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## **The Impact of Family Policies during Turbulent Times**

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# Chapter 10

## The Impact of Family Policies during Turbulent Times<sup>1</sup>

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A severe economic crisis hit Norway in 1987 and lasted for seven years (1987-1993). Unemployment reached the highest levels in the postwar period, the entire banking system was in disarray, individuals and their families were hit by worsening economic conditions and uncertainty. It was the severest economic crisis in Norway during the postwar period, and hence a period of turbulence for the government, organizations, and for individuals and their families. Mjøset and Cappelen (2011: 217) write: 'The turbulence in 1986-1992 created a 'state of emergency' that sustained a crisis-consciousness in many circles'.

This period of crisis coincided almost exactly with the single largest expansion of family policies in the postwar period, namely during the six years 1988-1993. The expansion occurred in spite of the economic crisis and was especially pronounced in two important family policy domains, in the number of weeks of paid parental leave (for both parents) and in availability of publicly supported child care. The policies had many goals, among them to make it easier to have children, to facilitate combining being a parent and working, to give incentives for men to be more involved in the family sphere and the bringing up of children, and especially to increase gender equality in both the family and

the labor market. It was (and still is) well known that women suffered a penalty in wages and careers from having children, and family policies were viewed as providing a particularly powerful tool for enhancing gender equality.

With these two massive facts as the background—the severe economic crisis and the vast expansion of family policies—one can reasonably ask the following question: What is the relationship between economic crisis and social policy; do social policies respond in specific ways to economic crisis; do the effects of policies get mitigated by economic crisis?<sup>2</sup>

There are many ways in which periods of turbulence and crisis can affect social policies. The first and perhaps most obvious way turbulent economic times may impact social policy is through the extent to which policies are downsized, maintained, or even expanded. They can be abandoned or be reduced due to fiscal pressures. But alternatively they can be expanded as part of anti-recessionary measures (through fiscal policy) to keep consumer demand from falling and to strengthen safety nets. As Farnsworth and Irving (2011b: 278) write: ‘... challenging times are as likely to widen the scope for progressive welfare state-building as they are to diminish it, and that how states respond is a matter of political struggle and political choice .’ There can also be shifts in the relative role of various policy domains, such as more resources going to unemployment benefits, expansion in higher education (to keep young people active while employment opportunities are limited), and thus less resources going to other

domains. It is often argued that the extensive Nordic-style social policies are highly vulnerable to economic up- and downturns. For example, in Sweden, the economic crisis that hit a few years later around 1990 resulted in a significant reduction of Swedish-style welfare and governmental policies (e.g., Kosonen 2011: 291), though the main features of the welfare state remained intact. In the case of family policies in Norway, the focus of this chapter, the economic crisis did not appear to have had this effect: Policies were expanded rather than abolished or merely maintained.<sup>3</sup>

A second way turbulent times can affect social policies is not through their direct impact on the policies themselves, but on how organizations may adapt differently to policies under different economic conditions, such as in the Norwegian case where the unemployment rate more than tripled from about 2 percent in 1987 to around 7 in 1993. Under threats of bankruptcy, perhaps increased competition, lower profit margins, and other adverse economic impacts, employers may not co-operate with employees and may not implement generous social policies as fully as otherwise. In the case of family policies, organizations clearly need to follow the provisions in the policies, and cannot explicitly treat employees who take advantage of the policies in less favorable ways (such as for parental leave policies). In this regard there is no change from good to bad economic times. But organizations may still be reluctant to co-operate with parents on long leave periods, perhaps by sending signals that this may hurt the organization, or even by abolishing positions for employees on leave, making it

more difficult for parents to return after long leave periods, thus possibly making parents weary of utilizing the policies to their fullest extent.

A third way turbulent times and unstable economic environments may impact social policies is in how individuals react to the policies, that is, the efficacy of the policies at the individual level. In the case of family policies, the incentives and opportunities for taking advantage of these policies in ways that promote a women's career may change as economic conditions worsen. Employees may be more reticent to avail themselves of generous policies during periods of economic crisis where job security and perhaps advancement prospects may be weakened.

In this chapter we focus on the second and third ways that turbulent times affect policy, investigating the impact of family policies at the organizational and individual level during a period marked both by the expansion of policies and severe economic turbulence. The government can control whether policies are funded and implemented, which happened in the case of family policies. But the government cannot control their effects. The focus of the chapter is on whether one of the sought for outcomes of the policies in fact occurred during the long and severe crisis. Did the policies, in spite of the economic crisis, contribute to increasing gender equality by lessening the wage penalties women experience to having children?

Such an analysis is of paramount importance because by the end of the twentieth century it had become abundantly clear that the processes unfolding in the family are a core, if not the core, obstacle to achieving gender equality in the workplace (Williams 2010).<sup>4</sup> For men, marriage and to some extent children have positive effects on wages and careers (Rodgers and Stratton 2010). For women, the reverse is the case, there are small differentials for marital status but large penalties to having children (Budig and England 2001). Family thus pulls in opposite directions for men and women: Helping wages and careers for one sex, detrimental for the other, and jointly increasing the gap between men and women. Policies that can ameliorate these penalties to women for having children are thus of core interest in rich countries. But how these policies fare in turbulent times, the type of times that mark economic downturns, is of central interest too.<sup>5</sup>

A caveat is in order. We refer to the effects or impacts of family policies on the wage penalties to motherhood. The policies have intended or desired effects and impacts, and the intentions are easy to assess. It is also easy to assess whether the intended effects occurred or not. It is however exceedingly difficult to assess the extent to which the policies in fact caused the intended outcomes. The reason is that policies are unrolled over longer periods during which other concurrent changes may have taken place, such as less discrimination against women, more involvement from fathers in the family sphere, cultural changes, and in this case severe economic turbulence. In the presence of a multitude of changes, employers and employees also need time to adjust

to these, which is especially the case for family behaviors where adjustments at the level of the family unit can be costly and almost always will be stretched out over long periods of time. To assess the specific effects of the policies themselves is hence well-nigh impossible. But to the extent that major changes occurred in intended outcomes, it seems plausible to conjecture that the changed policies played some contributing role, though the magnitude of this role may be beyond what social science analysis can identify. And since cultural changes typically occur over a longer period than policy changes, and thus may also manifest themselves in changed outcomes over a longer period than is needed for policy changes to have effects, there is heightened reason to think that family policies may have been one if not the driving cause of the changes in intended outcomes.<sup>6</sup> But with these modifications, our caveat still stands.

There are obviously a number of related questions of great interest that could be addressed. Among them we find the relationship between economic crisis and social policy creation and implementation, the extent to which a crisis can be used to expand or contract social policies, as well as the many 'ideological dimensions of crisis management, which concern the ways in which the crisis has been defined, understood, and responded to' (Farnsworth and Irving 2011b: 1).

## **The Economic Crisis**



The economic crisis hit Norway in 1987 and lasted until 1993. It affected many sectors of the economy and many domains of society in at least three important ways.<sup>7</sup>

First, unemployment saw its largest Postwar-period increase in the years 1988-1993, reaching its peak in 1992, but continuing to 1997 (Mjøset and Cappelen 2011: 212). It rose from just above 2 percent in 1987 to above 7 percent in 1992. Already in 1988 the severity of the situation became clear to politicians, unions, employers, and the main employers' association. As a result, a so-called 'wage law' with very 'moderate settlements' for all wage earners were negotiated in 1988 (Mjøset and Cappelen 2011: 200). In what can be described as an exceptionally well-ordered and democratic society 'These incomes policies were on the borderline of democratic legitimacy, but a spirit of national cooperation—dugnad—reigned and the interventions were accepted ...' (Mjøset and Cappelen 2011: 200). The Gross National Product even had negative growth in some years, with the crisis reaching its lowest point in 1991-1992 (Mjøset and Cappelen 2011: 212).

Second, there was significant turbulence in monetary policy. For the period 1987-1992 interest rates were very high, especially so in order to protect the exchange rate for the Norwegian Kroner, which had been devalued in 1986. The crisis in monetary policy culminated in 1992 (Mjøset and Cappelen 2011: 213-214), and was followed by turbulence for the exchange rate during the period December of 1992 to May of 1994 with devaluation again for the Norwegian Kroner. This improved the competitive

situation of enterprises in the export sector, but resulted in higher prices for imported goods. The high interest rates, coupled with high unemployment rates, created much turbulence for individuals and their families, including impacts on mortgages and housing markets.

Third, there was a major bank crisis, concurrent with the economic crisis but with a different genesis, probably primarily caused by major deregulations of the banking sectors in Norway and Europe elsewhere. In 1988 'there was an avalanche of bankruptcies' (Mjøset and Cappelen 2011: 200) in the banking sector. The banking crisis culminated in 1990-1992, with major restructuring in 1993-1994 (Mjøset and Cappelen 2011: 214-215; see also Lie and Venneslan 2010). The bank crisis resulted in severe financial problems for many individuals and families overextended by consumption and housing loans.

It is beyond the scope of this chapter to discuss this crisis in much detail. But there is no question that the crisis was very severe and that it resulted in significant turbulence. To repeat the conclusion from Mjøset and Cappelen (2011: 217): 'The turbulence in 1986-1992 created a 'state of emergency' that sustained a crisis-consciousness in many circles'.

## Family Policies

We review four family policies and institutional arrangements that have been identified as important for the family gap in wages (Waldfogel 1998: 141–145; Dex and Joshi 1999: 655–656; Gornick and Meyers 2003, chap. 8). These policies play out against a fixed background of The Gender Equality Act of 1978. It made discrimination on the basis of sex illegal but did not contain specific legislation protecting parents in employment (similar to the U.S. Equal Pay Act of 1963 and Title VII of the Civil Rights Act of 1964). Parents were however protected in a separate Work Environment Act of 1977.

The *first* major public policy is paid parental leave——maternity and paternity——with a portion reserved for fathers. In many countries, including those in Scandinavia, this is financed through social insurance (tax contributions paid by all employers and employees regardless of whether they employ parents or are parents). The central cost borne by employers is the prolonged absence of their employees after childbirth; practically all mothers take the leave and increasingly fathers do the same (Gornick and Meyers 2009: 39).

Maternity leave allows women to keep their jobs while they take time off to care for children and to keep a portion of their salary. Attractive job matches can be maintained and permanent employment secured. However, lengthy maternity leave can lessen human capital accumulation through loss of work experience and training. Paternity

leave provides many of the same benefits for fathers and may lead to a more equal distribution of work in the household and thus lessen the workload on the mother.

In Norway, parental leave was available for 18, 20, 22 weeks in 1977, 1987, and 1988, with 100% pay since 1978. Since 1977 fathers could share the leave, with the exception of the first six weeks, which were reserved for the mother. Between 1988 and 1993 parental leave was increased by a few weeks every year from 22 to 52 weeks at 80% pay (or 42 weeks at 100% pay), though with compensation for high earners capped at a maximum amount (Rønsen and Sundström 2002). Effective in 1993, as the first country in the world, four weeks were reserved for the father and six weeks for the mother (Leira 2002: 89, 95). In 1996, 69% of fathers took paid parental leave and used 7% of the parental leave days (Leira 2002: 86, 91).

The *second* major policy is subsidized child care, often publicly provided. This allows mothers to return to work soon after childbirth, and leads to less loss of human capital. Of some importance here are the opening hours of child-care facilities. In the Nordic countries hours at child-care facilities are short, in Norway they are typically open only between 7–7:30am and 5pm. This may be good for children and most parents, but does not help careers of parents in many high-paying professional jobs.<sup>8</sup>

In Norway, the percentages enrolled in publicly supported child increased considerably over the period studied: among 1–2 and 3–6 year old from 6.8 and 32.0 (1980) to 31.3

and 61.7 (1995) (see Ellingsæter and Gulbrandsen 2003, Tab. 15: 36). For children 0–6 years old, between 1980 and 1995 the percentages enrolled more than doubled from 20.9 to 44.3. There was still a substantial shortage of publicly supported child care for all ages 0–6, but especially so for 0–1 and 1–2 year old, in part reflecting the long periods of parental leave offered (especially from 1993). The coverage was much lower than in Denmark and Sweden. The cost of child care during the period was relatively low in Norway (with single parents paying lower fees), though considerably higher than in the other Scandinavian countries (but with significant decreases in prices from 2003). During the 1990s costs stood at 13 percent of average female earnings compared to 22 in the United States (Waldfoegel 1998a, table 2).<sup>9</sup> Access to child care was not a social right in Norway during the period analyzed, but became so in 2009, much later than in the other Scandinavian countries.

A *third* policy involves the provision of cash benefits and tax breaks for children. These make it easier to have children and may have pronatal effects. Whether they do much for the family gap is less clear. Their impact may in fact be negative, as they may encourage lengthy career breaks, but they can also facilitate employment by making it economically easier to purchase child care. Norway has provided monthly child benefits from birth through age 17 on a restricted basis since 1946 and universally since 1970, with extra allowances for families with children 0–3 years old (1991–1993) and 1–3 years old (1994–2002), and with other new policies starting 1998. Norway also had and

still has tax benefits, allowing parents to deduct child care costs, similar to, but more flexible than the child-care costs parents can deduct in the United States.

A *fourth* major policy arises in the realm of employment regulation and organizational practices, namely the availability of part-time jobs and jobs with flexible hours and schedules. Such jobs may facilitate labor-force attachments for mothers, especially of small children. These policies are implemented by employers, but they can be influenced by public policy as well. The tax system is particularly important. Employers pay a fixed percent of the employee's received wages, as opposed to paying a fixed premium for a health insurance plan. In the case of Norway, part-time work and flexible hours are and have been widely available, there is no wage penalty to being employed part time, and parents of small children have, under certain conditions, the right to part-time work (regulated by the Work Environment Act of 1977).

The first two policies—parental leave and child care—are important around the period of childbirth and up until school age. The third and fourth policies—financial incentives and flexible employment—have consequences for a longer period. Tax breaks and cash benefits are often given up until age 18 for each child. Flexible hours may also be attractive for families with teenage children living at home. The policies are primarily targeted at employees who combine parenthood with full- or part-time careers, but are less sensitive to the family adaptations of stay-at-home mothers (see Hakim 2000, Chap. 1).

In Norway during the period of our data—following the expansion of parental leave to 20 weeks with 100 percent pay in 1978—changes in family policies divide into three periods: (1) 1979–1987, eight years with relatively stable policies, including the first year (1979) the Norwegian Gender Equality Act of 1978 was effective, (2) 1988–1993, six years when policies were expanded (especially parental leave, including the four weeks reserved for fathers, but also publicly subsidized child care), and (3) 1994–1996, the years following the expansion, with fewer changes in policies.

Although most Scandinavian family policies are gender neutral, their first-order impact is primarily on mothers, making it easier to combine family and career; female labor-force participation rates are now close to male rates, though with higher rates of part-time work for women. The second-order impact is on the adjustments fathers make. In passing Norwegian family legislation a goal expressed during parliamentary debates was to redefine the family institution, by shifting the culture around how families operate to create gender equality within the family (Leira 2002: 94–95), which gets well captured by the phrase ‘politicising parenthood’ (Ellingsæter and Leira 2006). One goal was to strengthen the bond between fathers and children, thereby creating entirely new norms for fatherhood and hopefully increasing the welfare of children. Other goals were to create more equality in the division of work at home, and hence hopefully to result in more gender equality in the labor market (Leira 2002, chap. 4). Internationally, Norway—along with Sweden, Canada and the United States—has one of the most equal

divisions of household labor (Hook 2006, Fig. 1: 650; see also Fuwa 2004, Tab. 2: 757), and along with Sweden scores at the top of the Gender Empowerment Measure of the *Human Development Report* (Fuwa 2004, Tab. 2).

## **Data**

To address the questions outlined in the introduction we use matched employer-employee data on all white-collar employees in central parts of the private sector of the Norwegian economy in the period 1979–1996. The data were collected from individual-level records kept by the establishments and compiled by the Norwegian Central Bureau of Statistics and the main employer's association in Norway, the Confederation of Business and Employers (NHO). Norwegian employers are bound by law to collect and report the data (e.g., Central Bureau of Statistics 1991: 120–123). The data are used in wage bargaining and economic planning and should be more reliable than information from survey respondents on pay rates, hours worked, and occupation, but as explained below, less reliable for the measurement of labor force experience and cohabitation status.<sup>10</sup>

The longitudinal aspect of the data over an 18-year period allows us to trace changes over time as family policies were unrolled and as the economic crisis hit at the same time. We can ask: Did the policies result in women experiencing lower penalties to having children? The fact that the data provide matched employer–employee



information also allows us to address how organizations reacted in terms of equal or lack of equal pay of women with and without children over the period. We can ask: Did organizations, when they employed mothers and non-mothers in same occupation, pay them equally or differently?

We follow the establishments and their employees from year-to-year, and have information on 3.9 million person-years. We restricted the analysis to employees 20–50 years old, yielding about 2.8 million person-years. On an annual basis, we use information on 147,027 to 193,197 employees, 11,364 to 19,500 establishments, 488 to 608 occupations, and 59,042 to 78,091 occupation-establishment units. For each employee we have information on sex, occupation, age, part- versus full-time status, contractual hours worked, and monthly earnings from work on contractual hours, which excludes wages on overtime hours. The data have been matched to register data from the Central Bureau of Statistics, providing detailed information on educational attainment (length and type, 4 digit code), family or civil status (8 statuses), number and ages of biological and adopted children. This provides complete educational, marital, and parental histories for the period studied.

During the period for our study (1979–1996) Norway had a gender wage gap comparable to the other Scandinavian countries—among private sector employees women earned about 16% less than men in 1996. In the data we use, women earned

30.5% less than men at beginning of the period (1980), 26.0% less in the middle (1988), and 20.0% less at the end (1996).

Further details on the data are given in Appendix and in Petersen et al.(2014).

## **Methods**

The data have a unique multilevel structure. First, we follow employees and organizations over time. This allows us to trace out historical changes. Second, within each year, we can investigate how women with and without children fare in terms of wages once they work in the same occupation and establishment. We use fixed-effects models to examine the role of sorting employees into occupation-establishment units.

We include independent variables for education and potential labor force experience plus dummy variables for marital status and the number of children 20 years or younger. The first set of results controls neither for the establishments where employees work nor for their occupations. The second set of results uses fixed-effects models to control for the occupation and establishment in which the employees work (i.e., comparing individuals who work in the same occupation-establishment unit or 'job').<sup>11</sup>

The annual coefficients for women having children are all significantly different from zero, often with z-statistics of 40–50 and significance levels of .000001. No purpose is served in reporting these significance level. The coefficients reported can be interpreted as approximating percent differences: A coefficient of -0.10 for having three children would mean that women on average roughly earn about 10 percent less than a childless woman, adjusting for the other variables in the analysis.

### **Results: Impact of Family Policies during Turbulent Times**

Our first analysis examines the potential role of family policies in reducing the wage penalties women experience for having children, and how these penalties changed over time during years where policies were expanded (during the economic turbulence). Our second analysis investigates how these penalties evolved at the organization level during the same period, when women, mothers and non-mothers, worked in the same occupation in the same establishment, thus assessing whether the policies worked also at the level of organizations during the period of severe crisis.

The results of these analyses are presented in table 10.1. In columns 1-3 we present the penalties to having 1, 2, or 3+ children 20 years or younger by year for all the women in the data. In columns 4-6 we present the same penalties but now restricted to women working in the same occupation and establishment, that is, working side-by-side.

(Table 10.1 about here)

Consider first the results comparing all women (in the first three columns), not taking into account their occupation or their workplace (i.e., establishments). The children penalties were stable in two periods (1980–1987 and 1994–1996), but declined the first year after the Gender Equality Act of 1978 was made effective (from 1979 to 1980), and then declined precipitously in the second period (1988–1993). During the six years 1988–1993 the children penalties were reduced by 50% for 1 child and 66% for 2 and 3+ children, for the latter two dropping annually by about 1 and 1.4 percentage points for a period of six years. These were precisely the years during which family policies were extensively expanded, and the drops in penalties were dramatic. These were also the years with severe economic crisis. There is thus no question that one of desired effects of the family policies—to increase gender equality—was achieved in spite of the economic turbulence.

Our next analysis assesses whether the policies also worked to reduce differences between individuals working in the same establishments and occupations, providing insight into how organizations responded. At the occupation-establishment (i.e., job) level the penalties were again stable in the years 1979–1987 and 1994–1996, but then dropped strongly in the years 1988–1993: The penalties for 1, 2, and 3+ children dropped from 1.0, 3.3, and 5.3% in 1987 to 0.3, 0.6, 1.0% to 1994, again dramatic reductions in the penalties. Again, one of the desired outcomes of the policies was

realized during a period of turbulence, as motherhood penalties within organizations changed dramatically.

During the same years, the premia for men to being married and having children did not change at all (see Petersen et al.2014, esp. table 2). The policies thus did little to change the rewards for men. There was also a slight reduction in the female marital premium (see Petersen et al.2014), but the changes observed occurred almost exclusively for mothers.

The key lesson then is that while the period with extensive expansion of family policies did practically nothing to change husband and fatherhood premia, it reduced the penalty to motherhood in a perhaps unprecedented manner. The decline in the motherhood penalties over a short period is close to sensational. Perhaps also sensational is the fact that the severe economic crisis did not prevent these major changes and improvements to gender equality in the labor market and the workplace to occur.

The results are elaborated in Figure 10.1, where we also include the penalty to being female and the male marriage premium. We plot by year a subset of the premia and penalties, at the population level (when all employees are considered) and the occupation-establishment level (when only employees working in same occupation and establishment are considered). Above the horizontal zero-line, we see the stable male

marital premium at the population level (with smaller but stable premia at the occupation-establishment level, not plotted). Under the zero-line, we see the negative female main effect and the motherhood penalty to 3+ children at both the population and occupation-establishment levels. We see the sharp decline in the motherhood penalty, and the relatively stable female main effect, a penalty that hardly changed after 1990. At the beginning of the period, the negative female main effect was smaller than the penalty to having 3+ children at both the population and occupation-establishment levels. But by 1991, the negative female main effect was larger than the motherhood penalty at both levels.

(Figure 10.1 about here)

Put differently, in 1985 fatherhood premium (.07) accounts for 25% of the difference between men and women who are married with 3+ children, the female penalty (-.08) that single women receive relative to single men accounts for another 25%, and the motherhood penalty (-.15) is responsible for the remaining 50%. In spite of the turbulent economy, ten years later, in 1995 this difference is smaller primarily because the motherhood penalty has been reduced: in 1995 we find that the difference between men and women who are married with 3+ children is 40% due to the fatherhood premium (.07), 35% percent due to the difference between single men and women (-.06), and only 25% due to the motherhood penalty (-.04). We find a similar pattern

(with smaller magnitudes) when we look at patterns of inequality within occupation and establishment.

In conclusion, at the end of the period, the negative female main effect (i.e., the difference between single childless men and women) is larger than the penalty women experience for being a mother, and the sex differences in returns to marital status (see Petersen et al.2014) are at the same magnitude as the sex differences in returns to having children. One may conjecture that family policies had the desired effects and effectively removed the motherhood penalty, but they had less of an effect on the negative female main effect and no effect on premia for husbands and fathers. And moreover, the severe economic crisis did not hinder gender equality to progress remarkably.

## **Conclusion and Discussion**

We started by highlighting that two massive social upheavals served as the background for our period of study—the severe economic crisis in 1987-1993 and the vast expansion of family policies in 1988-1993. The family policies had several goals, but one of them was to increase gender equality in the labor market, especially by making it easier for women to combine family and career, and hence lessen some of the wage penalties women experience for having children. Our key questions were to assess first whether the intended goals in fact materialized in presence of a severe economic crisis,

and second to assess whether organizations adjusted to the intended goals by paying mothers and non-mothers more equal wages.

These questions are of considerable interest. The processes that occur in the family are today probably the largest obstacles to continued progress in gender equality in the workplace, with women suffering significant wage and career penalties from motherhood, and men reaping substantial premia to marriage, two diverging processes that combine to increase the wage gap between women and men. To understand how to ameliorate these processes one needs to identify both where they arise and the potential role of public policies. But these policies depend on and are influenced by the broader economic background, and hence it becomes relevant to investigate the extent to which the intended goals of the policies were realized even during severe economic crisis.

The conclusions are remarkably simple. First, the wage penalties experienced by mothers were stable in two periods, the years 1979-1987 and 1994-1996, periods prior to and after the introduction of the policies respectively. During the years 1988-1993 when the policies were introduced the wage penalties declined dramatically every year. These were also the years of severe economic crisis. The crisis did not hinder the policies from having their intended effects. Second, these dramatic drops in penalties also occurred within establishments: When mothers and non-mothers worked in the



same occupation in the same establishment, the penalties declined every year and became close to zero by 1993.

As we pointed out in the introduction it is unlikely that we can ever decisively establish how tight the causal link is between the expanded policies and the vanishing penalties, as there were concurrent changes in family culture and discrimination against women, but the correlation is in all likelihood not coincidental. And since similar changes in family culture occurred also in the United States during this period, but with no comparable change in family policies, and no comparable decline in motherhood penalties from 1975 to 1998 (Avellar and Smock 2003), our confidence in the claim that family policies in part caused the declines is strengthened.

It appears then that introduction of major social policies changes—in this case family policies—during times of economic turbulence is not only possible, but that the policies also can have some of their intended effects. Governance during turbulent times need not involve postponing longer term policy agenda goals until a period of stability.

### **Appendix: Additional Information on Data Sources**

These data on white-collar employees cover all occupational groups, such as technical, professional, administrative, and managerial employees, with a few exceptions: CEOs, top editors of newspapers, secretaries to the editors of newspapers, and journalists.

The occupational code is detailed, with 488, 511, and 608 occupations in 1981, 1989, and 1996. The restriction of analyses to white-collar employees is made in part because that is where most private-sector female employment is found, in part because that is where the larger gender wage gaps are found, and thus probably leads to results with somewhat larger motherhood penalties than if additional blue-collar employees (see Petersen et al. 1997) as well as employees in the public sector had been included.<sup>12</sup>

The analysis includes five broad sectors of the Norwegian economy (in the private sector): (a) manufacturing, oil extraction, mining, quarrying, transportation, storage, communication, and various other industries; (b) business services; (c) retail and wholesale trade; (d) banking; and (e) insurance. The sectors are broadly representative and account for roughly 25% of all employees in the Norwegian economy.

From the contractual monthly earnings and contractual hours worked we computed the hourly wage, which then refers to hourly wages paid on regular work hours, hence not mixing pay on regular and overtime hours. This is important since a central goal of the analysis is to assess whether employers pay differently by sex and family status, in which case we need to measure the pay rate on regular hours. Five marital statuses are distinguished: single, married, separated, divorced, and widowed. Among the married, separated, and divorced, we include a few hundred employees in same-sex unions that were intact ('married'), 'separated', and 'divorced'; these are legal categories in Norway. Excluding these cases does not affect the results. We coded three dummy variables for

number of children aged 20 or younger: for one, two, or three or more such children.<sup>13</sup>

We experimented with a number of different codings for the children variables, such as number of children below age 6, between 6 and 15, and so forth. The alternative codings make no substantive difference for the conclusions arrived at in the analyses.

We also control for potential labor force experience, imputed as age minus years of education minus 7.<sup>14</sup>

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## Notes

<sup>1</sup> We thank Lars Mjøset for extensive comments. This article draws on Petersen, Penner, and Høgsnes (2014) especially in the sections 'Family Policies', 'Data', 'Methods' and the 'Appendix'. Table 1 is adapted from table 3 in that article, and figure 1 is reproduced from that article. The 2014 article provides more extensive reviews of the literatures, not done here.

<sup>2</sup> Such questions have been asked at length in the volume edited by Farnsworth and Irving (2011a), *Social Policy in Challenging Times. Economic Crisis and Welfare Systems*.

<sup>3</sup> This appears to have been the case in the European Union as well. Hemerijck (2012: 8) writes: 'Spending on family services, childcare, education, health, and care for the elderly, as well as on training and employment services, has increased as percentage of GDP in practically everywhere in the European Union' and 'Family policy, covering child care, parental leave and employment regulation, and work and family life reconciliation policies, has been subject to profound change in both scope and substance over the past decade and half ...' See also Jenson (2009). And as Farnsworth and Irving (2011b: 21) write with emphasis on the Nordic countries: 'The data presented above suggest that it is the coordinated market economics ... of the social democratic and corporatist countries that will fare best in the immediate future in terms of protecting and expanding welfare provisions'.

<sup>4</sup> As Hobsbawm (2010: 136) reflects: 'There can be no doubt that the emancipation of women has been one of the great historical events of the twentieth century. The problem for the twenty-first is to establish what still has to be done, and what will probably happen.' He continues: 'There is, however, a serious problem, and it has become increasingly serious: the extraordinary difficulties for women of combining high professional posts with being mothers.' And he concludes: 'This has nothing to do with discrimination, but with the natural law that women are the ones who give birth'.

<sup>5</sup> Over just a 20-year period, the Nordic countries experienced two severe crises, one around 1990, and a second around 2010 (starting 2008). See Kosonen (2012) for a comparative analysis of these two crises.

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<sup>6</sup> We thank Lars Mjøset for making this point in written communication.

<sup>7</sup> This section draws extensively on Mjøset and Cappelen (2011, esp. pp. 182-184 and 200-219) as well as on extensive written comments received from Lars Mjøset drawing on work in progress with Ådne Cappelen.

<sup>8</sup> Hours are similar in Finland (7am to 5pm) but longer in Denmark (7am to 6pm) and Sweden (6:30am to 6pm). See Gornick and Meyers (2003, Tab. 7.9: 230–231).

<sup>9</sup> Esping-Andersen (1999: 66, Tab. 4.4), however, argues that net costs for child care in the United States are among the lowest internationally, stating that even in the absence of publicly provided child care ‘the United States offers a superior cost-subsidy mix’, and that as a percent of family income costs are equal to those in Denmark and France and lower than in Sweden.

<sup>10</sup> The data are quite complete. For example, for the year 1992 we have complete data on 84% of the establishments and 94% of their white-collar employees.

<sup>11</sup> Further details on the procedures are found in Petersen et al.(2014).

<sup>12</sup> Among blue-collar employees, the gender wage gap was rather small already by 1990. This reflects in part the unionized wage scales found among blue-collar workers with negotiated wages for each occupation that to a large extent are followed across establishments. The gender wage gap is also smaller among public sector employees, where women are more heavily represented than in the private sector. The sex segregation on sector in part explains the overall gender wage gap in Norway.

<sup>13</sup> The impact of having children on wages and careers clearly lasts beyond the period of children living at home through lost experience and opportunities. But for the questions addressed here, and in most of the research on the motherhood penalty, it is the period with children at home that is in focus.

<sup>14</sup> Further details on the data are given in Petersen et al. (2014).

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11/29/2015

Dear Trond,

The book manuscript has now gone through a final review with Oxford, and below you will find the suggested comments to your chapter. These are indeed suggestions for improvements. I would ask you to consider them, and send a final version of your chapter to me before the end of the year (31. December). Please make changes in the attached document. The full manuscript will then be submitted to OUP during January and immediately put into production process, which is estimated to take 6-7 months. Hence, the book should be out during mid fall next year.

### **Chapter 10: The Impact of Family Policies during Turbulent Times**

This study of the impact of a severe economic crisis on the passing and implementation of social reforms and family policies is interesting and relevant in the context. I have three comments. First, I would like a link to be established between turbulence and economic crisis. What kind of turbulence are economic crises likely to produce, and what can we learn about policy making and policy implementation from studies of economic crises? Second, I need a bit more argumentation for the assumption driving the analysis that economic crises is likely to result in weak social policies. It could just as well be the other way around. Third, there is no discussion of the role of politics as an intermediate and productive factor between economic crisis and social policy. In the end the interpretation of a crisis and what is perceived as relevant policy responses is a political matter. Apparently, there has been very little turbulence in Norwegian gender politics in the period under scrutiny.

Best,

Jarle

On 1: This has now been addressed at slightly more length.

On 2: This has now been addressed at slightly more length, including a quote.

On 3: This has now been addressed at slightly more length, including a quote.



Table 1. Wage Penalties of Children for Women by Year

	For All			In Same Job		
	Number of Children			Number of Children		
	1	2	3+	1	2	3+
Period 1. Before Introduction of Policies (1979)						
1979	-4.8%	-10.8%	-17.4%	-1.7%	-4.5%	-7.81%
Period 2. Gender Equality Law in Operation for First Full Year (1980)						
1980	-3.4%	-8.8%	-13.6%	-1.6%	-4.7%	-7.25%
Period 3. No Changes in Policies (1980-1987)						
1987	-3.9%	-8.9%	-14.0%	-1.0%	-3.3%	-5.33%
Period 4. Family Policies Introduced Every Year (1988-1993)						
1988	-3.3%	-8.0%	-12.6%	-0.7%	-2.4%	-4.11%
1989	-2.8%	-6.7%	-10.2%	-0.6%	-1.9%	-3.60%
1990	-2.3%	-5.1%	-9.0%	-0.8%	-1.8%	-3.16%
1991	-2.2%	-4.1%	-7.1%	-0.8%	-1.2%	-2.23%
1992	-1.6%	-3.4%	-5.6%	-0.5%	-0.9%	-1.30%
1993	-1.5%	-2.9%	-4.4%	-0.4%	-0.6%	-1.22%
Period 5. No Changes in Policies (1994-1996)						
1996	-1.4%	-2.3%	-3.8%	-0.4%	-0.1%	-0.83%

Figure 1: Graphs by Year for Male Marital Premium (Population Level), Female Penalty (Population and Occupation-establishment Levels), and Motherhood Penalty for 3+ Children (Population and Occupation-establishment Levels)

