Statistics Denmark 2015) to the extent that the whole public sector is sometimes analyzed as an 'alliance' between the women and the state (Hernes 1987).

In this chapter the notion of labor market attachment encompasses all three aspects mentioned before: presence in the labor market, intensity of dedication, and differentiation between public and private sector work. This approach allows for a more-fine grained analysis of labor market participation than the binomial distinction between being in or out of the labor market. The female employment revolution is a relatively recent phenomenon, even in the pioneering countries. Hence longitudinal research on labor market trajectories is becoming possible just now as the cohorts who spearheaded the massive incorporation in the labor market reach retirement age. I use

longitudinal data to look at trajectories instead of cross-sectional observations, as life-course approach allows separating the dominant dynamics from occasional blips. Throughout the chapter I compare two birth cohorts observed at the same ages, focusing on cohort effects and control for age effects. In order to estimate the extent of the gender gap in labor market attachment I compare women's trajectories with those of their male peers. As during the time period of interest male labor market trajectories have changed towards shorter work life due to educational expansion and earlier retirement (Leth-Sorensen and Rohwer 2001; Jensen and Rathlev 2010), this approach permits me to avoid comparison with an ideal-typical male trajectory and do it with actual data instead.

# 4.2 Background

By the end of the 20th century virtually all women in the West have had some labor market experience. Paid work is not just a transitory phase in woman's life (Goldin 2006), and this paradigm shift has brought about a more purposeful investment in human capital and establishment of a professional identity across social classes (Rubin 1994, Goldin 2006). After this shift in expectations regarding female employment, the question is about the extent that women's labor market attachment equals that of men.

This chapter explores the gender differences in labor market trajectories still present in one of the pioneer countries of gender revolution. Denmark has undoubtedly been at the forefront of the gender revolution, encompassing profound changes both in the labor market and work done at home (Esping-Andersen 2009 [2013], Esping-Andersen et al 2013). The social consensus on the importance of gender equality as a normative value was achieved early (Transgaard 1981, Hakim 1997 [2001]), and, according to most of the common indicators of formal gender equality (UNDP 2015; OECD Statistics 2016), Danish society seems to be very close to a complete gender convergence. Yet tensions between careers and family life have been a reality for many women of recent cohorts.

Similarly to the other gender revolution pioneer, USA, Denmark had a head start in structural conitions that tend to pull women into the labor force. Universal secondary education was achieved early (Garrouste 2010; Loft 2013) and so were solid democratic institutions (Kananen 2014). By the 1930s, inspired by the neighboring Swedish and Myrdals 'prophylactic principle', Danes had embraced the notion that 'social problems should not be only reacted against, but with careful planning they could be foreseen and

prevented in a way that simultaneously was beneficial for economic growth' (Kananen 2014: 74). Danish welfare state expanded considerably following the WWII using 'this social security system served as a mechanism of redistribution and also as a means of preventing social problems by investing in human beings' (Kananen 2014: 75).

Women's labor market participation in all working age groups increased since 1940, from below 40 per cent to more than 80 per cent in 2010s, especially steeply between the 1960s and 1980s (Bonke 1997, OECD Statistics 2016). The universalist welfare state required maximum employment to cover the costs of its programs and to fill the newly created public sector jobs (Esping-Andersen 1990 [1991]). The time of the great advancement in women's labor market attachment in Denmark is meshed with several other phenomena: the overheating of the Danish economy in the early 1970s and the preference to incentivize the labor market participation of women instead of inviting foreign guest-workers (Esping-Andersen 1990 [1991]: 170-173, Lewis 1992, Koch-Nielsen 1998, Jensen and Rathlev 2010), as well as the rise of the consumer culture and subsequent demand for 1.5 or 2 salaries per household (Koch-Nielsen 1998). Late 1970s and 1980s were marked by recessions (World Bank 2019), followed by public sector restructuring (Lidegaard 2009; Kananen 2014) but without losing coherence in state's approach to family policy as aimed at 'reconciling work and family life [in order to] increase labor supply by enabling both fathers and mothers to take up formal employment' (Abrahamson 2010: 408).

Hence, following a change in attitudes (Transgaard 1981; European Values Study Group 2015) and massive incorporation of women in the labor force (Transgaard 1981; Hansen 1993; Bonke 1997), I expect that

H1: There will be less gender differences in labor market trajectories between men and women of the younger cohort.

Denmark is the example where women's labor force participation has been hand in hand with public sector growth and occupational sex segregation (Esping-Andersen 1993). The growth of women's participation rates was accompanied by a considerable increase in the cross-sectional part-time work for women, peaking at almost 50 per cent of all employed women in 1978 (Bonke 1997) and decreasing until 32 per cent in 2001 (Wehner and Abrahamson 2003) and 37.3 per cent in 2013, as opposed to 23.1 of all

employed men in 2013 (Statistics Denmark 2015). It has to be taken into account that since the 'part-time working women frequently work hours long enough to be classified as full-timers [in other countries]' (Blossfeld and Drobnič 2001b: 39) and the higher quality of part-time jobs in Denmark in comparison with other countries (OECD 2004). In Denmark since the early 1990s, normal weekly hours of 37 and overtime premiums have been established through collective bargaining (OECD 1998, Lee 2004), a change that started with the Metal Working Industry Agreement and later spread to other sectors. While this change has made shorter hours the mode of the duration of a full-time workweek (Bishop 2004, Lee 2004), in early 2000s almost a third of the men and 10 per cent of the women employed reported having a workweek over 40 hours (Bishop 2004). However, already in the early 1980s, people of both sexes had roughly the same job tenure and labor turnover, both among those working part-time and those working full-time (Hakim 1997 [2001]).

Despite the high participation rates and an early attitudinal shift towards gender egalitarianism, the Danish labor market is very segregated by gender (Esping-Andersen 1993, Leth-Sorensen and Rohwer 2001, Statistics Denmark 2015). The expansion of the Danish welfare state has created a virtuous loop of public employment for women, boosting participation rates. In the late 1990s, 30 per cent of all employees worked in the public sector, and almost 45 per cent of all employed women did (Leth-Sorensen and Rohwer 2001, Statistics Denmark 2015). Women typically concentrate in the public sector, and it has been suggested that they 'still suppress their own long-term job opportunities, earning profiles, and other job-related interests when they raise young children' (Blossfeld and Drobnič 2001a: 7) and previous research in links between labor force attachment and fertility suggests that families adjust their behavior differently to male and female unemployment spells, hence 'the labour force situations of men and women are not interchangeable, even in societies like Denmark' (Baizán 2007: 121). It has been found that 'motherhood as well as lower potential wage compensation during maternity leave in the private sector increases the probability of being employed in the public sector. In the wage functions, the total effect of birth-related leave is found to be close to zero in the public sector although it varies with education. In the private sector, women lose earnings regardless of the level of education. However, self-selection implies that the women who would be affected by this penalty enter the family- friendly sector instead' (Nielsen et al 2004: 743).

SES-differentiated human capital investments imply that women with higher education are less likely to pursue these feminized trajectories and more likely to have trajectories closer to those typical of men (Han and Moen 2001; Henz and Sundstrom 2001; Leth-Sorensen and Rohwer 2001; Goldin 2014). Hence my second hypothesis:

H2: The trajectories of men and women with higher educational attainment are more similar than those of men and women with less education.

Coinciding with the second wave of feminism and rising prominence of unmarried cohabitation (Bracher and Santow 1998; Loft 2013), during the same decades of women's massive incorporation in the the labor force, age of marriage and first childbirth were postponed swiftly among the Danes. The age of marriage rose 22.9 in 1970 to 32.4 in 2012 (Loft 2013). The age at first childbirth rose from 23.9 for the cohort born in 1950 to 27.4 for the 1968 cohort (Frejka and Sardon 2006). The period total fertility rate reached a record-low for Denmark – 1.38 – in 1985 (Loft 2013), although it has bounced back to replacement levels since inverting the previous link between less education and higher fertility (Andersson 2002; Vikat 2004; Gerster et al 2007; Myrskylä et al 2009).

The ideal-typical model of the Danish family is having two breadwinners and the state serves as the care-provider (Esping-Andersen 1999, Jensen et al 2010, Jensen and Rathlev 2010, Pfau-Effinger et al 2010). The tax system is aligned to the dual earning paradigm, too. There is no fiscal incentive for the breadwinner-homemaker model from the highly individualized Danish taxing system (Blossfeld and Drobnič 2001b, Leth-Sorensen and Rohwer 2001; Loft 2013).

This two-breadwinner ideal is reflected in the parental-leave policies. In comparison to Norway and Sweden that have had more generous maternity-leave arrangements since the early 1960s, Denmark has opted for instituting somewhat shorter leaves in comparison with neighboring countries and promoting public childcare to balance it out (Ellingsæter 1993; Datta Gupta et al 2006). The high coverage by public day-care institutions – available since much earlier than in most Western countries (Garrouste 2010) and of quality (Esping-Andersen et al 2012) - 'helps to preserve women's close contact with the labor market and their human capital investments during maternity' (Jensen and Rathlev 2010: 46): 'in Denmark, the decision to have children involves

much less of a trade-off, due to existence of a flexible labor market and the possibility to take comparatively long paid parental leave, coupled with strong support to parenthood from the state in the form of income support and, especially, childcare' (Baizán 2007: 108). Family policies, especially the basically universal and uniform parental leave schemes, typically structure the timing of childbearing-related exits and reentries from the labor force (Pylkkänen and Smith 2004). Most care work previously done in the family is now taken care of by public services (Jensen et al 2010, Jensen and Rathlev 2010, Pfau-Effinger et al 2010). Hence a more equal sharing of care work has been possible not only due to a value change but also due to a lighter overall load. This institutionalization of care work and the sheer size of it make public sector employment a key aspect of Danish labor market.

Suggesting links of either self-selection into public sector or reaction to the favorable working conditions, working in the Danish public sector has been proved to have a significant positive effect for the advancement to higher parities (Baizán 2007). In line with previous research on the Nordic fertility turn (Andersson 2002; Vikat 2004; Gerster et al 2007; Myrskylä et al 2009), 'a clear positive income gradient is found in the risks of second and higher order births, consistent with the predominance of income effects over price-of-time effects in this society' (Baizán 2007: 116). Meanwhile, the same previous research suggests 'that women with different educational levels in each labor market status face similar conditions and display similar strategies as regards having an additional child' (Baizán 2007: 118). And previous research suggests both closed motherhood penalty gap (Datta Gupta and Smith 2002) and that 'by and large Danish women face few genuine problems of reconciling children and careers' (Esping-Andersen et al 2007: 147): 'the impact of substantial state support for parents [in Denmark] allows both fathers and mothers to continue with full time employment with enough time to care for pre-school age infants to avoid any significant increase in time stress' (Nazio and MacInness 2007: 179). Even so, there is also evidence of gendered differences in time dedicated to parenting from the same time period: 'having children only affects women's time spent on the labor market not that of men, and that the time spent on children for women is taken from paid work as well as from leisure, while for men time spent on children primarily goes from their leisure time' (Bonke 2012: 21).

However, I want to see if even this comparatively low care burden (Ellingsæter 1993; Esping-Andersen 1999; Sarasa and Mestres 2007; Jensen et al 2010, Jensen and Rathlev

2010, Pfau-Effinger et al 2010) and low family-related stress (Nazio and MacInnes 2007) environment creates labor market attachment differentials for people who have chosen to create large families. It would still be expected – partly due to selection effects of being among those wishing to go over the 2-children norm (Goldstein et al 2003; Frejka 2008) - that large household care burdens will affect women's work trajectory, pulling her away from male-typical trajectories (Blossfeld and Drobnič 2001a, Han and Moen 2001, Henz and Sundstrom 2001, Leth-Sorensen and Rohwer 2001, Stone 2007, Aisenbrey et al 2009, Cooke 2014). In 2001 both the average desired family size and the expected among young Danish women were above the replacement level and very close to each other, 2.4 and 2.2 respectively (Goldstein et al 2003), so those having three and more children are the ones having larger families than the social norms would imply. As previous literature has suggested, whatever care burden remains in families of these cohorts, has not been shared equally, hence the expectation of gendered impact of care burden. Hence my third hypothesis:

H3: Women without large household care burden – up to two children present in their household during the most active labor market years – will be the ones closer to gender convergence with their male peers than women with large care burden (three and more children) whom I expect to have had significantly less attached labor market trajectories. I also expect the care burden not to mark significant differences between men's labor market attachment.

#### 4.3 Data and Methods

Previous research has found women's labor market trajectories to be dynamic to an extent that preferences stated early in life, or even behavior at some point, hold little predictive value for the later life course or are revealed only under certain contextual conditions (Gerson 1985; Hakim 1997 [2001], 2002; García-Manglano 2015). Hence the optimal data for my analysis would be longitudinal data covering the whole life course.

The Danish register data maintained by Statistics Denmark permits me to carry out such research design. This unique dataset follows the entire population since the mid-1980s and contain individual and greatly detailed yearly information on labor market participation. Register data offer more precision than other types of data because the

data are not self-reported, there is no attrition, no recall or desirability bias. The drawback is the lack of information on attitudes and interpretations of behavior, and very limited information about years prior to 1986.

	Birth years	Observed years	Observed ages for the oldest in the cohort	Observed ages for the youngest in the cohort
Cohort 1	1947-1956	1986-1998	39-51	30-42
Cohort 2	1960-1969	1999-2011	39-51	30-42

Table 4.1: A summary of the birth cohorts and observed years used in the chapter.

In Denmark, as in the USA, the quiet revolution in the labor market started with women born during the 1940s (Koch-Nielsen 1998, Blossfeld and Drobnič 2001b, Henz and Sundstrom 2001, Pfau-Effinger 2005). Therefore, it is reasonable to take these cohorts as the baseline for the evolution of the women's labor market trajectories in the last decades of the 20th century, and then follow the subsequent cohorts.

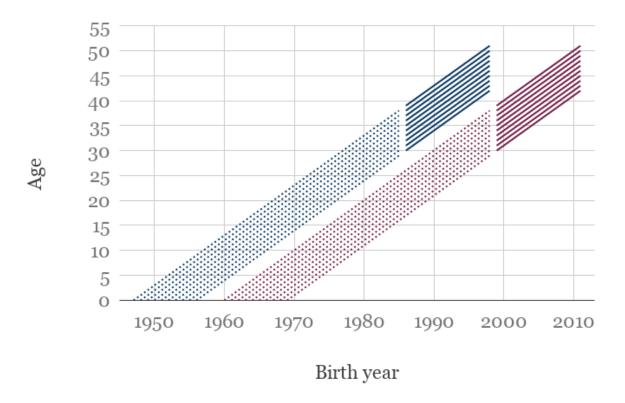


Figure 4.1: The A graphic representation of the two Danish cohorts used for this paper, 1947-1956 birth cohorts in dark blue, and 1960-1969 in purple. The dotted areas represent the prior life experiences to the observed time window, and solid lines – the years observed.

The register data allow me to observe 26 consecutive years between 1986 and 2011. I am unable to work with full labor market trajectories, as the 1940 birth cohorts entered in the labor market in the late 1950s and early 1960s when the registers were not yet set up, and younger cohorts are only half-way through their labor market trajectories. Trying to disentangle age from cohort effects while getting the most out the data, I compare two subsamples of birth cohorts at the same ages throughout a 13-year period. I observe those born between 1947-56 and 1960-69 between ages 30 and 51 (see Table 4.1 for more details and Figure 4.1 for a visualization). Although full trajectories are not available, the available data contain the key age window for both professional and family lives for these cohorts where the most conflict between the two is to be expected<sup>2</sup>.

The final sample is restricted to individuals who lived in Denmark in the first observed year (1986 for 1947-56 cohorts and 1999 for 1960-69 cohorts) and have information for all years (i.e. they haven't lived abroad during the years observed). I keep the observations that experience early exit (death) but do not allow later entrances (immigration). Register data contain the whole Danish population, but the computational capacity required for the chosen methodology obliges me to select a smaller random sample to work with. I have drawn a random subsample of 20.000 observations for each of the subsamples. Hence the final sample of 40.000 observations is still large and representative.

I use sequence analysis in order to maintain the complexity of trajectories in a longitudinal analysis (Widmer and Ritschard 2009; Barban 2011) and to capture the patterns behind the sequences (Abbott 1995; Abbott and Tsay 2000; Billari 2001; Aassve et al 2007; Barban and Billari 2012). Sequence analysis serves as a purely descriptive technique, permitting the construction of a whole sequence of events without any assumption about them (Abbott and Tsay 2000), which is particularly useful in a field where capturing and conceptualizing heterogeneity is an ongoing challenge (Gerson 1985, Goldin 1990, Hakim 1997 [2001]). I apply sequence analysis to create a longitudinal trajectory of labor market related activity (R Development Core Team 2011, Gabadinho et al 2009, 2011; Studer 2013; Halpin 2014).

<sup>&</sup>lt;sup>2</sup> I also carried out an identical design with cohorts born between 1957-66 and 1970-79 observed between ages 20-41. The results were exceedingly similar to ones presented in this chapter and are available upon request.

The labor market activity sequence includes the relationship with the labor market, the intensity of that attachment if the individual is working and if the paid work is carried out in the private or public sector. Due to data limitations, until 1994 it is impossible to distinguish the type of paid work that the person observed is engaged in. Only from then on I am able to distinguish between employment in public or private sector, part-time work and full-time work. So throughout the results I assume that the importance of part-time work and the sectorial divide is underestimated, and take it into account when deciding on the cluster solution. This also implies that in determining the cluster membership for the older cohort, last observed years weight more than the first ones. Hence that intra-cohort gender comparison is more robust than between-cohort comparison.

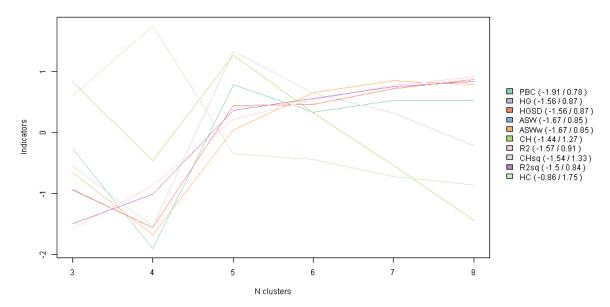


Figure 4.2: A graphic representation of the quality of a partition for cluster solutions from 3 to 8 for Labor Market sequences in standardized values. The cluster quality measures depicted are (from top): Point Biserial Correlation, Hubert's Gamma, Hubert's Somers D, Average Silhouette Width, Average Silhouette Width weighted, Calinski-Harabasz index, Pseudo R2, Calinski-Harabasz index squared, Pseudo R2 squared, Hubert's C. For a discussion on the particularities of each measure, see Kaufman and Rousseeuw 1990 [2005], Studer (2013) and IDEMO (2018).

There are 10 possible sequence states: (1) working full-time in the public sector, (2) working full-time in the private sector, (3) working part-time in the public sector, (4) working part-time in the private sector, (5) working but with further details unknown, (6) being on a leave (sick, maternity, sabbatical, etc.), (7) being unemployed, (8) being

in school, (9) being out of the labor market (retired or otherwise not active), and (10) dead. The data are collected yearly and register one's relationship with the labor market at the end of each November. So I have to accept that spells of shorter duration (for example, a maternity leave from January until September) are overlooked in these data. I have opted for the most data-driven optimal matching. My optimal matching substitution costs are the transition rates observed in the datasets and my indel costs are one (Gabadinho et al 2009, 2011).

I cluster each of the subsamples using partitions around medoids (Studer 2013). The decision about the number of clusters was driven both by the research question as there are three dichotomies of interest: labor market activity vs. inactivity, full time vs. part time work, and public vs. private sector work, and the measures of quality of partition (Studer 2013). Five is the optimal number of clusters for the labor market activity sequence (see Figure 4.2) but a closer inspection reveals that partitions beyond three are driven by the missing labor market information until 1994, hence affecting only the older subsample (see Figure 4.4 in Results section for a visualization of all sequences by cohort and gender). So I merge the subsample specific clusters, and continue with a set of three clusters applied to both subsamples.

First I provide a description of the typical activity in the labor market at the observed age windows by (a) subsample and gender and, following clustering, (b) cluster, subsample and gender. Then I apply a multilogit regression analysis to examine variables linked to labor market cluster membership. Labor market activity clusters serve as the dependent variable, and the cluster dominated by private-sector work is the reference category in all four models, as it is the most numerous in both subsamples. The independent variables introduced are gender, subsample (0 'older subsample', 1 'younger subsample'), education level (1 'secondary or less', 2 'vocational training, 3 'tertiary education'), and household care burden (1 'having had three or more minors in one's own household for seven or more years during the observation window').

This operationalization of large care burden is driven by the fact that Danish families have a relatively small care burden due to the high levels of formalized care by the welfare state (Jensen and Rathlev 2010; Sarasa and Mestres 2007), making the number of children raised in the household the most straightforward and common stratifier of amount of care provided by the household. For this design those that have had three or

more minors in their household for seven or more (not necessarily consecutive) years of the observed thirteen are considered having had a large care burden (see figure 4.1 for the proportion of observations of each subsample that qualify as having had a high care burden in each observed year). Use of a dummy instead of a parallel sequence allows for a more parsimonious design and setting the threshold at three and more children in a society with a strong two-child norm (Goldstein et al 2003; Frejka 2008) allows to single out those with both large care burden and, supposedly, strong preference for children and family. Hence labor market convergence between this highly selected group and the rest of the population would suggest very weak links between labor market and family trajectories. However, the only variable available that consistently measures the presence of children overestimates the care burden as it captures 'the number of children in the household [including] all persons under the age of 25, who are children of at least one other person in the household [...] does not have children [on their own], is not part of a couple and has never been in marriage or registered partnership'.

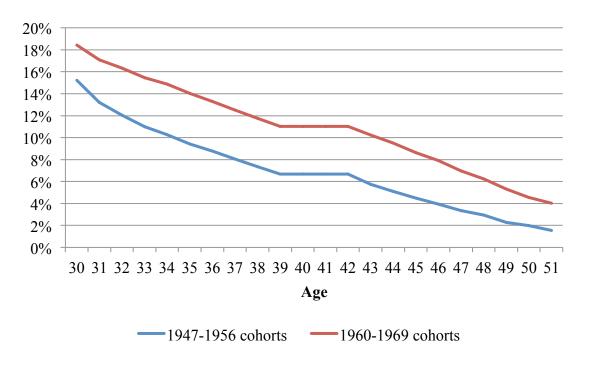


Figure 4.3: The proportion of observations with 3 or more 'children' in the household by subsample and age.

The key results of the regression analysis (table 4.2 in the Annex and figure 4.4 in the Results section) is the likelihood of the labor market activity cluster membership depending on the effects of the four-way interaction among gender, subsample,

education level, and household composition cluster membership. These are discussed and presented in graphical form as predicted probabilities in the Results section.

#### 4.4 Results

# 4.4.1 The Labor Market Activity Sequence States and Trajectories

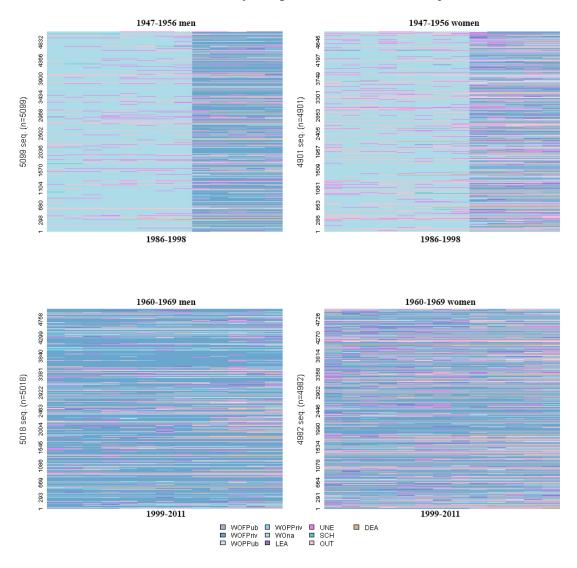


Figure 4.4 Index plots of the labor force sequences by gender and cohort.

Despite the lack of details for 1986-1993, a division of the labor market trajectories by gender and subsamples (see figures 4.4 and 4.5) reveal several key differences. The trajectories of women in both subsamples are more often dominated by public sector work, part-time work and being out of the labor force. Differences between subsamples are less clear at this level of inspection, as only the last five years of the 1947-56

trajectories are directly comparable to 1960-69 trajectories. The only major difference is reduction in public sector work for both men and women.

An inspection of the visualization of the mean years spent in each state (see Figure 4.5) confirms the gender differences in years spent in private and public sector work. In both samples women spend more time working in the public sector and men spend more time working in private sector. Furthermore, in each of the subsamples women are somewhat more likely to be in part-time work, to be on leave, in unemployment and out of labor force. The only one of the marginal states that men are more likely to be in is being dead. Hence a preliminary exploration of the sequences reveals gender differences but do not suggest a change across the two cohorts observed.

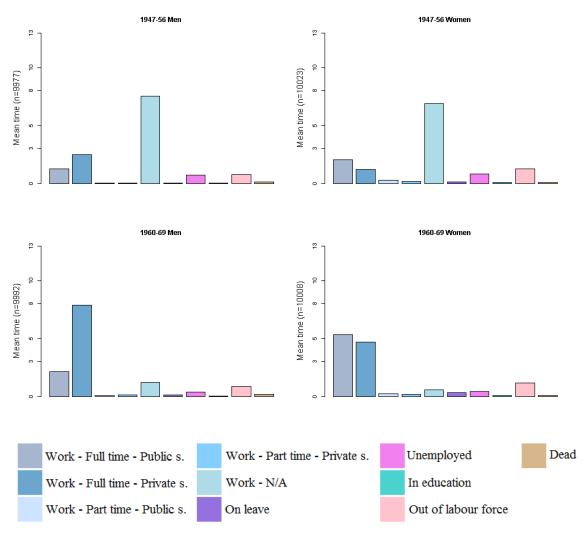


Figure 4.5: Mean years spent in each Labor Market sequence state by cohort and gender.

# 4.4.2 The Labor Market Activity Clusters

The three cluster solution organizes the sequences according to the two of the three dichotomies of interest (only being active vs. out of the labor force and private vs. public sector employment, and not working full-time vs. part-time), and solves the missing employment condition information for the older subsample by merging the cluster solution from five to three on the basis of the fully informed part. The clustering solution emphasizes the importance of the sectorial divide seen in the descriptive analysis and reflects the negligible long-term impact that part-time work has as a defining characteristic of the trajectories observed (see Figure 4.6).

The private sector work dominated cluster – the most numerous in both subsamples – brings together trajectories dominated by private sector employment, and the public sector cluster does the same with public sector employment, and trajectories marked by absence from the labor market, unemployment and part-time work are in the out-of-labor force cluster. The relative importance of each cluster is in line with the status quo of the labor market for these Danish cohorts: almost universal labor market participation, mostly in the private sector but also in the very considerable public sector. While lack of data about private/public division does not permit to see such dynamics in the two clusters dominated by paid work, the Out of Labor force cluster index plots (see Figure 4.6) that typical trajectories sorted into this cluster start out more diverse – featuring paid work, unemployment, leaves, schooling - albeit intermittent and then tend towards more out of labor force states in later years observed. This would suggest that people sorted into this cluster are the ones with turbulent trajectories in their 30s and then tend towards an exit from the labor force in their 40s.

Unequal gender distribution in each of cluster reflects the gendered Danish labor market. In both subsamples more than two thirds of men are sorted into private sector cluster (See figure 4.7) while less than 45 per cent of women are sorted into this cluster. At the same time less than 30 per cent of men are sorted into public sector cluster while more than 45 per cent of women are. For these birth cohorts at these ages, the out-of-labor-force cluster is clearly marginal. 10-11 per cent of women and 7-8 per cent of men are sorted into this cluster. A comparison between the two subsamples suggests a movement away from the public sector cluster for both men and women.

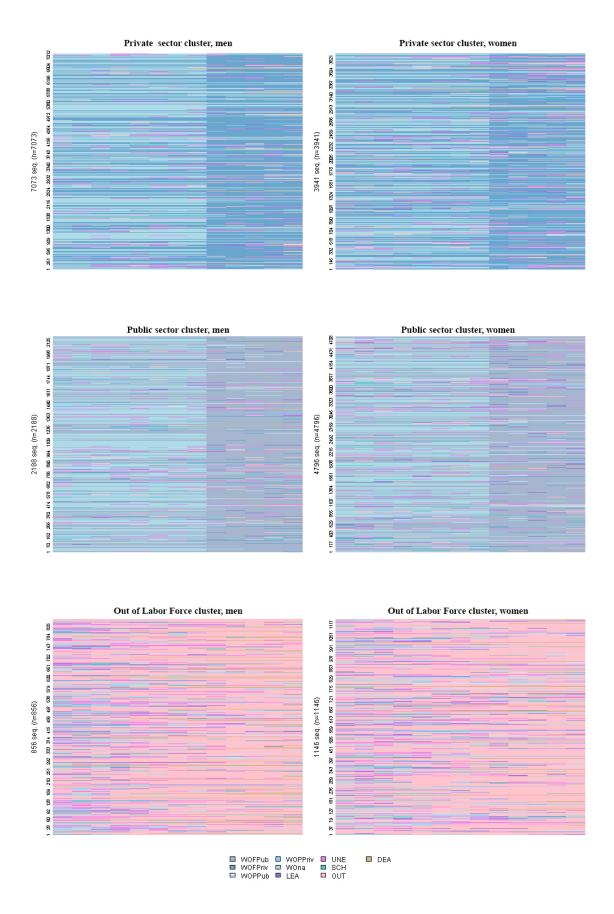


Figure 4.6 Index plots of the labor force sequences by cluster and cohort.

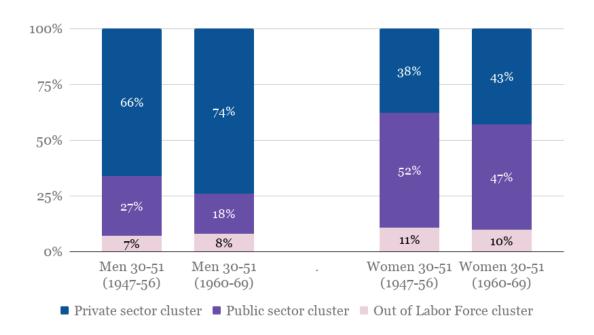


Figure 4.7: The division of each subsample by gender and cluster membership.

I do not find any evidence of Danish women migrating from the private sector to the public en masse to ease the work-family reconciliation, despite having explored the cluster division up to eight clusters. While such sectorial moves might be a strategy practiced by some people at executive positions, none of the algorithmic division to up to eight clusters found a cluster dominated by transitions from one sector to the other. Also, as noted in previous research (Nielsen et al 2004) it is hard to pinpoint to what extent decisions about sectorial choice are taken from the very entrance in the labor force or in response to realities encountered there. As the observation window of this paper covers age between 30 and 51, my results suggest that these decisions are taken early on and not, for example, after the birth of the second or third child or when one's parents start to ail.

# 4.4.3 The Regression Analysis

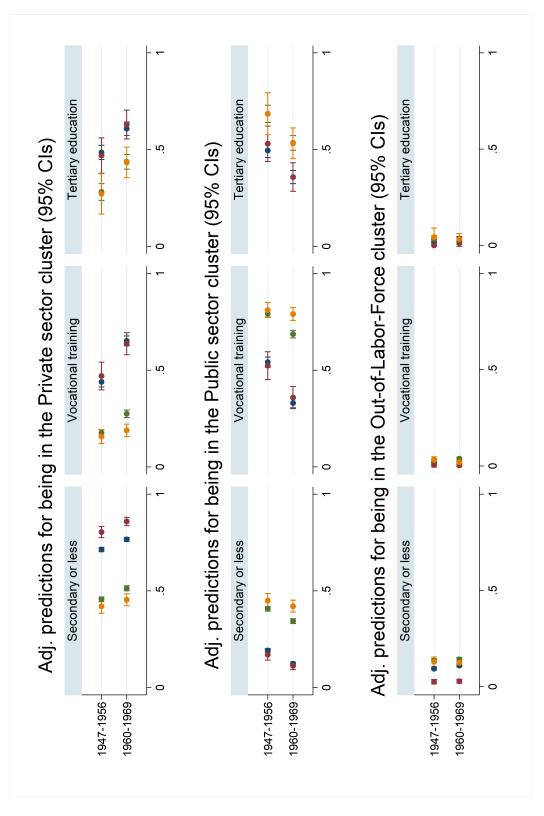
As expected, each of the four independent variables – gender, subsample, education, care burden – has a proper dynamic in relation with the three labor market clusters and each other (see figure 4.8). Overall, in line with the descriptive exploration of the clusters, men are more likely to be in the Private sector cluster and women – in the Public sector cluster. The likelihood of being in the Out of Labor Force cluster is very low for all, reflecting gender convergence in the almost universal participation in the labor force. The only ones standing out as having even less probability of being in this

cluster than the rest are 1947-1956 men with less education and with a significant care burden, probably a vestige of the blue collar breadwinner paradigm.

As the descriptive results already suggested, contrary to Hypothesis 1, there is little evidence of change in labor force attachment between these two consecutive cohorts. The only cohort change captured by this research design indicates increased likelihood of having a private sector dominated trajectory as opposed to a public sector trajectory, in line with the 1990s restructuring of the welfare state (Lidegaard 2009; Kananen 2014).

In both clusters characterized by paid work, education and not the birth cohort is the variable linked with gender convergence, in line with Hypothesis 2, the tertiary educated subgroups are undistinguishable in their probabilities of having public sector dominated trajectories and almost undistinguishable when it comes to private sector dominated trajectories, though there is still a vestige of gender division in the private sector cluster. Care burden is linked with significantly different probabilities among the lower educated, but this gap disappears among the tertiary educated. The only visible cohort effect is a general move towards less public sector work and more private sector work among the higher educated.

Gender predicts a significant gap in cluster membership probabilities, and levels of care burden at home further orders them. The degree of overlap varies, but the order is the same in all subgroups partly in line with Hypothesis 3: men with a significant care burden are the ones most likely to have a Private sector work dominated trajectory while women with a significant care burden are the least likely. The implication here is that men with big care burden at home are the ones most likely to work in the least sheltered labor market segment while their partners are likely to have chosen the most sheltered one. Hence, the effect of care burden for women is as expected but, where I expected no effect for men, there is an effect mirroring that for women and suggesting traces of the new home economics specialization (but in a context of almost universal labor force participation).



• Men without large care burden

Men with large care burden

Figure 4.8: Adjusted predictions of the four-way interaction between gender, cohort, education level, and care burden (95% CIs).

<sup>•</sup> Women without large care burden

<sup>•</sup> Women with large care burden

At least with this research design, hose with only high school education or less seem to be moving away from gender convergence and towards a neo-traditional arrangement inside the labor market. Women with less education in the younger subsample are more likely to have had public sector dominated trajectories, especially so if they have also had a considerable care burden, in line with other research indicating public sector work as a safer haven for those preferring stability and more generous working conditions (Baizán 2007; Esping-Andersen et al 2007). Men with high school education or less, especially those with care burden, have increased the likelihood of private sector dominated trajectories.

#### 4.5 Discussion

The most important finding of this chapter is that both subsamples follow the same pattern of clustering around the same three modes of relating with the labor market. Out of three key stratifiers introduced in the analysis – labor market activity vs. inactivity, full-time vs. part-time work, and public vs. private sector work – only two drive the clustering. Participation in the labor market is almost universal, and the absences are almost symmetrical. There's a 4 percentage point difference between the proportions of men and women in the Out of labor force cluster in the 1947-56 birth cohorts, and 2 percentage point difference between men and women born between 1960-69 (see figure 4.7). In line with previous literature (Esping-Andersen 1993, Leth-Sorensen and Rohwer 2001, Nielsen et al 2004), the sectorial division between public and private sectors is a key aspect to the gendered Danish labor market trajectories.

While private/public divide emerges prominently in this paper, differences between full-time and part-time workers do not. The distribution of part-time work is clearly gendered and a significant share of women and men is working part-time at any given moment in time, but for these cohorts it serves only as a transitory phase in one's career.

My analysis confirms the importance of several variables that promote or hinder gender convergence. However, the Hypothesis 1 is rejected: there is no cohort effect towards closing of the gender gap, only an overall movement away from public sector dominated trajectories.

Hypothesis 2 is confirmed: education level is a key predictor of gender convergence. Those with most education have followed very similar trajectories despite gender or care burden differences while at lower education levels the gender gap is much wider.

At least within the limits of this research design, I find no clear indication of 'system-based glass ceiling' with 'some of the family-friendly schemes [having] serious boomerang effects on women's position in the labor market, especially for the more educated women (Datta Gupta et al 2006: 33; also Mandel and Semyonov 2005, 2006; Orloff 2008, 2009). However, my research question is not explicitly aimed at assessing women's access to leadership roles, so my findings go only as far as to confirm more consistent labor market attachment among tertiary educated women, both in private and public sector.

Hypothesis 3 is partly confirmed: the likelihood of being in one labor market cluster or other is affected by one's care burden, but only for those with education below tertiary and even then the effect sizes are very small. Meanwhile, the least educated men are the ones most likely to be in the Private sector cluster, suggesting either lack of skill giving access to public sector or remnants of the provider-breadwinner role. However, the overall subtlety of the findings suggests that household composition has a limited impact one's work trajectory, presumably due to the family-friendly institutional setting.

My analysis confirms the partiality of the apparent gender egalitarianism of the Danish labor market. Sequence analysis has permitted to summarize longitudinal and multivariate data and to obtain a synthetic measure of the labor market trajectories. The possibility of including several variables of interest among the sequence states allows for a more flexible design where the final cluster solution is already part of the findings, in this case emphasizing the importance of the sectorial divide and disproving the importance of the part- and full-time divide.

I have to conclude that there is convergence in labor market participation previous to these two cohorts, although lower educated women with high care burden lag behind it. Once inside the labor force, both Danish men and women work full-time for most of their lives in a labor market heavily gendered by sector. In this chapter I have not observed a solid cohort effect towards sectorial gender convergence. A replication of this research design once younger birth cohorts reach the same ages might either reveal those born in 1970s and afterwards as the cohorts achieving full gender convergence in Danish labor market or confirm my finding: an ongoing horizontal labor market segregation and gender convergence only for the highly educated.

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## 4.7 Annex

	Public sector			Out-of-Labor-Force		
	Coef.		SE	Coef.		SE
Constant: Man - 1947-56 - HS or less Without large care burden	-1.310	***	0.031	-2.030	***	0.042
Woman - 1947-56 - HS or less Without large care burden	1.196	***	0.041	0.818	***	0.057
Man - 1947-56 - HS or less With large care burden	-0.246	*	0.103	-1.409	***	0.237
Woman - 1947-56 - HS or less With large care burden	0.427	**	0.134	1.442	***	0.268
Man - 1960-69 - HS or less Without large care burden	-0.514	***	0.049	0.088		0.058
Woman - 1960-69 - HS or less Without large care burden	0.226	***	0.063	-0.159	*	0.081
Man - 1960-69 - HS or less With large care burden	0.041		0.149	-0.073		0.308
Woman - 1960-69 - HS or less With large care burden	0.104		0.187	0.030		0.350
Man - 1947-56 - Voc. tr. Without large care burden	1.518	***	0.063	-1.167	***	0.208
Woman - 1947-56 - Voc. tr. Without large care burden	0.103		0.090	0.665	**	0.251
Man - 1947-56 - Voc. tr. With large care burden	0.145		0.188	0.129		1.053
Woman - 1947-56 - Voc. tr. With large care burden	-0.196		0.256	-0.074		1.115
Man - 1960-69 - Voc. tr. Without large care burden	-0.373	***	0.094	-0.536		0.299
Woman - 1960-69 - Voc. tr. Without large care burden	0.067		0.127	0.341		0.353
Man - 1960-69 - Voc. tr. With large care burden	0.165		0.257	-0.161		1.482
Woman - 1960-69 - Voc. Tr. With large care burden	0.075		0.340	-0.170		1.568
Man - 1947-56 – Tertiary Without large care burden	1.330	***	0.082	-1.242	***	0.286
Woman - 1947-56 — Tertiary Without large care burden	-0.326	*	0.140	0.332		0.404
Man - 1947-56 — Tertiary With large care burden	0.347		0.227	-12.856		875.214
Woman - 1947-56 – Tertiary With large care burden	-0.492		0.380	13.100		875.214

Man - 1960-69 – Tertiary Without large care burden	-0.035		0.118	0.290		0.352			
Woman - 1960-69 – Tertiary Without large care burden	-0.366	*	0.184	-0.825		0.513			
Man - 1960-69 – Tertiary With large care burden	-0.178		0.309	13.301		875.214			
Woman - 1960-69 – Tertiary With large care burden	-0.000		0.477	-13.387		875.215			
Observations						40000			
Pseudo R <sup>2</sup>						0.114			
*p<0.05 ** p<0.01 *** p<0.001									

Table 4.2: A summary of the regression output organized by education levels.

#### **CHAPTER 5: Conclusion**

'That sexual revolution became a social revolution, and the shape of human relations was changed for ever. It can't be undone. Women will not return to sexual and political subjection without a fight to the death. But some people are still unaccountably angry that that sweeping social change was ever thought of, and have hung screaming on to our ankles every step of the long, slow trudge to gender equality. We are not there yet.'

(Laurie Penny 2014: 8)

In this chapter, I summarize the main conclusions and implications of chapters 2-4 and discuss their limitations and some potential avenues for future research. Each of the three empirical articles addresses the question of "under what conditions do men and women have the same intensity of labor market attachment". Chapter 2 focuses on establishing the profile of those most likely to have spent many years out of the labor force, examining whether these absences are linked to traditional family roles or other variables structuring one's life chances in two very different policy environments, Denmark and the USA. Chapters 3 and 4 explore labor market attachment patterns among young (American) and mature (Danish) adults, estimating the degree of gender convergence in terms of labor market attachment, and identifying which factors promote or hamper this convergence. Major strengths of this thesis include the throughout lifecourse approach, focus on cohort comparison, and use of interactions to reveal the subgroup heterogeneity.

### 5.1 Overview of the Three Empirical Chapters

Chapter 2, with its focus on the absence from labor force, establishes the baseline for the rest of the thesis: the typical behavior for the cohorts analyzed is to be in the labor force; absences are typically of short duration. At the same time, crucial differences in women's labor force participation are identified, with Danish women being almost as attached to employment as are American or Danish men; in contrast, American women on average spend more years out of labor force. The most obvious explanation for this difference is the availability and cost of quality childcare that enable Danish women to return to the labor force in less than a year and stay attached to it. In comparison, three years of absence from labor force appears to be the average solution for the American women. This is in line with previous research describing the post-childbearing decision-making of American women as bi-modal: '75 percent of all women are back at work

only six months after the birth of a first child [but] many women drop out of the labor force altogether for some years' (Aisenbrey et al 2009: 599; also Esping-Andersen 1999). My research focuses on the cumulative years out of labor force, not only the absences after having a child, but the great gap between the time American women tend to spend out of labor force and the estimates for American men, and Danish men and women, confirms the very different interface between gender (and family) and labor force participation in the two cases explored.

Chapter 2 also explores the other side of absence from the labor force, namely that rather than 'opting out', one is 'expelled' from the labor force or at least perceiving that the wages she can expect are so low that she would need public assistance to make the ends meet anyway (Burtless 1995). And the interaction of being a women and socially disadvantaged – be it in terms of race, immigrant background, or low education – increases the amount of years spent outside the labor force. The cumulative absence of men also vary with social class (lower educated and racialized men are accumulating more years of absence in USA and men with immigration background – more years of absence in Denmark), but, in each pairwise comparison between men and women, women accumulate more absences, especially among lowest educated American women and first-generation immigrant women in Denmark.

Chapter 3 maps the gender convergence process across three cohorts of young American adults, confirming the general trend towards convergence, but also highlighting how social disadvantage is associated with fewer opportunities in the labor market. Looking at young people's trajectories allows to use the most recent data (younger birth cohorts can be analyzed). Here I uncover greater similarity of the early labor force trajectories for those born in 1980s, due to later entrance in partnerships and postponed fertility. With the educational expansion as the backdrop for these developments, I observe the convergence in disadvantage of black men and women and convergence in privilege of young men and women with higher educated parents. This approach also reveals important heterogeneity between the trajectories of young women. An exploration of labor force attachment patterns by age at first birth reveals the expected accumulated disadvantage for young mothers. Those that give birth before turning 25 clearly follow a less attached labor force trajectory. My research design, however, does not permit me to disentangle to what extent early motherhood is the

cause of weaker labor force attachment, or just another 'symptom' of very limited labor market opportunities.

Chapter 4 focuses on the labor force attachment trajectories of two cohorts of mature Danes estimating the extent of gender convergence. As in Chapter 2, it is clear that being attached to the labor force is the norm for both men and women. But exactly in the case of the almost universal Danish labor force participation, it makes sense to look at the details of this participation, and to do so from a longitudinal perspective. The register data allow me to see if there is segregation by sector or hours worked. I do observe that women are more likely to have intermittent or public sector-dominated labor force trajectories. Sheltered public sector jobs are highly prevalent among Danish women. And part-time contracts turn out to be only a short-time strategy for these women and hence invisible as a structuring factor of labor force trajectories (although this is probably also underestimated due to problems of data availability up to 1994). Even the highly selected group of mothers of three or more children is firmly attached to the labor force.

I do not find any signs of change in labor market attachment patterns between the two cohorts I compare, except for fewer public-sector dominated trajectories (a difference of 5 percentage points for both men and women) in the youngest cohort which is in line with welfare state reforms since 1990s. But that is not surprising given the stability of the Danish labor force participation rates after 1990. After having left behind the 1970s where there weren't enough part-time jobs for all who wanted them (Transgaard 1981), Denmark has achieved one of the highest female labor participation rates in the world where part-time work is a passing arrangement. The next step in normative gender equality would be the de-gendering of the public-private divide. However, at least for the cohorts I could observe, public sector work is still a 'partnership between the women and the state' (Borchorst according to Ellingsaeter 1993: 379) that transferred most of care work from women at home to professional 'women [as] the basic labor force in the public sector' (Hansen 1993: 357).

Although women's labor force trajectories are my main focus, I present three findings concerning the trajectories of men in a post-industrial and post-gender revolution labor force. The first, stemming from the results of Chapter 2 and potentially interesting question to look into using oversampled quantitative data or qualitative research, is

people – both men and women – with an intermittent labor force attachment combined with family trajectories dominated by singlehood. Low educated Danish men spend on average 5.2 years out of the labor force if they belong to the 'no partner, no children' family cluster, more than twice what their peers with normative family trajectories do. Also low educated American men and low educated Danish women spend more time out of labor force if they belong to the 'no partner, no children' family cluster, 1.6 and 1.2 times more respectively. Only low educated American women with the 'no partner, no children' trajectory spend more time in the labor force than their peers with more normative family trajectories. For American women this can be interpreted as a repeated sign of vestiges of the 'either or' pattern (Han and Moen 2001), while for the American men and both Danish men and women it suggests the contrary dynamic: a subgroup of individuals who are not appreciated in either labor or marriage markets. This finding is in line with previous research on Denmark (Leth-Sørensen and Rohwer 2001) and Finland (Jalovaara and Fasang 2015, 2018; Sirniö et al 2017).

The second is the similarity of labor force attachment patterns among young black American men and women, a recent convergence, according to the results of Chapter 3. It is an example of gender convergence in disadvantage, as the smallest gender gap among Americans is observed in the subpopulation where men's labor force prospects are the least promising. It is in line with previous research, ranging from the higher labor force activity rates among middle-class black wives (Landry 2000) to the structural racism limiting young black men's labor market participation (Harrington 1962 [1969]; Blau et al 1998 [2001]) – and, recently, just not being incarcerated (Bureau of Justice Statistics 1996, 2005, 2010, 2012; Pettit and Western 2004) - and hence pulling their partners away from nuclear family structures and towards reliance on market work, extended kin/friendship networks, and welfare instead (Stack 1975; Edin and Lein 1997; Edin and Kefalas 2005; Western and Wilderman 2009; Tach and Edin 2011; Edin and Nelson 2013; Haney 2018).

The third finding regarding men is a tentative observation about the lowest educated men in Denmark. Although the effect size is small, among men with only high school education or less, those who have raised three or more children have been significantly more likely to be in the Private sector cluster and significantly less likely to be in the Out of Labor force cluster. Complementary to the findings on no-employment no-family trajectories in the Chapter 2, these results suggest that those lowest educated men that

form (large) families, most likely because these men differ from those mentioned above and are selected as acceptable partners by their peers, they are also the ones to be firmly attached to the labor force.

### 5.2 Commonalities among the Three Chapters

Each of the three empirical chapters emphasizes the importance of a life course perspective and longitudinal data, although necessarily synthesized, as a more reliable source to identify the relevance of cross-sectional data and forces that shape people's trajectories. Longitudinal data permit me to ignore short-term phenomena and focus on long-term trajectories. One of the key findings throughout my thesis is the irrelevance of part-time work as a long-term strategy. This emerges with great clarity by utilizing longitudinal data, and serves to confirm that at least in these two cases part-time work is no longer the 'easy' pathway to combine paid work and family life (Myrdal and Klein 1956 [1970]; Komarovsky 1962 [1987]; Hakim 1997 [2001]). Especially in Denmark, part-time is now mostly a transitional state to accommodate a re-entry in the labor force, and, in USA, often an involuntary arrangement due to employers' preference for cheaper part-time workers (Drobnič and Wittig 1997 [2001])

Comparison of women's trajectories with those of their male peers is another commonality throughout the three empirical chapters, serving the double purpose of (a) being a reminder that the most straightforward measure of gender equality is 'to what extent are men and women doing the same', and (b) bringing to awareness that the ideal-typical 'school to retirement' male labor market trajectory is not real either. Forgetting the extremely particular conditions when this was the norm - sustained economic growth, full employment, a demographic squeeze following WWII, and rising real wages - the male breadwinner dominance that lasted only 40 years has become the baseline (Coontz 2000; Ruggles 2015). In comparison with the young men who came of age during or just after the WWII, the loss of privilege for the most recent cohorts has fueled 'the end of men' discourse (Rosin 2012). As with women, there is a lot of heterogeneity behind 'the average man', and diversification of labor market trajectories due to advantage (educational expansion, gap years and sabbaticals, change of profession several times during one's life, etc.) and disadvantage (low human capital, labor market discrimination, structural unemployment, etc.) is as present as ever.

### 5.3 Generalization beyond Denmark and USA

That great differences in policy context do not necessarily entail great differences in the aggregate outcomes was the riddle at the basis of my case selection. And throughout the three empirical chapters I have observed how, when the incentives are conflicting, people follow the opportunity calculus that makes the most sense to them. And it is not the same answers for everybody, as it stems from the mix of external impulses, pushes and pulls of the economy, and personal preferences and circumstances. What I started out calling 'pockets of resistance' to the gender revolution are just subpopulations when another logic of 'what makes sense' applies. The challenge in large-n quantitative work is to capture these alternative mechanisms of decision making at work.

While case context was essential for my hypotheses, empirical work so embedded in these specific labor market and policy contexts makes generalization beyond these cases complicated. I would expect the results for other Nordic countries to be quite similar to those of Denmark, and that Canadian or Australian data could reveal roughly the same dynamics as the USA. Even these supposedly very similar policy contexts differ, though. Among its neighbors, Danish policy places more emphasis on labor force participation (shorter family leaves, *flexicurity*), while America's 'relatives' such as Canada or Australia have their own idiosyncrasies: higher overall labor force participation rates, higher female labor force participation rates, and a more inclusive health care systems among them.

When it comes to cases beyond the immediate economic and welfare state peers of my cases, my results are not generalizable but add to the conversation on the relationship between policy contexts and women's labor force participation. The time period researched in my thesis has been a very dynamic one for women's labor force participation in most developed countries, but each has had its own mix of circumstances. My case selection, on one hand, confirms that high levels of female labor market participation and attachment can be reached without a supportive policy framework (as in the USA), while adequate policies can greatly improve the conditions and characteristics of this attachment (as in Denmark). On the other hand, it also shows that a generous and supportive welfare state is not an immediate guarantee of complete normative gender equality. Both my cases require high labor force participation to maintain the social contract and ensure individual quality of life while their

imperfections are in line with the typical expectations about the sources of inequality under each arrangement (Fraser 1994; Mandel and Semyonov. 2005, 2006; Orloff 2008, 2009).

These reconsiderations of USA as a possible leader instead of a laggard (Orloff 2008, 2009) in line with arguments alternative to the major strand of research linking decommodification, de-familialization and gender equality (Esping-Andersen 1990 [1991], 1999, 2009 [2013], 2016), voice the possibility of other paths towards gender equality instead of the Nordic 'partnership between the women and the state' (Borchorst, according to Ellingsaeter 1993: 379) and remind that any set of policies that so strongly structure people's lives – already on top of the basically universal policydriven life-course markers such as education and retirement – are bound to have sought or unexpected consequences. The feminist critique of labor market-welfare state literature celebrating the Nordic welfare state model started as a reminder about the forgotten - gendered - role unpaid work played mediating between paid work and welfare (for an overview, see Lewis 1992, 1997, 2001, 2002), is now often a critique of the potentially restrictive nature of Herne's 'woman-friendly state' (1987) going back to Fraser's juxtaposition of 'universal breadwinner' and 'caregiver parity' welfare states (1994), as far as policies are created with specific gendered roles in mind and hence serve to maintain those roles (Mandel and Semyonov. 2005, 2006; Orloff 2008, 2009). At the same time, it is impossible to know to what extent the active role that state has played in promoting women's labor force participation and the gender egalitarian discourse has helped to incorporate these values in the private sphere, such as husbands in 2001 doing, on average, a record-high 41 per cent of the housework (Esping-Andersen et al 2013).

Throughout the thesis I've found higher education and other characteristics typically linked to higher social class to be a factor that favors labor market attachment, as it has since after the World War II (Myrdal and Klein 1956 [1970]; Weiss and Morse 1958; Mincer 1962). The findings of all three empirical chapters indicate that intermittent labor market attachment for these cohorts of women is firmly linked to social disadvantage and not privilege. Hence, at least for the time window observed and for these cohorts, my results align with the literature refuting the notion of 'opting out' as a mass phenomenon (Boushey 2005; Antecol 2010; Kreider and Elliott 2010) and talks about it as a discursive weapon instead (Williams et al 2006; Graff 2007). The results

for Chapter 4 confirm the higher likelihood for women to be in the more regulated and sheltered public sector, in line with previous research suggesting self-selection into more family-friendly trajectories once in the labor force (Nielsen et al 2004). Yet, I do not observe transitions towards them throughout the ages observed (30-50), hence the mechanisms of selection into public sector dominated trajectories must be prior to these ages and beyond the scope of this work.

While the normatively perfect gender equality is not here yet and the frustration has spurred a lot of literature on it (Esping-Andersen 2009 [2013]; England 2010, 2011; Gerson 2011; Pedulla and Thébaud 2015; Thébaud and Pedulla 2016), it is very clear that this is, although with many caveats, especially when it comes to social class, a post-revolutionary world. The male breadwinner is long gone, so much so that it is surprising to find traces of it. People are not opting out or specializing but instead negotiating and balancing, when possible, all their roles. Both boom and bust economies pull and keep women in the labor force, and a reversal seems impossible. Gendered differences and links to family life persist mainly via class and other disadvantages linked to the social position.

## 5.4 Limitations of the Empirical Work Presented

The longitudinal approach suffers from hindsight bias and a time lag. We can only analyze trajectories once they are complete; hence the role of life-course research seems to be that of toning down findings that come from cross-sectional data. It is the case with part-time work for the mature cohorts throughout my empirical chapters, and it looks like it could circumscribe the 'opting out' discourse to its adequate relevance once we have access to full work and family trajectories of the more recent cohorts.

Throughout my thesis I have been restricted by data availability. Despite the richness of the data I worked with, more observed years and more birth cohorts would have made it even more complete, especially in terms of reaching further into the past through Danish Register or seeing beyond 2011 in both data sets equally. Yet that was impossible, so I can say nothing about the extent of gender convergence in later life of the three American cohorts or of Danish trajectories before 1986. Due to the same restrictions, I observe pieces of the life course, but not its entirety. I understand very well why so many researchers use the National Longitudinal Survey of Youth'79 and do not seem so

keen to compare it with the NLSYM/W and NLSY97 (although exceptions that have appeared after NLSY79 became available exist, such as Monks and Pizer 1998; Bernhardt 2000 or García-Manglano 2015). As discussed in the Chapter 3, the little use given to the first male cohort makes sense once seen the attrition rates, and NLSY97 is currently a great source of data only for research on transitions to adulthood (for recent examples, see Van Winkle 2017; Min and Taylor 2018; Schneider et al 2019). Such key research design elements as the granularity of the sequences was affected by my priority focus on cohort and case comparison: as NLSYM/W and Danish register have only yearly data points. These differences in sequence design as well different approaches to sample selection and optimal matching explain the differences between my results and similar ones using NLSY79 (Aisenbrey and Fasang 2017; Killewald and Zhuo 2019).

My attempts to add richness to my exploration of labor force trajectories are not exhaustive. While I look at participation, hours worked, and (in Denmark) economic sector, there are other dimensions with a lot of potential. The sectorial divide between public and private sector in Denmark reveals horizontal segregation, but I have chosen not to look at vertical segregation. Sequence analysis is a great tool to analyze careers and can be used to track career dynamics, transitions between occupations, changes in income, etc. Hence, provided access to quality data, it can also be used to explore the 'glass ceiling' or analyze income curves throughout one's work life. And the same goes for multichannel sequence analysis, for examining individual's labor force trajectory together with those of their partners. However, there is also a risk of too much complexity. While I did attempt the most 'linked' method currently available - the multichannel sequence analysis (Pollock 2007; Gauthier et al 2010) - for the initial research design for Chapter 2, but the loss of complexity in creating one overarching cluster solution for a labor market and a family sequence was too big to proceed with that method. I also did an attempt at including income quartiles in the design of Chapter 4, but it had to be abandoned since the complexity involved did not justify the findings.

Finally, averages, of course, hide a multitude of particular realities, at the individual level and also at the intersection of disadvantages. And revealing those alternative mechanisms and new behavior patterns is typically more exciting than working with population averages. While I was – fortunately – talked out of my initial idea to attempt a mixed methods design, I've relied on journalism, qualitative research and work on attitudes to fill in mechanisms and meaning to the best of my ability.

#### 5.5 Future Avenues for Research

First of all, as probably most life course researchers, I would be thrilled to extend the work presented here with additional years and cohorts to obtain a more complete picture. While that won't happen for the incomplete information of National Longitudinal Survey of Young Men or Danes before 1986, the consecutive waves of the National Longitudinal Surveys of Youth are gaining value and so is use of register data in research. The same goes for enlarging the scope with additional cases that would either (a) contrast the two cases further with an addition of another type of economy-policy-gender contract mix, such as Germany, France, Italy, or Spain; or (b) deepen our understanding of the differences found by adding similar cases. Such an approach would provide answers to the singularity of case selection and generalizability of my findings.

There are also a couple of specific research questions that I see as particularly exciting avenues for future work.

My not coming across it might be just a language issue due to my lack of working Danish, but I would be really interested to see an in-depth qualitative exploration (or at least sequence analysis from a Register oversample) of the trajectories of foreigners in Denmark, especially when differentiating between countries of origin and if people are perceived as racialized. Non-Scandinavian immigration in Denmark is a rather recent phenomenon (the overall proportion of foreign-born population was 2.63 per cent in 1980 and 10.2 in 2018 (Statistics Denmark 2018)), race as a variable is not present in the Danish registers, and, of course, no data on attitudes or subjective experiences of discrimination are collected. But even among my mature cohorts that had experienced little (hence selected) immigration, immigration background is the most salient labor force participation deterrent, especially in combination with gender.

Another issue that could branch out of this work, even maintaining the same case selection, is that of domestic work and the externalization of care work. It is an ongoing issue when discussing women's emancipation, as 'the entirety of Western society is still traumatized by our complex relationship to the economics of domestic labour' (Penny 2011). I didn't have data on paid domestic help even in the American panels where it could have been asked; even questions about paid childcare arrangements are not

consistently asked in the National Longitudinal Surveys of Youth. I would find it a fascinating opportunity to see how labor market attachment and time use patterns might be structured by social class and outsourced housework. Because the 'second shift' (Hochschild and Machung 1989) has been eroding very slowly (Bianchi et al 2000) and the solutions proposed reveal the milieu of social class and the epoch. While Betty Friedan didn't see an issue with outsourcing housework or childcare in order to obtain time for personal fulfillment (1963), for Myrdal and Klein '[having a housekeeper or maid] would be a satisfactory division of labour which would enable women to specialize in the field for which they have the greatest ability and interest' but they are quick to admit – in 1956 America - that 'in practice, however, this is hardly possible today [...] even though conditions of pay and general treatment have greatly improved in our time, the low social status and lack of independence make domestic service unattractive in comparison with other jobs open to young girls [...] part-time domestic help, which is the maximum a woman who goes out to work can, as a rule, expect at present, appears altogether the most satisfactory solution' (1956 [1907]: 179). There is indeed a wide gap to bridge between Gilman's radical fantasy of vocational and professionalized domestic services (1910) and Sassen's observed dynamics of chains of care with women migrating to take up care work of women who then incorporate in the formal economy while their previous care work is taken up by other women in their community of origin (2003). When very little housework is reported in time-use data freeing up time for leisure and labor market attachment, and freeing couples from so much tension and conflict - I suspect not only the use of integrated washer-dryers, robot vacuum cleaners, and eating out, but also an externalized 'second shift'. I would like to empirically test if that might be the price of the current middle-class gender convergence.

# 5.6 Next Empirical Challenges

For most future avenues for research I imagine, gathering, safekeeping, and maintenance of big data sets is a necessary prerequisite, exceedingly hard to do via traditional survey methodology and tricky to do it via registers and the wealth of data crumbs left on the Internet. What is one's browser history or Facebook timeline if not a very detailed personal sequence? Having had the opportunity to explore Danish register data in the midst of several global data safety breaches has made me very aware of how paradoxical the future of microdata collection seems at the moment. There is an

incredible wealth of data that open previously unimaginable potential for data mining voluntarily given up to billion-dollar companies while State-controlled registers do not sound appealing at all. And this growing ambivalence around privacy will only make worse our current longitudinal data issue of scarce availability driving an over-research of some countries and a complete ignorance of others.

My final reflection is about the changing baseline of what true gender equality would look like, how it is to be achieved, and how could it be measured empirically. Arguably, we expect more – more attachment, more intensity, more achievements - from women currently entering the labor force, but only longitudinally can we see this and only, obviously, post factum. And when the social alarm about injustice and inequality reaches a feverish pitch – and taking into account how long it takes to complete a piece of research and publish it - we are bound to have all data available only when the ground beneath our feet has already shifted. As Kate Millet's despair describing her time as the Counterrevolution (1969 [1970]) seems quaint today, knowing that she is publishing one of the seminal works of radical feminism during the Summer of Love, it is very possible that the answers to my research questions are already different for those currently in the labor force, but we will be able to find this out only in several decades.

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