



Challenges of work-life balance faced by working families

Evidence Review

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1. Introduction

The aim of this review is to provide evidence of the expected costs and benefits incurred by five reforms envisaged by the European Commission (EC).

1.1. Policy interventions

This review considers five reforms:

- The introduction of a **carers' leave**, which can be defined as a short period of leave to take care of ill, disabled or impaired family members. Carers' leave allows people to stay in employment when taking a leave in order to care for dependent family members in the ageing society [1].
- The introduction of a **paternity leave**, which is generally a short period of leave specifically for the father, immediately following childbirth, the main purpose of which is to allow him to spend some time with the new child and his partner [2], [3].
- The introduction of a **paid parental leave**. Parental leave is a leave available equally to mothers and fathers, either as: (i) a non-transferable individual right (i.e. both parents have an entitlement to an equal amount of leave); or (ii) an individual right that can be transferred to the other parent; or (iii) a family right that parents can divide between themselves as they choose [2], [3].
- The introduction of a **father's quota**. The father's quota (also known as 'paternal leave' or 'daddy days/months') is a non-transferable share of the parental leave strictly reserved to the father. The aim of this quota is to encourage gender equality and increase work-life balance.
- The introduction of EU-wide **breastfeeding provisions at work**, including a right to a breastfeeding break and access to appropriate facilities [1].
- The extension of **flexible and part-time work arrangement**. The aim of this extension would be to promote various types of flexible working arrangements (e.g. teleworking, job-sharing, flexible working times) for both women and men in order to meet the needs of the carers and the employers, taking into account opportunities offered by modern working patterns and technology [1].

More detailed reform specifications (and assumptions) can be found in relevant sections.

Such a classification is not always conducive to analysis since actual provisions may deviate from it. The boundaries between these different types of interventions tend to blur and various categories of leave may overlap or be substitutable. Long maternity leave, as in the UK (up to 52 weeks) functions de facto like parental leave in other countries. Alternatively, parental leave may constitute an extension of maternity or paternity leave, with both being paid in the same way as wage compensation (e.g. Finland), or be separate when it is unpaid (e.g. Ireland). The distinction between maternity and paternity leave also tends to be blurred in some countries, especially in the case of post-natal leave. Parental leave is also no longer restricted to infants. It may often be taken in a flexible and staggered fashion and long after the initial paternity/maternity

leave, when the child is older, or when adopting a child. It may also function as leave to care for a sick child.

In the interests of clarity, this report considers each reform separately – despite the above-mentioned overlaps. In order fully to understand the complete picture of parental leave, it is important to keep in mind that the whole range of provisions in a particular country may be combined, shared between parents or follow on from one another chronologically.

1.2. Issues of interest

This review considers:

Needs assessment:

- Mapping of existing legislated provisions;
- Mapping of other existing provisions;
- Evidence of take-up;
- Correlation with outcomes of interest.

Expected effects on beneficiaries, including:

- Physical and mental health (well-being);
- Employment outcomes and wages;
- Career planning;
- Career prospects;
- Family planning;
- Work-family conflict.

Expected effects on the cared for, including:

- Physical and mental health (well-being);
- Practices assumed by the author to be favourable to the dependent: e.g.
 - Fathers' involvement (i.e. time spent with dependent)
 - Breastfeeding.

Expected effects on employers, including:

- Employee outcomes (e.g. organizational commitment);
- Absenteeism;
- Productivity.

Expected effects on the wider society, including:

- Fertility;
- Gains in QALYs;
- Gender equality;
- Costs to the taxpayer;
- Human capital depreciation;
- Income distribution;
- Social mobility;
- Society's welfare.

Factors impeding or boosting take-up/effectiveness, including:

- Policy characteristics,
- Dependent's health;
- Other policy provisions;
- Personal factors (health, education, professional status);
- Professional factors (e.g. family-friendliness of the employer);
- Family-related factors (e.g. partner's income).

1.3. Methodology

This review is based on empirical evidence collected from a number of databases. A detailed methodology can be found in Annex 1.

1.4. Overview of the literature

Table 1.1 – Number of sources per reform and issue.

	Carer's leave	Paid parental leave	Paternity leave	Flexible and part-time work	Breastfeeding provisions	Father's quota
Mapping	8	14	4	--	--	2
Effect on beneficiaries	46	51	2	--	--	12
Effect on the cared for	1	22	2	--	--	5
Effect on employers	5	11	9	--	--	1
Effect on wider society	6	45	4	--	--	21
Take up	21	42	9	--	--	20

2. Breastfeeding provisions

2.1. Baseline and reform specifications

There are currently no provisions at EU-level to enable women to return to work while continuing breastfeeding, such as the provision of appropriate breaks and/or privacy.

We understand that the proposed reform:

- Requires Member States to create a right to a breastfeeding break;
- Applies to all workers who are breastfeeding, without limitation on the age of the child;
- Does not require this break to be paid;
- Does not impose a minimum or maximum duration or frequency;
- Requires employers to provide a suitable place for breastfeeding mothers.

2.2. Mapping of policy provisions

2.2.1. Legislated provisions

A statutory right to a breastfeeding break exists in 23 of the 28 Member States. This break is paid in 21 Member States. Access to appropriate facilities is required in 12 Member States.

Table 2.1 – Detailed table of legislated provisions

Country	Break	Paid break	Facilities	Comments
Group 1: High level of legal protection				
AT (2011)	Yes	Yes (Employer)	Yes	Maternity Protection Act §4, 9
BE (2011)	Yes	Yes (Insurance)	Yes	Royal Decree Rendering compulsory Collective Agreement N° 80 Arts.5, 6 Royal Decree Rendering compulsory Collective Agreement N° 80 Art.3 Royal Decree to Execute the Act Respecting Compulsory Sickness and Indemnity Insurance Scheme Art.223
BG (2012)	Yes	Yes (Employer)	Yes	Labour Code §166 Labour Code §308 Ordinance No. 7, on the minimum requirements for healthy and safe working conditions §241
IE (2011)	Yes	Yes (Employer)	Yes	Maternity Protection Act §15B Maternity Protection (Protection of Mothers who are Breastfeeding) Regulations 2004 §2-4

LV (2011)	Yes	Yes (Employer)	Yes	Labour Law §146
NL (2011)	Yes	Yes (Employer)	Yes	Working Time Act §4
RO (2011)	Yes	Yes (Employer)	Yes	Law for adopting Emergency Ordinance nr 96/2003 on Maternity protection at work §17
SI (2014)	Yes	Yes (Employer)	Yes	
SK (2011)	Yes	Yes (Employer)	Yes	Labour Code §170
Group 2: moderate level of legal protection				
CY (2011)	Yes	Yes (Employer)	No?	The Maternity Protection Act §5
CZ (2011)	Yes	Yes (Employer)	No	Labour Code Section 241, 242
DE (2011)	Yes	Yes (?)	No	Maternity Protection Act §7
EE	Yes	Yes (taxation)	No?	?
ES (2011)	Yes	Yes (Employer)	No?	Royal Decree No. 1/1995 enacting the Worker's Charter Art.37(4)
HR (2011)	Yes	Yes (Employer)	No	Labour Act §68
HU (2011)	Yes	Yes (Employer)	?	Labour Code §55
IT (2011)	Yes	Yes (Employer)	No	Legislative Decree No. 151 of 2001 §39
LT (2011)	Yes	Yes (Employer)	No	Labour Code §278
LU (2011)	Yes	Yes (Employer)	No	Labour Code L336-3
PL	Yes ¹	Yes	?	
PT (2011)	Yes	Yes	No	Labour Code §47
FR (2012)	Yes	No	Yes	Labour Code § L1225-30
SE (2011)	Yes	No	No	Parental Leave Act §4
Group 3: Low level of legal protection				
EL (2011)	No	--	Yes	Act No. 1483 of 1983 Protection and facilitation of obligations of workers with family obligations.

¹ <http://www.iclg.co.uk/practice-areas/employment-and-labour-law/employment-and-labour-law-2015/poland#chaptercontent4>

UK (2011)	No	--	Yes	Health, Safety and Welfare Regulations 1992
FI (2011)	No	--	No	No statutory right.
MT (2012)	No	--	No	No statutory right.
DK (2011)	No	--	No	No statutory right.

Source: [1], [2]

2.2.2. Maximum scope of the reform

Assuming there are no other provisions beyond the existing legislation, the reform is expected to affect five Member States (DK, EL, FI, MT, UK) with a cumulated population of 86 million (17% of the EU population).

Table 2.2 – Member States affected by the proposed reform

Proportion of MS affected by the reform	5/28
MS affected by the reform	DK, EL, FI, MT, UK
Percentage of the EU population affected by the reform	17%

2.2.3. Real scope of the reform

Tables 2.1 and 2.2 probably *under-estimate* the entitlement a breastfeeding break across Europe.

In Member States where the right to a breastfeeding break exists, collective agreements sometimes offer a better protection than the law. For example, in FR, many collective agreements guarantee the right to a *paid* break, whereas the law does not (explicitly) provide such a guarantee².

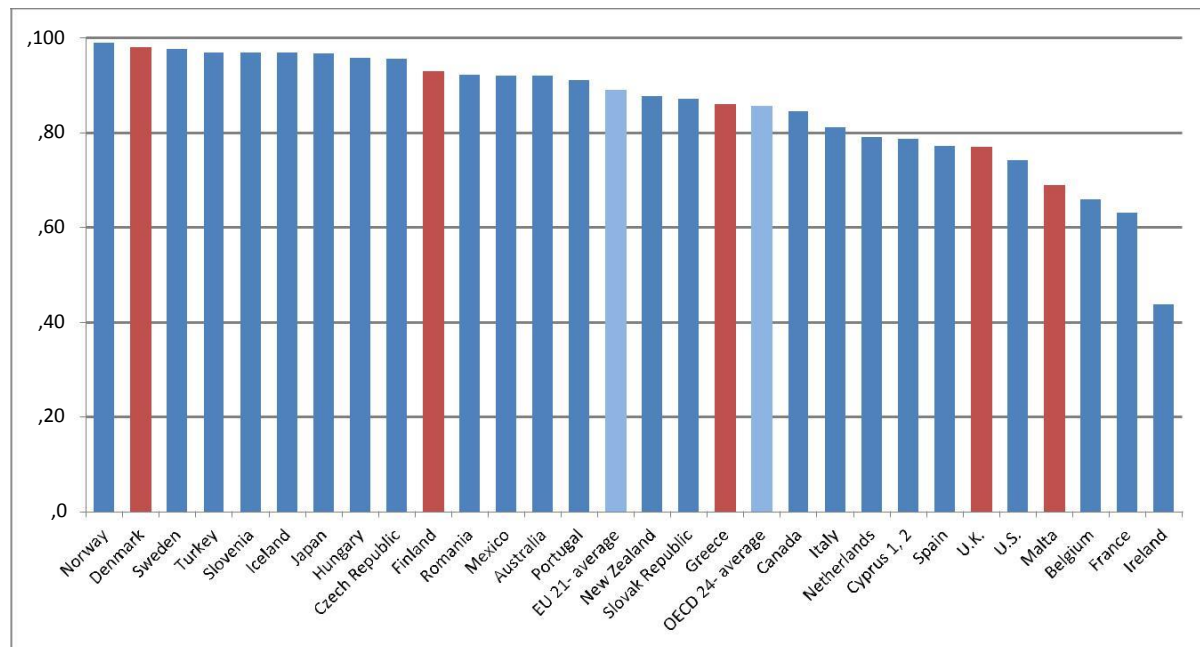
2.2.4. Expected effect of the reform

The expected effect of the reform depends on its objective. If the objective is to increase proportion of children who are breastfed, the reform could help to achieve this objective as past empirical research has shown that a supportive work environment for breastfeeding is one of the contributing factors that may lead to an increase in overall breastfeeding rates [20][21][22][23]. As a result, given the right conditions (please see section 2.7), the reform's effect might be larger in EL, UK and MT (where this proportion

² <http://www.illfrance.org/1137-53-ce-que-dit-la-loi>

below the EU-21 average) and smaller in DK and FI (where this proportion is above average), as shown in Figure 2.1.

Figure 2.1 – Proportion of children who were “ever breastfed”, around 2005



Source: OECD Family Database

If the objective of the reform is to reduce the gender gap in employment rates, there is limited evidence that supports a direct impact of the reform on narrowing such a gap (please see section 2.3.1.).

2.3. Expected effect on beneficiaries

2.3.1. Effect on labour force participation

Literature to support the expected impact of the aforementioned breastfeeding provisions at EU-level on women’s participation in the labour force is limited. There is evidence that indicates that mothers report that the need to return to work is one of the main reasons to stop breastfeeding at longer durations [3]. Perhaps one of the reasons for this is the lack of breastfeeding provisions in the workplace as there is some evidence [5] that suggests that having breastfeeding provisions in the workplace may encourage some mothers to return to work earlier from maternity leave.

There is some evidence [4][5] that indicates that breastfeeding provisions may have a positive impact on the participation of mothers with young children in the labour market: women will return to work from maternity leave earlier, if they wish to do so, and will increase retention of women who may otherwise have resigned [5]. Past research [4] suggests that low-income women may have more difficulty combining work and breastfeeding than higher income women, and women working in administrative and

manual occupations may face special constraints. Less skilled workers have less workplace flexibility with their scheduled hours or location than do more highly-skilled workers [6]. There are two explanations for this pattern. First, flexibility is a form of compensation. Just as more educated workers enjoy higher earnings and are more likely to have benefits such as employer-sponsored health care, they are also compensated with more flexibility. In addition, the nature and context of low-wage job (such as the need for around-the-clock coverage) may make giving flexibility (such one required to provide breaks) to some low-wage workers more costly. Therefore, we can infer that creating breaks/facilities for breastfeeding would benefit this type of employees most.

2.3.2. Effect on career advancement and earnings

Breastfeeding provisions might not be used as extensively as they could due to a perceived negative effect on the career advancement and future earning prospects of the employees who use them. If breastfeeding provisions are not fully integrated in organisations and, therefore, are marginalised (as it often happens with other work-life initiatives), there is the risk of stigmatisation of the users of such provisions. One of the main reasons these initiatives are marginalised is the lack of organisation cultural support, as they clash with basic assumptions about the masculinised “ideal” worker (whose primary priority is his/her work role over his/her non-work role) that are still prevalent in the workplace in developed countries [7] [8]. Employees may choose not to utilise these practices, as they may fear that these practices will negatively impact their career prospects [9][10][11]. This fear might not be unjustified, as past research have shown that some employers might worry that giving time off to pump would decrease employee productivity [12] and this, as a result, may lead to breastfeeding mothers being passed by for promotions.

Very little quantitative research examines how breastfeeding impacts women’s economic status [13][14], aside from research that tallies the saved expense of not purchasing formula, and the reduction in medical costs and fewer missed work days for mothers as a result of healthier children [15]. Furthermore, although a large body of work shows that motherhood, in general, has a negative effect on women’s wages [16][17], the motherhood wage penalty research does not usually distinguish mothers into groups based on type of infant feeding.

A study documenting how the decision to breastfeed instead of formula-feed is associated with women’s post-birth earnings [18] suggests that breastfeeding has a negative economic impact on mothers. Using data from the National Longitudinal Survey of Youth in the U.S., results from this study show that mothers who breastfeed for six months or longer suffer more severe and more prolonged earnings losses than do mothers who breastfeed for shorter durations or not at all. Long-duration breastfeeders forgo substantial income after birth compared to short-duration breastfeeders and formula-feeders. The larger earnings reduction faced by long-duration is largely explained by long-duration breastfeeders being more likely to be non-employed in the years following childbirth and working fewer hours when they are employed.

The reasons why long-duration breastfeeders exit the labour force at higher rates than other mothers cannot be explained by the study’s data. They may leave work because of

their own personal desires or cultural pressure, or they may be pushed out because of the incompatibility of breastfeeding in the workplace. Despite a lack of precision as to why these patterns occur, results of the study indicate that the ability to intensively mother via long-duration breastfeeding is class-biased: on average, women who breastfeed are more likely to be married to college-educated men, men who are capable of supporting a family during the period when mothers reduce their labour supply. Privileged women are thus more likely to be disconnected from the labour force when they have children, and less-privileged women are less likely to be seen as 'good' mothers.

2.3.3. Effect on health and well-being

WHO and UNICEF recommend exclusive breastfeeding for the first six months of life and the introduction of nutritionally-adequate and safe complementary foods at six months together with continued breastfeeding up to two years of age or beyond. However, many infants and children do not receive optimal feeding. For example, only about 36% of infants aged zero to six months worldwide are exclusively breastfed over the period of 2007-2014 [19].

Empirical research has shown that a supportive work environment for breastfeeding is one of the contributing factors that may lead to an increase in overall breastfeeding rates, exclusive breastfeeding rates and continued breastfeeding up to 23 months [20][21][22][23]. A recent literature review [20] revealed that in order to promote breastfeeding practices among employed mothers, the most powerful workplace interventions include: educating working mothers about management of breastfeeding with employment; enhancing employers' awareness about benefits of breastfeeding accommodation at workplace; arranging physical facilities for lactating mothers (including privacy, childcare facilities, breast pumps, and breast milk storage facilities); providing job-flexibility to working mothers; and initiating mother friendly policies at workplace that support breastfeeding. The positive effect of work policies on breastfeeding among full-time workers, might be particularly higher among those who hold non-managerial positions, lack job flexibility, or experience psychosocial distress [22]. However, support at work alone may not be the most effective method to improve breastfeeding rates. A systematic review and meta-analysis [21] to provide comprehensive evidence of the effect of interventions on breastfeeding found that to promote breastfeeding rates, interventions should be delivered in a combination of settings by involving health systems, home and family and the community environment concurrently.

Therefore, work interventions may increase breastfeeding rates among working mothers, which may lead to subsequent health benefits. The health benefits of breastfeeding for the mother and child are well documented. Based on results from hundreds of studies, numerous organisations, agencies, and parenting experts argue that breastfeeding provides benefits for infant and maternal health, mother-child bonding, and the environment. In 2007, the Agency for Healthcare Research and Quality of the U.S. Department of Health and Human Services commissioned a review of the evidence on the effects of breastfeeding on short- and long-term infant and maternal health outcomes in developed countries [24]. This review screened over 9,000 studies which included systematic reviews/meta-analyses, randomized and nonrandomized comparative trials,

prospective cohort, and case-control studies on the effects of breastfeeding and relevant outcomes published in the English language. In terms of the maternal health outcomes, the study found that a history of lactation was associated with a lower risk of type II diabetes, ovarian and breast cancer. Early cessation of breastfeeding or not breastfeeding was associated with an increased risk of maternal postpartum depression. No relationship was found between lactation and the risk of osteoporosis. The effect of breastfeeding in mothers on return-to-pre-pregnancy weight was insignificant, and the effect of breastfeeding on postpartum weight loss was unclear.

2.3.4. Effect on work-life balance

Providing mothers with support to breastfeed when they return to work may also help new mothers to manage the demands from their work and family domains and, therefore, positively contribute to a decrease in work-life conflict [25]. Past empirical research have indicated that there is a conflict between the employee and breastfeeding mother roles. Past research has found that the duration of maternity leave significantly and positively affects the duration of breastfeeding [26]. Indeed, each additional week of work leave was found to increase breastfeeding duration by almost one half of a week. Researchers also found that the intensity of the work effort (measured in terms of daily work hours) upon returning to paid employment significantly affects the intensity of breastfeeding. These findings illustrate the potential conflict for women who attempt to combine paid employment and breastfeeding.

A decrease in work-life conflict may help to reduce its multiple negative effects. There are numerous studies that associate work-to-life and life-to-work conflict with negative outcomes for individuals and organisations. Past empirical research has found that work-life conflict is related to mental and physical health problems [27] and decreased life satisfaction [28][29]. In terms of work-related attitudes, prior research suggests that work-life conflict may diminish job satisfaction [30][28][29] and organisational commitment [31], and increase turnover intentions [32][33]. Work-life conflict has also been associated with a decrease in performance in both the work role and life role. Results from prior studies have linked work-life conflict with reduced job performance [31][34] and increased absenteeism. Similarly, work-life conflict may lead to an individual performing less well in the life domain, for example, as a parent or a partner [35]. For example, both employee fatigue on the job due to caring for a sick baby and decreased work concentration due to anxiousness about a sick baby are likely to result in decreased productivity (Faught, 1994). Extreme conflict between work and family may even result in a breastfeeding mother leaving her role as employee.

A past empirical study [25] explored specific behaviour-based, strain-based and time-based conflicts that can occur for women combining breastfeeding and employment, utilizing a work-family conflict framework. Results indicated that these conflicts often lead to decreased breastfeeding durations, which result in costs for infants, mothers and employers. This study linked workplace interventions (e.g. prenatal education, lactation programs, support systems, job flexibility, and child care) to the types of conflict (e.g. time, behaviour, and strain-based) that each intervention can reduce. It concluded that employers offering support and flexibility decrease the potential for role conflict between

employment and breastfeeding and increase the probability that breastfeeding will be initiated and maintained for longer durations.

2.3.5. Other benefits

Having a breastfeeding provision may bring additional benefits to its beneficiaries such as:

- Enabling parents to exercise real choice about whether or not to breastfeed and for how long, rather than compelling women to cease breastfeeding prematurely on return to work [5].
- Reduced complexity for employees by providing clarity about rights and obligations [5].

2.4. Expected effect on the cared for

2.4.1. Effect of health and well-being

Optimal breastfeeding practices are the cornerstone of child survival, nutrition and early childhood development [36]. A history of breastfeeding is associated with a reduced risk of many diseases in infants from developed countries [24]. The review of the effects of breastfeeding on infant health commissioned by the Agency for Healthcare Research and Quality of the U.S. Department of Health and Human Services in 2007 [24] found that breastfeeding was associated with a reduction in the risk of the following diseases among infants:

- acute otitis media
- non-specific gastroenteritis
- severe lower respiratory tract infections
- atopic dermatitis, asthma (young children)
- obesity
- type I and II diabetes
- childhood leukemia
- sudden infant death syndrome (SIDS)
- necrotizing enterocolitis

There is also evidence that there is a causal association between breastfeeding and reduced infection-specific neonatal mortality in young human infants [37]. In addition, optimal breastfeeding practices improve mother and infant bonding and help infants achieve optimum growth and development [36].

2.5. Expected effect on employers

Expected consequences for employers of the proposed breastfeeding provisions are multiple. As explained earlier, supporting breastfeeding among working mothers may help them to reduce conflict between their work and family. A reduction in work-life conflict can subsequently bring benefits to their employers. Work-life conflict has been associated with negative outcomes in terms of employee's attitudes and behaviours such as reduction in job performance [31][34] and increased absenteeism [38] and turnover intentions [33][32].

Many costs of not breastfeeding or reduced durations of breastfeeding extend to the workplace, affecting employers and work outcomes. For example, higher rates of employee absenteeism and lost income are correlated with incidences of illnesses among children who are not breastfed. In fact, in a comparison study of maternal absenteeism and children illness rates, researchers found that of the 40 illnesses causing one day's absence for employed mothers, 75% occurred in formula-fed babies while only 25% occurred in breastfed babies [39]. Furthermore, because breastfeeding has many demonstrated health benefits for mothers and children [24], reduced employer costs for employee benefits, such as healthcare, have been linked to breastfeeding [40]. For example, a study found that breastfeeding mothers reported fewer gastrointestinal symptoms, fewer physician visits, and fewer cardiac symptoms than mothers who did not breastfeed their children [41].

An additional benefit of breastfeeding provisions is the potential reduction of complexity for employers and employees by clarifying rights and obligations and, therefore, lower the risk of dispute associated with unclear legal entitlements [5].

Regarding costs, employers will face the new cost of providing breaks for breastfeeding, however provision of facilities should have no significant practical or cost implications for employers as the demands on employers are modest and are for a limited period of time [5]. The following are case studies of the support provided by different employers in the UK [5].

Frances returned to work as a school teacher when her daughter was 6 months old. She continued breastfeeding for two months. Her employer provided her with a private room. She was excused from morning briefings to enable her to express milk before school started and she used her other breaks to express during the day.

Helen returned to work when her child was four months old. She worked in a mobile phone shop. Her employer provided a private, lockable room for her to express and access to a kitchen with a sink and a fridge. She used her microwave sterilizer and breast pump at work. Her employer permitted her to take breaks to express when she needed to, rather than at designated times.

Sian works as a TV editor for small company. When she returned to work after maternity leave, her employer permitted her to take breaks to express milk, as needed. She generally took breaks twice a day. She stored the milk in a lunch bag in

the work fridge. This enabled her to work up to 10-hour shifts without halting breastfeeding. Sian was determined to breastfeed her baby and would have resigned if she had been unable to continue feeding.

Catherine is a manager at a local authority. She provides breastfeeding women on her team with access to the first aid room for expressing milk, as well as somewhere to clear and wash equipment. The women take breastfeeding breaks as needed

The above case studies indicate that the level of accommodation that the proposed breastfeeding provisions may require from employers does not necessarily lead to significant changes in the way organisations operate. Of course, this will also depend on the costs of additional facilities (e.g., in areas where real estate is very expensive, the cost of a dedicated space for breastfeeding employees might be more costly for employers).

2.6. Expected effect on the wider society

2.6.1. Economic impact

If breastfeeding provisions in the workplace are effective in increasing the number of working mothers choosing to breastfeed and continue breastfeeding up to the first 23 months (as suggested by past empirical evidence [20] [36]), they might lead to potential health benefits with a subsequent economic impact, such as decreased healthcare costs for the baby and the mother. Studies suggest that increased breastfeeding rates can provide substantial financial savings. A US study found that the excess cost of health care services for illnesses of formula-fed infants in the first year of life totalled between \$331 and \$475 per never-breastfed infant [42]. Thus, the health care costs for child illness among formula-fed babies are significantly higher than the costs incurred for breastfed infants [42].

A UK study aiming to estimate potential cost savings attributable to increases in breastfeeding rates from the National Health Service perspective found that the economic impact of low breastfeeding rates is substantial. This study focused on the cost savings where evidence of health benefit is strongest: reductions in gastrointestinal and lower respiratory tract infections, acute otitis media in infants, necrotising enterocolitis in preterm babies and breast cancer (BC) in women. Savings were estimated using a seven-step framework in which an incidence-based disease model determined the number of cases that could have been avoided if breastfeeding rates were increased. Treating the four acute diseases in children costs the UK at least £89 million annually. The 2009–2010 value of lifetime costs of treating maternal BC is estimated at £959 million. Results of the study suggest that supporting mothers who are exclusively breast feeding at 1 week to continue breast feeding until 4 months can be expected to reduce the incidence of three childhood infectious diseases and save at least £11 million annually. Doubling the proportion of mothers currently breast feeding for 7–18 months in their lifetime is likely to reduce the incidence of maternal BC and save at least £31 million at 2009–2010 value. The study concluded that investing in services that support women who want to breast feed for longer is potentially cost saving.

2.6.2. Social and policy impact

The impact of the new breastfeeding provision on society can be multiple and varied. Among the positive effects is the potential to resolve issues of gender and class equality. Past research [4] [18] has shown that low-income women may have more difficulty combining work and breastfeeding than higher income women, and women working in administrative and manual occupations may face special constraints. Promoting breastfeeding without providing adequate economic and social supports to facilitate the practice reproduces gender and class inequality. With regard to gender equality, breastfeeding provisions, together with shared parental leave, will help parents to exercise real choice about who takes leave, rather than compelling women to take leave while breastfeeding.

2.7. Expected barriers and facilitators

The proposed breastfeeding provision is expected to encounter similar barriers of other work-life policies. Past empirical research [10] has identified several potential barriers that might preclude work-life initiatives from being effectively implemented and used at the individual (such as lack of knowledge of programs and fear of negative consequences) , work group (such as lack of co-worker support and task interdependence), supervisor (such as lack of informal support) and organisational level (such as organizational culture that values presenteeism).

A literature review of the barriers and facilitators to the continuation of breastfeeding for at least six months among working women in the United States [23] organised its findings by the maternal ecosystem starting with the mother 's characteristics and behaviours, her personal social relationships, her community/health care/work environment, and the larger socioculture, policy, and law. This literature review supports the notion that the proposed breastfeeding reform in the EU requires several concurrent conditions to have a positive effect on increasing breastfeeding rates among working mothers. Regarding the workplace, there is evidence that breastfeeding provisions in a supportive working environment facilitates the usage of such provisions. A summary of the findings are shown in Table 2.3.

Table 2.3 – Barriers and facilitators to the continuation of breastfeeding among working mothers [23]

Type of barrier / facilitator	Barrier / facilitator
Mother's characteristics and behaviors	A mother's personal beliefs, way of being, and view of herself in the world are central components of breastfeeding success during maternal employment. For instance, a study [43] found that mothers who continued to breastfeed while working possessed determination, commitment, assertiveness, dedication, positive feelings about breastfeeding, and belief in the benefits of breast milk. The behaviors of mothers are also an important component of successfully combining work and breastfeeding. Mothers reported that time management,

	planning ahead, anticipating breastfeeding or pumping breaks, being flexible, and organizing their workload helped to merge breastfeeding and work [43]
Personal relationships	social Social relationships with and support from others affect a mother's continuation of breastfeeding during employment.
Community/health care	Support from health professionals can contribute to breastfeeding success or failure in working women. Mothers reported separately that health professionals made an important contribution to the promotion of breastfeeding through encouragement, recommendations, and role modelling [44]. However, the same groups of mothers expressed concern about the negative impact of many health care professionals who lack knowledge about breastfeeding, make little effort to offer information, and in some cases discourage breastfeeding [44]. Support groups can promote successful breastfeeding among working women.
Workplace	The workplace can also be an influential social environment, and coworkers can be barriers to or a facilitators of breastfeeding [43]. An accepting work environment with supportive supervisors is also important for success [43] [44]. Supportive work environments and facilities, and childcare options facilitate breastfeeding.
Socioculture, policy and law (including the legislation of breastfeeding provisions in the workplace)	The duration of maternity leave has a clear influence on breastfeeding time. The more time a woman has for maternity leave, the longer she is likely to combine breastfeeding and employment. For 712 mothers in a national survey, each week of work leave increased breastfeeding duration by almost one half week. The amount and distribution of work time has significant consequences for breastfeeding. In two studies with large sample sizes (N= 1,488, N= 2,431), part-time workers had higher rates and longer breastfeeding duration than those working full time.

2.8. Summary

Supporting breastfeeding in the workplace by providing appropriate breaks and/or privacy breaks, for example, may lead to increased breastfeeding rates which, in turn, has multiple benefits for employees and their children, organisations and society. Breastfeeding provisions in the workplace may also lead to some costs for the beneficiaries and organisations. A summary of the benefits and costs are provided in Table 2.4.

Past research suggests that breastfeeding provisions might be more efficient in increasing breastfeeding rates when a) they are combined with other set of family friendly policies (such as shared parental leave), b) the organisational culture is supportive (where support by the line manager is crucial), and c) support is provided from a combined set

of environments concurrently (such as work, home, community, health system). Past research also seem to indicate that interventions in the workplace to support breastfeeding might benefit mothers with lower socio-economic status most.

Table 2.4 – Impact of breastfeeding provisions

	Benefits	Costs
Beneficiaries	<ul style="list-style-type: none"> – Potential increase in labour force participation – Multiple health benefits – Improvement in mother-infant bonding – Reduction of work-life conflict with subsequent positive effects on attitudes and behaviours (e.g. life satisfaction) – Increased clarity of employee rights 	<ul style="list-style-type: none"> – Potential negative effect on career advancement – Potential loss of earnings
Cared for	<ul style="list-style-type: none"> – Multiple health benefits 	–
Employers	<ul style="list-style-type: none"> – Reduction of work-life conflict with subsequent positive effects on employees' attitudes and behaviours (e.g. job performance) – Reduced employee absenteeism for maternal and infant health – Reduced healthcare costs – Enhanced clarity about rights and obligations 	<ul style="list-style-type: none"> – Costs of provision of breaks for breastfeeding – Costs of provision of facilities for breastfeeding
Society	<ul style="list-style-type: none"> – Potential significant savings in healthcare costs – Help to reduce gender and class inequality 	–

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3. Introduction of a paternity leave

3.1. Baseline and reform specifications

There is currently no EU-level provision on paternity leave.

We understand that the proposed reform:

- Requires Member States to create a right to a paternity leave;
- Does not require the leave to be paid;
- Does not impose a minimum or maximum duration;
- Does not concern adoptive fathers.

3.2. Mapping of existing provisions

3.2.1. Legislated provisions

A statutory right to paternity leave exists in 22 of the 28 Member States. Table 3.1 shows that the average (minimum) duration of paternity leave in countries where such a right exists is 10 days. However, there is great variation (from 1 working day to 54). The mean (minimum) compensation rate is 96%, with a range going from 70% to 100%.

Table 3.1 – Summary table of legislated provisions

	Max.	Min.	Mean	Median	Std deviation
Min. duration (wd)*	54	1	10.4	10	11.2
Compensation rate (%)**	100	70	96	100	9

(*) Excluding Member States where there is no statutory right. (**) Excluding DK and countries with a flat rate.

Table 3.2 – Detailed table of legislated provisions

Country	Availability	Min. Duration	Min. compensation	Comment
BE	Yes	3wd	100%	3 working days are obligatory and compensated but the leave can last up to 10 working days.
BG	Yes	10wd	90%	
DK	Yes	10wd	N/A	
EE	Yes	10wd	100%	

Challenges of work-life balance faced by working families

EL	Yes	2wd	100%	
ES	Yes	10wd	100%	
FI	Yes	54wd	70%	
FR	Yes	11wd	100%	
HU	Yes	5wd	100%	
IE	Yes	10wd	Flat rate	Budget 2016 (November 2015) ³
IT	Yes	1wd	100%	
LT	Yes	20wd	100%	
LU	Yes	2wd	100%	
LV	Yes	8wd	80%	
MT	Yes	1wd	100%	
NL	Yes	2wd	100%	Work and Care Act
PL	Yes	10wd	100%	
PT	Yes	20wd	100%	
RO	Yes	5wd	100%	
SE	Yes	10wd	80%	
SI	Yes	15wd ⁴	100%	
UK	Yes	10wd	Flat rate	Or paid at 90% of earnings if the person earns less than 167 euros per week
No paternity leave				
AT	No	--	--	--
CY	No	--	--	--
CZ	No	--	--	--
DE	No	--	--	--
HR	No	--	--	--
SK	No	--	--	--

³ <http://www.independent.ie/business/budget/news/paternity-leave-mandatory-for-employers-34111391.html>

⁴ Does not take into account the 'emergency measures' taken in the wake of the economic crisis and which temporarily increased the number of paternity leave days.

Source:

- Sources: OECD Family Database, Council of Europe Family Policy Database, MISSOC;
- Reviewed by MISSOC national correspondents in June 2015;
- ILO;
- European Parliament.

3.2.2. Maximum scope of the reform

Assuming there are no other provisions beyond the existing legislation, the reform is expected to affect six Member States (AT, CY, CZ, DE, HR, SK) with a cumulated population of 110 million (22% of the EU population).

Table 3.3 – Member States affected by the proposed reform

Proportion of MS affected by the reform	6/28
MS affected by the reform	AT, CY, CZ, DE, HR, SK
Percentage of the EU population affected by the reform	22%

3.2.3. Real scope of the reform

Tables 3.1 to 3.3 probably *under-estimate* the entitlement of new fathers across Europe.

First, these tables are based on minimum leave durations. Some Member States (e.g. BE) impose a minimum leave (typically compensated at 100%) but give fathers the option of taking longer leaves, with a lower compensation rate (up to 10 days).

Second, extensive paternity leave regulations also exist at the sectoral and company level:

- For instance in AT, although there is no statutory paternity leave, workers in the public sector are entitled to 20 working days of unpaid leave.
- In ES, the proposal to increase the duration of paternity leave from two to four calendar weeks, which had been approved in 2009 to be implemented in 2011, has been postponed for until January 2017⁵. However, the extension of paternity leave had already been brought about through some company-level agreements, for instance, at the Spanish subsidiary of Orange, a mobile network operator. Orange's employees can extend their paternity leave up to four weeks, though any days taken outside of the 15 days of national paternity leave are treated as a temporary suspension from work and are not compensated [1].

⁵ <http://csif-fomento.blogspot.com.es/2015/11/rv-permiso-paternidad.html>

- Another example comes from IT, where Nestlé promoted paternity leave among their employees in 2012 through the extension of the legal three days to two weeks' paternity leave with 100% wage compensation [1].
- In DK, leave is not only regulated via national legislation, but also via collective agreements at branch company levels. In 2011 about 75% of the workforce was covered by such collective agreements, and these workers receive compensation during leave from their employer up to their former earnings, i.e. their employer tops up the state benefit.
- In the UK, the *Third Work-Life Balance Employer Survey* data showed that approximately, one in five workplaces offered enhanced paternity pay and leave packages beyond the statutory minima [2].

Third, at least one Member State (CY) is considering amending its legislation to provide a right to paternity leave. A draft bill on paternity leave and allowance was recently discussed in the Cypriot parliament. The proposed reform would offer new fathers a total of four weeks' leave⁶.

Conversely, in one Member State (IT), although paternity leave is available and compulsory, the proposed reform could still benefit a large part of the working population. Indeed, the labour law reform of 2012 only applies to the private sector. Civil servants are therefore not entitled to paternity leave.

More detailed information about collective bargaining on family-related leave can be found in Table 6 of [3] .

3.2.4. Evidence of take-up or demand

Many Member States do not keep administrative records of leave usage by fathers, so national audits have used survey samples when available. It is notable that the most detailed information is found in those countries operating under an extended father-care leave with high-income replacement model.

Table 3.4 summarises the evidence we found on take-up. According to EIRO (2004), “the available figures show a relatively significant take-up rate [for Paternity leave]” [3].

Table 3.4 – Evidence of take-up or demand in Member States

Country	Year	Take-up rate	Comment
AT			
BE	2008	68%	Only about five% of fathers continue to use only the three days of leave that was the previous entitlement.

⁶ <http://cyprus-mail.com/2015/11/16/bill-seeks-a-better-deal-for-new-fathers/>

Challenges of work-life balance faced by working families

BG			
DE			
DK	2011	60%	Source: Danmarks Statistik
EE	2014	41%	Source: Statistics Estonia and Social Insurance Board
EL	--	N/A	
ES	2013	80%	Source: Instituto Nacional de la Seguridad Social – INSS
FI	2013	83%	The average length of the leave taken was 15 working days both in 2012 and 2013. Source:
FR	2012	62%	
HU			
IE			
IT	--	N/A	
LT	--	N/A	
LU			
MT	--	N/A	
NL	2004	51%	An employee survey in 2004 found that 90% of men entitled to Paternity leave took up some sort of leave: 51% had taken the statutory Paternity leave, but most had taken holidays or leave accrued in lieu of pay
PL			
PT	2014	66%	
SI	2015	80%	Roughly four in five fathers take up to 15 days of Paternity leave while one in five leave-takers take more than 15 days.
SE	2011	75%	
UK	2009	91%	Of those taking time off, 49% took statutory Paternity leave only, 25% statutory leave plus other paid leave, 18% other paid leave only and 5% unpaid leave. Those taking statutory paternity leave were most likely to take the statutory two weeks (50%); 34% took less than two weeks and 16% more than two weeks.

Source: [4]

3.3. Expected effect on beneficiaries

We were not able to identify studies looking at the effect of paternity leave on beneficiary outcomes such as fathers' well-being or labour market participation. There might be two reasons behind this gap in the literature. The first explanation is that paternity leave is not meant to improve any of these outcomes (see 'expected effect on the cared for'). The second explanation is that the intervention is too 'weak' (10 working days on average, with a standard deviation of 11 days) to have a tangible effect on 'hard outcomes' [5].

It could be argued that paternity leave has many benefits to the father. For example, a 2008 review of costs and benefits commissioned by DG EMPL found a positive but moderate effect on parents' health, mainly as a "short-term reduction on stress" [6]. However, the evidence behind such a finding is tenuous.

Any benefit of paternity leave in terms of a greater involvement of the father in childcare has been analysed from the mother's perspective, as a better sharing of caring time (see 'expected effect on the cared for').

3.4. Expected effect on the cared for

According to the ILO, the aim of paternity leave is to "enable fathers to assist the mother to recover from childbirth, which is also crucial in establishing breastfeeding, take care of the newborn as well as other children, attend to the registration of the birth and other family-related responsibilities" [7]. Thus, the following section considers the effect of paternity leave on those who are cared for (or assisted) during this leave, i.e. the mother and, to a lesser extent, the newborn.

A key point in the WLB literature is that the effect of leaves on the cared for is strongly moderated by the length of the leave. In other words, the effect of the leave on children's and mothers' outcomes increases as the duration of the leave increases. As already mentioned, a paternity leave is too 'weak' an intervention (10 working days on average, with a standard deviation of 11 days) to have a tangible effect on 'hard' outcomes like children's health or mothers' employment.

Studies comparing the effect of shorter (paternity) vs. longer (parental) leaves have been reviewed in the 'paid parental leave' section, as we found much more variation in the duration of parental leave than in the duration of paternity leave.

3.4.1. Expected benefits for the mother

Quicker recovery and higher level of well-being

We found two studies analyzing the effect of paternity leave on mothers' well-being.

Redshaw and Henderson (2013) utilised data collected in a 2010 survey of new mothers in England. In this survey, 4616 women were asked about their experiences of maternity care, health and well-being up to three months after childbirth, and their partners'

engagement in pregnancy, labour and postnatally. The authors found that paternity leave was strongly associated with well-being at three months. For example, the odds of a mother feeling very or quite well were 64% higher for primiparous women whose partner took up to nine days of paternity leave than for women whose partner had taken no leave. Furthermore, multiparous women whose partner took no paternity leave were significantly more likely to report depression at one month and three months than women whose partners took the standard two weeks leave (in the UK) [8].

Séjourné et al. (2012) surveyed 119 new mothers and their partners in France. The aim of their study was to explore the impact of paternity leave and paternal involvement and notably paternal participation in infant care on the development of symptoms of maternal postpartum depression. The authors found that a low level of paternal involvement in infant care was significantly associated with maternal postpartum depression. This finding is consistent with much of the literature⁷. However, no significant association was found between paternity leave and maternal well-being. This result is in line with a previous study (Séjourné et al., in press)[9].

More equal sharing of parental tasks

The implementation of family-related leaves in developed countries led to various analyses of the impact of fathers' implication in housework and children education. However, most studies evaluate the effect of implementation of long-lasting parental leave in Sweden and Norway that were the forerunners to set up such leaves [10]–[14].

We found two studies looking more specifically at the effect of short-term leaves on the division of family-related tasks. Romero-Balsas (2015) used data from the survey *Social Use of Parental Leaves 2012* to evaluate the effect of the introduction of paternity leave in Spain in 2007 [5]. The subsample of the survey used in his paper contained 600 fathers who had at least one child since 2007 and who were employed at the time of having children, in other words, fathers who could take paternity leave. The use of paternity leave was found to be positively associated with the amount of time dedicated to the care of their first child. Although statically significant, this effect is very small: using paternity leave was associated with an average of five additional minutes dedicated to childcare per day. Furthermore, the tasks that were most equally shared tended to be of a ludic nature (playing with the children) rather than strictly related to care (caring for ill children). Interestingly, the effect of paternity leave on time dedicated to childcare disappeared for fathers who had more than one child [5].

Similarly, Pailhe, Solaz and To (2015) assessed the impact of paternity leave on housework division between spouses in France. By using a large national cohort of children born in 2011 (ELFE cohort), the authors were able to assess the impact of paternity leave on the sharing of housework and newborn-related activities between

⁷ See for example Malik, N.M., Boris, N.W., Heller, S.S., Harden, B.J., Squires, J., Chazan-Cohen, R., et al. (2007). 'Risk for maternal depression and child aggression in Early Head Start families: A test of ecological models'. *Infant Mental Health Journal*, 28, 171–191

parents two months after the birth. Paternity leave take up is likely to be endogenous: fathers who take leave may be more committed fathers, and thus more willing to participate to domestic and parental tasks. In order to identify the effect of paternity leave on subsequent gender equality in childcare and housework, the authors took advantage of the timing of the survey that implied that some of the fathers had already taken the paternity leave and some others were about to take it. Under the assumption that these two groups of families were comparable, the authors observed that a short-duration paternity leave resulted in a more egalitarian distribution of parental tasks when the child was two months old. In particular, the impact of paternity leave on fathers' participation to diapering, giving bath, taking to the medical doctor, getting babies to bed or waking up during night was found robust across models. Other activities, like getting babies to bed, waking up during nights, feeding and outdoors activities were also found to be positively associated with paternity leave; however to a lesser degree [15].

More equal sharing of domestic tasks

The clearest finding of the Romero-Balsas study is that the use of paternity leave was not associated with a more equal sharing of domestic tasks. This lack of effect is robust regardless of the number of hours spent in paid work by fathers. The study shows that the best predictors of an egalitarian division of domestic tasks were the use of domestic service and the employment status of the mother. The author's explanation for the limited effect of paternity leave is that its length is too short to achieve structural changes in attitudes and family practices. In addition, the normative expectations regarding childcare continue to be greater for women due to the asymmetry in the duration of maternity and paternity leaves [5].

Pailhe, Solaz and To (2015) found that paternity leave resulted in a better sharing of a few housework activities, i.e. washing dishes and cleaning, and cooking. It did not significantly modify the distribution of other housework tasks. The authors noticed that the domestic activities impacted by paternity leave were already among the most equally shared, meaning that a short duration paternity leave can affect the housework division to only a limited extend [15].

3.4.2. Expected benefits for the child

Higher probability of breastfeeding

Evidence of a possible association between paternity leave and probability (or duration) of breastfeeding is very limited and unclear. Redshaw and Henderson (already cited) found that women whose partners were more engaged before birth and in labour were more likely to breastfeed and to breastfeed for longer, significantly so for primiparous women. However, in women who were breastfeeding, breastfeeding problems at 10 days were more common in those whose partners were more engaged, significantly so in multiparous women. There were no differences at one and three months [8]. It is unclear from the study whether paternity leave was associated with more or longer breastfeeding.

3.4.3. Expected costs

We have not found evidence of costs to the cared for.

3.5. Expected effect on business outcomes

There is a limited but growing number of econometric studies on work-life balance issues. Many of them are based on analyses of the UK Workplace Employment Relations Study (WERS)⁸. These studies benefit from large sample sizes, the control of a large number of potentially confounding factors which may explain outcomes (e.g. management practices) and the ability to compare firms with and without particular policies. Outside of the UK, the evidence base is much more limited.

3.5.1. Expected benefits

Enhanced staff performance

A few studies have analysed the effect of paternity leave on staff performance; however their findings are contradictory [16].

Using WERS data, Dex et al. (2001) found that having a written policy giving male employees entitlement to specific period of leave when their children are born was associated with:

- Above-average financial performance, based on respondents' *perceptions*. Controlling for a wide range of structural and other human resources practices, the odds of an above-average performance were 26% higher in companies offering specific paternity leave. However, this result is just above the 5% significance level [16], [17].
- Above-average labour productivity performance, based on respondents' *perceptions*. Controlling for a wide range of structural and other human resources practices, the odds of an above-average performance were 29% higher in companies offering specific paternity leave. This result is statistically significant [16], [17].
- Below-average quality performance, based on respondents' *perception* of the quality of output. Controlling for a wide range of structural and other human resources practices, the odds of an above-average performance were 12% lower in companies offering specific paternity leave. However, this result is not statistically significant [16], [17].

Also using the WERS, Gray (2002) examined productivity and financial performance benefits to employers from parental leave, financial help to parents for childcare and workplace nursery provision. In terms of managers' perception of productivity, findings were mixed. Paternity leave, paid time off for childcare and parental leave were not associated with productivity. The author also examined performance in terms of

⁸ <http://www.esds.ac.uk/findingData/werTitles.asp>

manager-assessed profitability compared with industry average. Again, no significant association was found between performance and support for dependent care policies or family leave, indicating that these were neither disadvantageous nor advantageous for businesses. There were two exceptions – in businesses that provided financial help for child care and businesses that offered paternity leave, managers were 93% and 123% respectively, more likely to report above-average performance [18].

Reduced absenteeism

Gray (2002) analysed WERS 1998 to explore the impact of several family-friendly policies on absence rates in the private sector. Paternity leave was not significantly associated with absence levels [18].

Bevan et al (1999) conducted a study of the business case for family-friendly policies (including paternity leave) for the UK Department for Education and Employment based on 11 private sector business case studies. None of the case study firms investigated had measured or quantified the benefits derived from the provision of family-friendly policies but, as noted by the authors, “anecdotally, each of them was able to highlight where they felt they had benefited in business terms. The key areas included reduced casual sickness absence: most were clear that absence due to sickness of a dependant rather than of the employee had reduced. Employees felt able to be more honest about sickness absence than previously. Reduced days lost also reduced direct costs, and the indirect costs of organising cover and lost or delayed business” [19].

Higher organisational/professional commitment

Giffords (2009) obtained data from a convenience sample from the National Association of Social Workers (NASW), the largest professional member organization of professional social workers in the US with 160,000 members. 1000 NSAW members were recruited using a random sample and 214 returned and completed the survey. The author found that the availability of paternity leave in an organisation was associated with a modest but positive and significant commitment to both the organisation and the profession of social workers. However, the provision of paternity leave was only secondary to respondents’ perceptions that the organization in which they work provide opportunities for professional advancement, that it treats the individual equitably, and that it permits sufficient autonomy in doing the job [20]. This result is consistent with a review of the literature: Within a workplace which is perceived as supportive of families, perhaps signalled by paid maternity or paternity leave or emergency leave beyond statutory provision, staff may be more committed and exert greater effort [16].

3.5.2. Expected costs

Costs on business

We found evidence of the cost of paternity leave on business for just one Member State (UK). The impact of the Additional Paternity Leave and Pay regulations on businesses has been estimated at between £2.3 million and £15.8 million. This includes costs to employers of staff time spent on setting up administration systems of APL&P at £1.7 to £5

million. These figures are based on the assumption that four to eight% of eligible fathers will take up the benefit. [21].

High administrative burden

The above-mentioned cost on business is hard to interpret without an understanding of what employers consider as 'reasonable'. In 2012, the British Department for Business, Innovation and Skills (BIS) commissioned a qualitative survey of around 40 employers, with the aim of exploring employers' perceptions of the maternity and paternity leave arrangements and flexible working arrangements in place at the time [22]. Three main findings emerged from this report:

- The process for dealing with paternity leave was found relatively straightforward, and much more informal than for maternity leave, primarily because leave was for a shorter period and required less advance planning. As such it was perceived by employers and other staff as additional holiday [22].
- The impact of paternity leave on businesses was perceived as limited. Shorter absences were much less disruptive and the impact on other staff was limited. Returning to work was straightforward; employees required no support and employers said it was much less common for fathers to request flexible working on their return compared to mothers [22].
- There was no experience of additional paternity leave (i.e. over the 10 statutory days) across the sample. When the concept was introduced, employers were extremely resistant. This was in part due to cultural attitudes to paternity leave, which were evident across all sectors but was particularly evident in male dominated environments. Whilst maternity leave was embedded in working culture, paternity leave was not; it was not taken by all fathers and employees did not always take the full period, or took annual leave as opposed to paternity leave as they received full pay, particularly in senior professional roles [22].

The BIS study confirmed the results of the *Third Work-Life Balance Employer Survey*, which was conducted in 2007 [2]. The survey was conducted with a random sample of 1,462 workplaces in the UK with five or more employees. The survey showed that few workplaces had ever experienced any problems with fathers taking paternity leave. Just six% of workplaces where fathers had taken time off around the birth of a child in the past two years said that there had been problems because a father had not provided enough notice (i.e. less than fifteen weeks before the expected date of birth). Five% of respondents said that there had been other types of problem at the establishment with fathers taking paternity leave [2].

3.6. Expected effect on the wider society

We found very little evidence of the effect of paternity leave on the wider society.

3.6.1. Expected benefits on mothers' health

As already mentioned in this chapter, the aim of paternity leave is to enable fathers to assist the mother to recover from childbirth. From an economic perspective, one would expect paternity leave to alleviate the costs incurred by the medical complications of childbearing. The most common complication is postpartum depression (PPD). PPD occurs in 10 to 15% of new mothers. Groups of women at higher risk include adolescents, inner city women (50–60%) and mothers of pre-term infants. Depression after delivery persists for more than seven months in 25–50% of women. Long post-birth depressive episodes may result in relational or social problems, sometimes long after recovery. Moreover, PPD is associated with increased chronic medical disorders and risk-related behaviours such as alcohol abuse and tobacco smoking [23].

The negative impact of PPD for children, mothers and their families has been established. Competent maternal function is critically important for ensuring the child's well-being and safety. Difficult temperament, poor self-regulation and behavioural problems have been observed in infants of depressed mothers. The depressed mother may not experience a positive relationship with her child, which serves to offset the stresses of newborn care and postpartum recovery. Maternal depression that disrupts the relationship between mother and child contributes to a higher risk for poor infant and child developmental outcomes [23].

Given the breadth and depth of the implications of PPD, it is very difficult estimate the true cost of PPD. Petrou et al. (2002) applied unit costs to estimate the health and social care resource used by 206 women recruited from antenatal clinics and their infants in 2001. Net costs per mother-infant dyad over the first 18 months post-partum were estimated. According to the authors, PPD costs the economy around £45 million each year in England and Wales [24].

3.6.2. Expected costs

Costs to the taxpayer

A 2008 review of costs and benefits of provisions to facilitate the reconciliation of work, private and family life (also commissioned by DG EMPL) assessed the cost of introducing a two-week paternity leave in Member States at different rates [6]. Table 3.5 summarises the findings of the review.

Table 3.5 – Review of estimated costs to the taxpayer in three Member States

Country	Estimated cost to the taxpayer
	Costs of increasing paternity leave to 10 days amount to a maximum 249 million Euro. Even though it is only a scenario of 5 days extra offered leave it gives productions losses that are at the same level as the costs of changing compensation HU levels of 18 and 52 weeks of maternity/parental leave (they only give 20% tax distortion costs). On the other side the public budget consequences of increasing paternity leave are marginal (78-152 million Euro NPV) compared to improving the compensation level of parental leave (1.3bn Euros NPV) [6].
PL	Costs of introducing specific paternity leave of 10 days amount to a maximum of 760 million Euro, stemming mainly from the associated productions losses. On the other side the public budget consequences of introducing paternity leave are not overwhelming (250-524 million Euro NPV) compared to improving the compensation level of parental leave markedly (8.2 bn Euros NPV) [6]. For paternity leave the results shows that the socioeconomic costs are in the range of 564 to 912 million Euro.
	The additional socioeconomic cost of increasing the existing compensation level of paternity leave to 100% of salary for 2 weeks is calculated to be 0.7 billion Euros UK (0.002% of GDP). Costs per user are limited as the duration of paternity leave stays the same, only the compensation level increases for a short period (two weeks of paternity leave) [6].

3.7. Moderating variables

Pailhe, Solaz and To (2015) found that the effect of paternity leave on the sharing of parental and domestic tasks was moderated by the father's level of education. For housework, stratifying by educational level shows some significant results that were not when all fathers were grouped together. Hence it appears that the paternity leave induces more equal sharing of cooking for couples where the father is highly educated and of laundry where the father is high school graduated. The positive effect observed for cleaning on the average population is in fact only driven by a higher participation of highly educated father. On the other hand, the effect of paternity leave on the washing up is higher when fathers are low or medium educated than when they are highly educated. For the latest, washing up is the most equally shared housework activity (half couples share equally). Since equal sharing is nearly achieved, greater progress are hard to achieve [15].

Concerning child-related activities, paternity leave has a greater impact on low educated fathers than on highly educated. Having taken paternity leave leads the formers to share more equally outdoors activities, doctors visitations, changing diapers and bathing the baby. It clearly appears that paternity leave has a positive effect on father-child bonding for fathers who tend to be less involved with their children. For their part, highly educated fathers who have enjoyed paternity leave share more equally putting children to bed [15].

3.8. Factors affecting take-up

There is a large literature on the factors affecting men's take-up of family-related leave; however this literature focuses on the take-up of *parental leave* only. Thus, we refer the readers to the 'parental leave' section of this report for a more complete discussion on this topic.

3.8.1. Leave compensation

Macro-level evidence

We found very little evidence of a link between paternity leave compensation and take-up. This is primarily because the policy set-up across Europe is not conducive to such an analysis. First, there is no take-up data in countries where there is no statutory right to a paternity leave – even though evidence suggests that many new fathers in those countries either benefit from collective agreements or take a different type of leave. In countries where a statutory right exists, methods and definitions are not always comparable. This said, many experts believe that take-up in these countries is “high” [3], [4]. Second, there is not enough variation in terms of compensation rate. In the six countries where paternity leave is not available, the base compensation rate is thus 0%. In the 22 Member States where paternity leave is available, the mean compensation rate is 96% and the median compensation rate is 100%.

It has been said that fathers are most likely to take paternity leave when wage replacement rates are relatively high, and when they have an individual entitlement which is lost if they do not take it [1], [3], [4], [25]. However, these comments extrapolate analyses of fathers taking *parental leave*. The greater variation that exists among Member States in terms of parental leave provisions (duration, compensation, eligibility) makes such analyses possible. Thus readers interested in the link between compensation and take-up are referred to the chapter on parental leave.

Micro-level evidence

Given the impossibility of using cross-national data to analyse the effect of compensation on take-up, observers can only rely on national surveys. However, the blurred line existing between paternity leave and parental leave means that the results are often confusing and hard to interpret. Research published by the UK Equality and Human Rights Commission in 2009 suggested that 34% of eligible fathers didn't take their statutory entitlement; many (49%) saying it was because they could not afford it [26].

3.8.2. Duration

The duration of statutory paternity leave varies from one country to another (from 1 to 54 working days). It should be stressed that looking at the duration of paternity leave in isolation is problematic since paternity leave may be extended through parental leave. In countries with very short paternity leave, this may be offset by the existence of parental leave, thus ultimately providing fathers with significant leave in terms of duration.

Similarly fathers may choose to ‘top-up’ their paternity leave by taking annual leave or holiday, allowing them to take more than the statutory two weeks leave. Almost six in ten UK workplaces (56%) that had fathers who had taken paternity leave said that this had happened in the past [2]. Another UK study published in 2011 suggested that 91% of fathers took some time off following the birth of their baby; almost half took it as paternity leave only, and a quarter combined paternity leave with paid leave (either annual leave or an occupational scheme) [27].

3.8.3. Eligibility criteria

Self-employed men are often not entitled to paternity leave. We have not found evidence of post-natal leave for this sub-group.

3.8.4. Interaction with other policy provisions

We have not found evidence of an interaction between the generosity of paternity leave provisions and other policy provisions (e.g. availability of childcare) on the take-up of paternity leave.

3.8.5. Socio-cultural barriers and facilitators

Personal situation

Escot et al. [28] found:

- A clear and significant U-shaped effect of age on the probability of being on paternity leave for men. This means that both the youngest and oldest fathers, with children under 1 year of age, have a higher probability of being on leave than middle-aged fathers;
- A significant and negative association between being an ‘immigrant’ (from a developing country) and the probability of the male interviewee being on paternity leave during the reference week;
- No statistically significant association between the variable ‘high education’ and the probability of being on paternity leave in the reference week;
- A negative but not statistically significant association between the probability of being a manager and the probability of being on paternity leave;
- A negative and statistically significant association between the probability of working on a temporary contract and the probability of being of taking paternity leave. In Spain, the percentage of wage earners with temporary contracts is very high (around a quarter of the working population). Among them there are high levels of insecurity of employment, and this may lead to some of them not exercising their right to childbirth leave because of fear of their employers’ reaction. This negative effect of having a temporary contract, however, is significantly lower in men than in women.

Family situation

Feldman found that the length of paternity leave was positively and significantly associated with: (i) a planned pregnancy; and (ii) higher family salience [29].

A survey carried out in 2013, covering the region of Olomouc in CZ, showed that nearly two-thirds of women did not wish their partners to be on parental leave, if they had a child at the time of the survey. By contrast, 42% of men stated they would like to take at least some parental leave if they had a child (11% of men even demonstrated a 'strong preference' for their participation in parental leave). A follow-up survey carried out in 2014 explained why women are not willing to give part of their 'carer's time' to fathers. The most important reason mentioned was financial: two-thirds of women respondents were concerned that the financial loss for the household would be too large if fathers took their share of parental leave. Furthermore, one-third of female respondents believed that fathers would not be able to look after their children properly while a similar proportion of female respondents was convinced that women simply do not want to give up their traditional role [1].

Professional situation

Escot et al (2014) found that working in the public sector had a positive and statistically significant effect on the probability of being on paternity leave. In the public sector, with greater stability, better working conditions and a more family-friendly environment, men are more encouraged to request childbirth leave [28]. As already mentioned, many employees who do not claim statutory paternity take time off as annual leave or holiday instead. According to the *Third work-life balance employer survey*, this behaviour was more common at private sector workplaces (35%) than it was at public sector workplaces (12%) [2].

More broadly, Chanfreau et al. (2009) found that fathers who took paternity leave were more likely to be working for large employers, working in the public sector and working in organisations with established family-friendly practices, and to be on higher pay. Conversely, fathers were less likely to take time off if they were working in small private companies, were self-employed or were low-earners [25], [27].

While the attitude of the work supervisor was not relevant for Swedish fathers (Haas et al., 2002), other studies have shown that vertical supervision approval was a key factor in taking parental leave in Spain (Meil et al., 2007) [30]. Likewise, Feldman (2004) found that the length of paternity leave was positively associated with a positive employer's reaction to childbirth [29].

3.9. Summary

	Expected benefits	Expected costs	Inconclusive evidence
Beneficiaries	--	--	<ul style="list-style-type: none"> – Paternity leave probably not meant to improve beneficiary outcomes; – Intervention probably too weak (10 days on average) to influence 'hard outcomes'.
Cared for	<ul style="list-style-type: none"> – Lower risk of post-partum depression for the mother. – More egalitarian division of parental tasks. – Weak effect on the division of domestic tasks. 	--	<ul style="list-style-type: none"> – Unclear effect on the probability (or duration) of breastfeeding.
Business outcomes	<ul style="list-style-type: none"> – Stronger commitment to the organisation and the profession. – Weak effect on absenteeism. 	<ul style="list-style-type: none"> – Low administrative burden. 	<ul style="list-style-type: none"> – Unclear effect on staff performance.
Wider society	--	<ul style="list-style-type: none"> – Relatively low cost to the taxpayer. 	--

Barriers	<ul style="list-style-type: none"> – Self-employed father are often excluded from paternity leave provisions. – Being an immigrant. – Working on a temporary contract.
Facilitators	<ul style="list-style-type: none"> – A higher level of education increases both take-up and effectiveness. – A higher compensation rate might increase take-up. – Planned pregnancy. – Higher family salience. – Working in a large company or in the public sector.

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4. Carer's leave

4.1. Baseline and reform specifications

Currently, there are no provisions on carers' leave at EU level.

We understand that the proposed reform:

- Requires Member States to create a right to a carer's leave;
- Limits the use of this leave to carers of elderly/disabled/frail family members, typically parents, spouses, siblings and adult children;
- Does not impose entitlement conditions (e.g. being terminally ill);
- Does not impose a minimum or maximum duration;
- Does not require this leave to be paid;
- Does not offer any type of pension credit to informal carers;
- Focus on long term leave to care for relatives (as opposed to emergency leave).

4.2. Mapping of existing provisions

4.2.1. Legislated provision

The table below describes the current provision of carer's leave across the European Union. If many European countries recognize the role of family carers and incorporate the principles of helping them balance work and caring, this is not completely reflected in the provision of carer's leave [1, 2]. Most countries for which information is available have leave for carers, although conditions for leave tend to be limited and paid leave is restricted to slightly less than half of the countries. In contrast, parental leave to care for children – although different in nature and content – is widely available and is paid in three-quarters of EU countries; although often at low rates.

In most Member States where it is available, paid care leave is limited to terminal illnesses or to less than one month. BE provides the longest publicly paid leave, for a maximum of 12 months, which employers may refuse only on serious business grounds. In terms of remuneration, Nordic countries tend to pay the most. In DK, in exchange for employers continuing to pay full wages during care leave, municipalities reimburse a minimum equivalent to 82% of the sick benefit ceiling [1].

In the case of unpaid leave, there is a geographical divide [2]. A group of countries provides long leave of one or more years (*e.g.* FR). In the case of FR, while employers may not oppose the leave, eligibility criteria remain strict: leave is only available to care for a relative with an 80% autonomy loss. A second group provides relatively short leave of up to three months (*e.g.* NL).

Table 4.1 – Overview of legislated provisions

Country	Paid	Description	Duration and payment
Carer's leave with rate based on previous earnings			
AT	Yes	Extra annual leave	5 days per year for dependent family members needing care (10 days for children), paid at 100%
AT	Yes	Family hospice leave	6 months, rate is income-related and equal to the rate of unemployment benefits (55% of daily net income)
AT	Yes	Part-time family hospice leave	6 months, rate is calculated on the difference between the average gross pay received before the leave and the one received during part-time leave.
DK	Yes	Leave to care for a close related with a significant and lasting disability	Up to 6 months (in certain circumstances extended up to 3 additional months), full wages during care leave, municipalities reimburse a minimum equivalent to 82% of the sick benefit ceiling
EE	Yes	Care benefit	Up to 7 calendar days for nursing a sick family member at home, paid at 80% of average income
EE	Yes	Care leave	No duration mentioned, rate is 80% of average income up to 60 calendar days. Afterwards unpaid.
FI	Yes	Job alternation leave	100-360 calendar days, rate is 70-80% of unemployment benefit
IT	Yes	Leave to care for a seriously disabled child or relative.	Up to 2 years, paid at 100% of earnings up to an annual ceiling of €36,151.
NL	Yes	To take care for a sick family member or a sick social relative	Up to 10 days per year, paid by the employer at 70% of employee's earnings.
PT	Yes	Leave to care for children under the age of 12 (or without age limits if disabled); aged 12 or more provided they leave in the household; for disabled or chronically ill children spouse or other close relative	Up to 6 months, paid at 65% of the reference wage of the six months preceding the second month before the event
SI	Yes	Leave to care for a sick co-resident family member	7 days, but 15 days can be taken for a child up to 7 years of age. The period can be exceptionally extended to 30 days (or up to 6 months in extreme case), paid
SK	Yes	Workers are entitled to leave for the care of a sick family member.	Maximum 10 days at a time (but renewable, no yearly max), paid.

Unpaid carer's leave			
DE	No	Leave to care for a close relative.	Up to 6 months (which can be taken part-time or full-time)
EL	No	Leave to care for dependent persons	6, 8 or 12 days according to the number of the dependent persons.
ES	No	Long term leave or reduction of working hours to take care for a dependant	Up to 2 years; possible extension to 3 years for civil servants. Un paid but the 1st year of leave is considered as contribution period for retirement and other benefits.
FI	No	Contractual absence	For a fixed period, as agreed.
FR	No	Family support leave	3 months renewable up to one year for the whole career, Granted to employees who have worked at least 2 years for the company.
HU	No	Leave of absence	Maximum of 2 years
IE	No	Carer leave	At least 13 weeks up to a maximum of 104 weeks. 3 days of leave are also available in any 12 consecutive months, up to a limit of 5 days within a 36 months period in case of serious needs
NL	No	Long term leave for the assistance of family members or social relatives who need care	6 weeks per year
Flat rate			
BE	Yes	Leave for medical assistance	Up to 12 months (up to 24 months in case of part-time leave). Must be taken in blocks of one to three months. Flat rate of 786,78 EUR gross.
BE	Yes	Leave for palliative care	Maximum of 2 months per patient, flat rate of 786,78 EUR gross.
FR	Yes	Family solidarity leave	3 months, renewable once, flat rate of 55,15 € per day.
Carer's leave paid as sick leave			
BG	Yes	Leave for family care	Up to 60 calendar days per calendar year total for all insured family members, paid as sick leave.
CZ	Yes	Leave for the care of a child under ten years or of a family member.	Unlimited, Sick pay (60 % of the Daily Assessment Base) for the first 9 days of leave.
DK	Yes	Leave to care for a terminally ill relative	No upper limit regarding leave to care for terminally ill persons but the prognoses are

			often short and within a maximum time range of 2-6 months. Pay equivalent to 1½ times of sick pay, but not exceeding previous revenue.
PL	Yes	Leave to care for a family member	Up to 60 days per calendar year (care of a healthy child under 8 years of age or a sick child under 14 years of age), up to 14 days per calendar year (care of a sick child aged more than 14 years or another sick member of the family). Paid at 80% of the basis for the sickness allowance assessment.
SE	Yes	Leave for the care of relatives	Maximum 100 days per relative, Paid at sick-leave level.
Countries with no provision in place for carer's leave			
CY			
LT			
LU			
LV			
MT			
RO			
UK			

Sources: OECD Family Database, Council of Europe Family Policy Database, national ministry sources, Reviewed by MISSOC national correspondents in June 2015

4.2.3. Maximum scope of the reform

Table 4.2 – Member States affected by the proposed reform

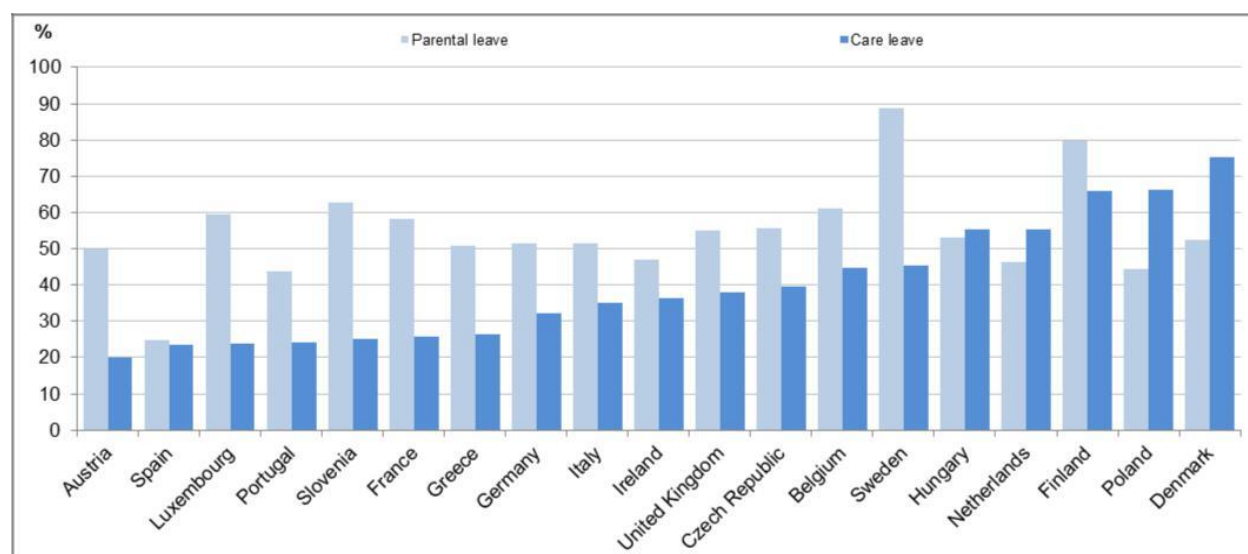
Proportion of MS affected by the reform	1/4
MS affected by the reform	CY, LT, LU, LV, MT, RO, UK
Percentage of the EU population affected by the reform	28%

Assuming there are no other provisions beyond the existing legislation, the reform is expected to affect seven Member States (CY, LT, LU, LV, MT, RO, UK) with a cumulated population of 142 million (28% of the EU population).

4.2.4. Real scope of the reform

Data on leave use are particularly difficult to obtain but a representative survey of companies in European countries collected by Eurofound contained information on companies providing leave for long-term care purposes (Establishment Survey on Working Time and Work-Life Balance) [1]. Figure X below shows that among these companies, the provision of care leave is clearly less frequent than that of parental leave.

Figure 4.1 – Share of companies providing leave for long-term care purposes

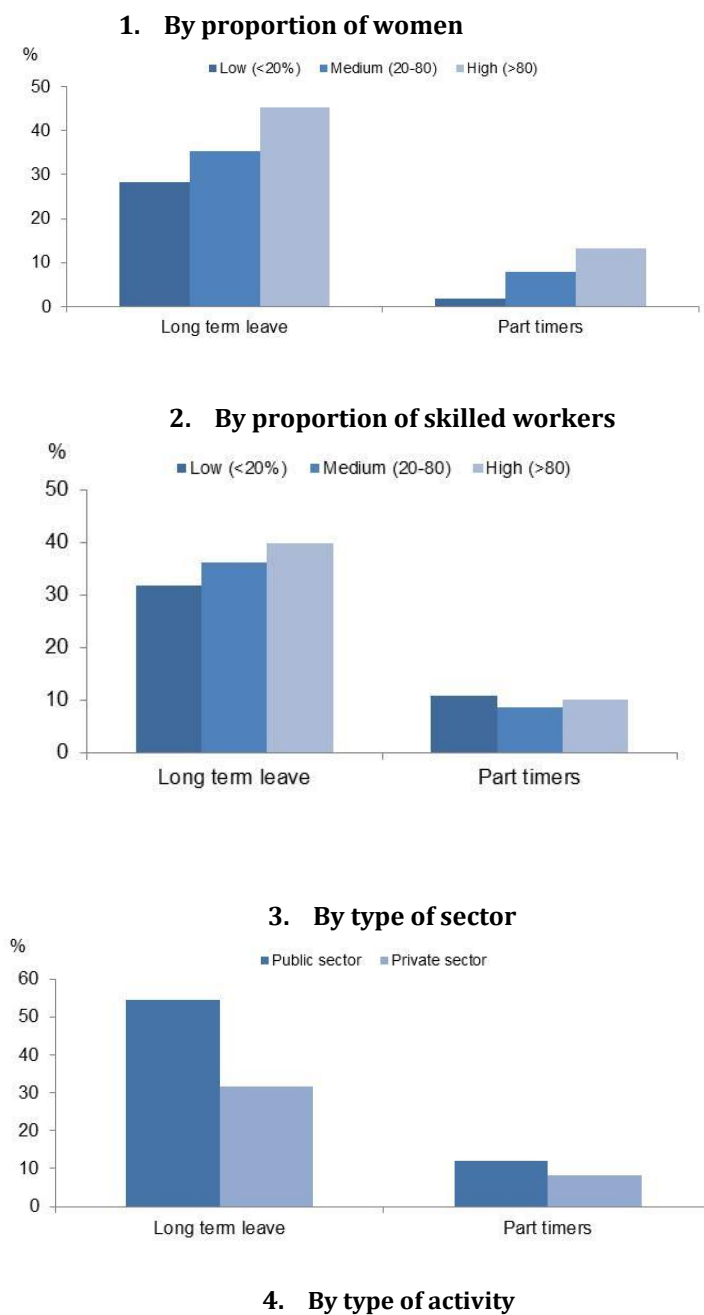


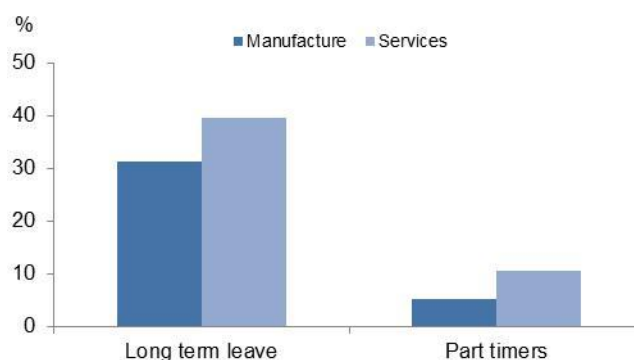
Source: European Establishment Survey on Working Time and Work-Life Balance, 2004.

Over a third of European companies report that long-term leave is available for employees to care for an ill family member, whereas nearly all establishments offer parental leave and in half of the establishments employees have taken parental leave in the previous three years. A greater portion of companies offers care leave to their employees in Nordic countries and in PL (60% on average) and a much smaller fraction is found in Southern Europe (around 25%). Use of care leave depends heavily on the sector of work and disparities among workers are likely in the absence of statutory rights [1].

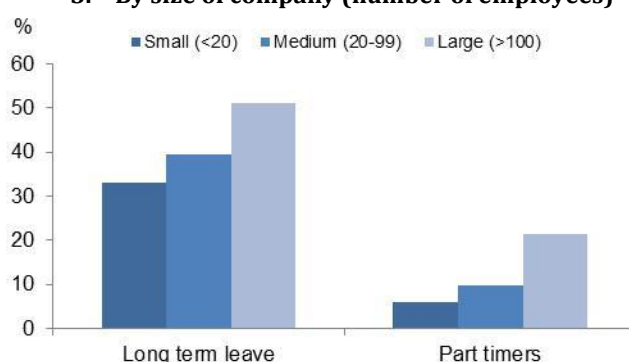
The OECD collected data on the availability of care leave by types of firms [1] – see Figure 4.2 below. Long-term leave to care for an elder or sick relative is most often found in the public sector and/or in larger companies. In terms of firm characteristics, more establishments grant care leave in companies with a higher proportion of female employees, where there are more skilled workers, and care leave is less likely in manufacturing than in the service sector. All of these categories of workplaces are most likely to provide child-related provisions, too [1].

Figure 4.2 – Share of establishments reporting offering care leave or part-time work for care





5. By size of company (number of employees)



Source: European Establishment Survey on Working Time and Work-Life Balance, 2004.

4.2.5. Evidence of take-up or demand

We could not find evidence of take-up or demand of carer's leave in Europe.

A note on the literature covered in this section

Recent policy developments in long-term care (LTC) in Europe have been uneven, and often occurred in response to political or financial pressures [3, 4]. However, all have in common to rely heavily on informal carers as the main providers of care for older people and adults with disabilities. Across the European Union, informal carers provide over three-quarters of all LTC services [5, 6], and the size of the informal care 'workforce' is at least double that of its formal counterpart [7]. Despite their relevance to the future of LTC services in Europe, support services for informal carers in general and carer's leave in particular remain largely under-researched. European states have gradually implemented policies to compensate for income lost due to caring, but also to facilitate caring activities [2]. Most of these services (including carer's leave) have not yet been fully evaluated. Consequently, a large share of the evidence we reviewed is 'indirect'. If the negative effects of caregiving on a number of outcomes of interest for this report are well established in the literature, still little is known about which interventions (including carer's leave) will mitigate this association. The literature included in the review reflects these limitations: we know quite well the impact of caregiving on health and employment

outcomes but relatively little on the wider impact on the cared-for person, on employers or on society. It should also be noted that the development of the literature in the area is not homogenous. The UK has been at the forefront of research developments in the field for the past 10 years. A large share of the research presented here is consequently centered on the British case.

4.3. Expected effect on beneficiaries

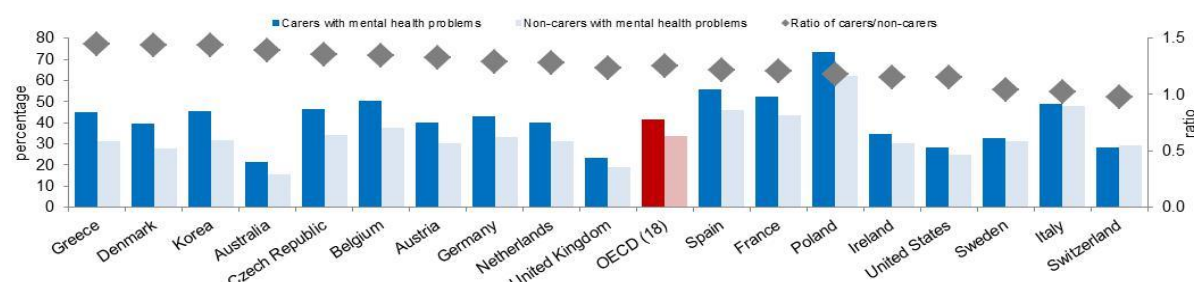
4.3.1. Health and wellbeing

The evidence regarding the expected effects of an extension/introduction of a carer's leave on the health and wellbeing is limited. Most of the available evidence is 'indirect': the negative outcomes associated with caregiving in terms of health and mental health are well-documented but much less is known about which policy interventions could mitigate that association [8, 9].

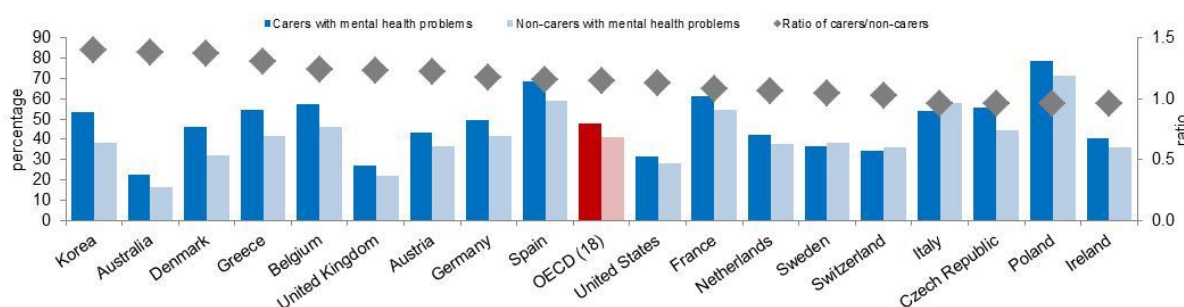
The psychological distress, strain and overall health deterioration associated with informal care are well established [e.g. 10, 11]. Isolation and lack of support might prove a high burden and result in mental health problems, with carers often referred to as "secondary patients" [1, 12]. In the US, one third of caregivers are in fair to poor health themselves and two out of three older care recipients get help from only one unpaid caregiver [13]. In the 2011 UK census, 390,000 carers in England and Wales reported being in bad health. People providing intensive care are more than twice as likely to report bad health than non-carers. Across OECD countries, informal carers also present 20% higher prevalence of mental health problems [1]. Figure X below shows per OECD country the prevalence of mental health problems among carers and non-carers. Carers report higher levels of mental health problems in all OECD countries, and it is particularly the case among women.

Figure 4.3 – Percentage of mental health problems among carers and non-carers and ratios, OECD countries

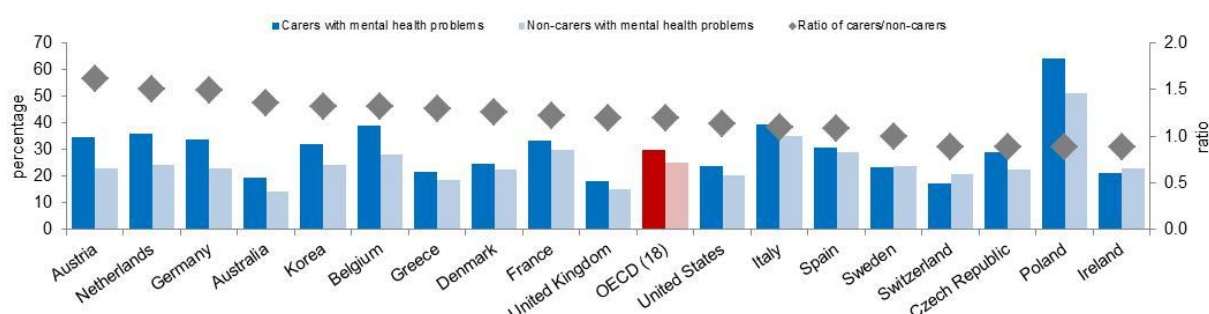
Total



Women



Men



Note: Ratios correspond to the relative prevalence of mental health problems among carers and non-carers. Samples include person aged 50 and above. The US includes care provide to parents only. The following estimates are considered for each country: 2005-2006 for Australia, 1991-2007 for the UK, 2005 for Korea, 2004-2006 for other European countries, and 1996-2006 for the US.

Source: OECD estimates based on HILDA for Australia, BHPS for the UK, SHARE for other European countries, KLoSA for Korea and HRS for the US.

No formal evaluation of the impact of paid or unpaid leave on the physical or psychological health of carers was available for Europe at the time of this review. Available data from the US show that workers in jobs that provide unpaid family leave are more likely to remain employed and maintain work hours over a two-year period, but access to these benefits has little impact on female carer's psychological distress [14]. Although carer's leave does not directly reduce the effects of care work on psychological distress, there is some evidence that they could have an indirect benefit for well-being if they allow women to remain in the labour force while providing care [14].

4.3.2. The role of carer's leave policies in alleviating the negative impact of caregiving on unemployment

A primary economic consequence of caregiving is reduced labor force market participation. Carers are less likely to be employed and are 50% more likely than non-carers to give up paid work, to be unable to seek (re)employment after redundancy for example because of their care responsibilities, especially when informal caregiving is intensive and co-residential [7, 15]. Policies to reduce the dual pressure from work and care for employed caregivers might improve their employability, making caring a viable

option for more potential carers. However, examples of good practice measures from EU Member States to relieve carer burden which have been rigorously evaluated are very limited in number. Thus even though many initiatives are developed to support carers, there is little scientific evidence available on what works, why it works, for whom and what the short- and longer-term impact on the carer and/or the person they care for might be [2]. Some examples of good practice are multi-component interventions; with these it is even more difficult to identify what particular elements of these intervention are effective and why [8]. We gathered here the studies which have looked specifically at the impact of leave on a range of employment outcomes.

Most studies on the use of carer's leave found positive effects on labour-market outcomes, work commitment, and other employment outcomes [e.g. 14, 29]. Workers who report that they have access to unpaid family leave are more likely to remain in the labour force or maintain or increase their hours of employment. These effects are particularly notable because policies such as unpaid family leave are relatively low cost for employers, but they may have a substantial pay-off if they help retain employees [14].

The Netherlands offer an interesting case. Dutch employed carers are helped to stay in work thanks to relatively generous leave arrangements. Under the Work and Care Act 2001, carers can take advantage of different types of care leave, including long-term unpaid leave to look after a relative with a life-threatening disease for up to six weeks full-time or 12 weeks part-time. Another option is the Life Course saving scheme, whereby employees can 'bank' time or wages, which they can later exchange for care leave, sabbatical leave, educational leave or early retirement. However, statistical data suggest that Dutch people providing care rarely make use of long-term care leave [30]. As far as the Life Course scheme is concerned, women are more likely than men to take advantage of the facility. Those caring for a partner and those with a full-time job (28-plus hours per week) use such arrangements more often than those caring for a child or parent or carers working part-time. Carers in public sector employment also use the arrangements more than others [31]. However, many women – especially those in low income groups – face difficulty in banking enough time because of discontinuities in paid employment, part-time work, and having previously used up any savings for parental leave [32]. In principle, there is scope for implementing similar forms of employment leave to help carers provide work and care at critical times in care-giving situations, although there are potential resource implications for employers and/or the state [8]. Canada's (Employment Insurance) Compassionate Care Benefit scheme is particularly generous. It gives eligible employees who are absent from work to provide care for a gravely ill family member the right to six weeks of compassionate care benefits (up to 55% of average insured earnings) without putting their jobs or income at risk [33].

Design of carer's leave policies

The studies mentioned above point at the specificities of leave policies to care for older adults. Unlike the care of children, which follows a fairly predictable time schedule, care for disabled or sick parents is unpredictable and may take place over a long or short period of time. The need for care may be sustained or sporadic; it may involve the long-distance management of health care and other support, or it may involve daily contact and personal care. And, unlike caring for children, the amount and intensity of care work

for adults often increase over the course of the care episode. The variation and unpredictable nature of the care experience makes it especially difficult to identify specific policies that are most likely to help workers manage care work and remain in the labour force.

Existing studies suggest that combinations of interventions including care leave, and targeting support to specific categories of carers, might work best in supporting carers to retain employment or return to the workforce [8]. Factors that contribute to effective support for carers include [2, 8]:

1. A 'package' of complementary interventions or combination of different approaches that provide synergy; for example, day care for the care recipient combined with leave for carers;
2. A 'package' that is made available to all employees rather than targeted to specific groups of workers: findings from previous studies have shown that informal work cultures may discourage their use, thus weakening their impact;
3. Tailoring the package to meet the needs of specific categories or groups of carers and care recipients, such as people with dementia, or other mental health problems, and their carers;
4. Acknowledging the common concerns of carers and care recipients, as well as their separate needs;
5. Embedding the intervention within existing networks, linked to existing professions.

Care leave is sometimes limited to caring for those with a terminal illness. Obviously, much care is needed also for people with non-terminal diseases. A wider definition of care leave may be desirable but it is not without risks. First, while a parent-child relation and the needs for child care are relatively clear-cut, it remains difficult for policy makers to identify who are the long-term carers and which level of caring commitment should trigger an entitlement to care leave. To prevent such problems, entitlements are defined in terms of the relationship to the dependent person, but since a person might have several carers, the problem of how many carers per person should benefit from leave arrangements emerge. Second, additional difficulties arise with respect to decisions about what care needs justify a care leave and the setting of eligibility conditions that are neither too loose so that any relative may claim to be a full-time carer, nor too restrictive (e.g. terminal illness, 80% dependency as in FR). Given that most carers are involved in low-intensity caregiving [1], this raises the issue of what care efforts justify entitlements to a care leave. The use of care assessment systems already in place to determine eligibility to publicly funded LTC benefits may need to be extended also to dependent people that rely on care by family and friends.

4.3.3. Career and career prospects

Another possible economic cost associated with informal care is lower wages. For instance, informal carers might experience a wage penalty as a result of career interruptions, which lead to a deterioration of human capital or skills depreciation, or the loss of opportunities for career advancement [15, 19].

The relationship between carer's leave and career prospects has been the focus of a limited number of studies. The use of leave for long-term care might be limited in practice because employees fear that it will have a negative effect on their career and income [17]. In this respect, the use of statutory rights to care leave might be influenced by the generosity of leave compensation and the intensity of caring obligations. Caregivers with less intensive obligations might prefer to use sick leaves or holidays, particularly if workers fear that a request for care leave might endanger their career [1]. It is to be expected that the lower the compensation rate, the lower the take up for such care leave will be [1]. Loss of income during care leave is often cited as a reason for preferring to use sick leave or annual paid leave since workers receive full salary during holidays and many Member States have generous replacement rates during sickness. On the other hand, for those caring for their partner, providing more hours of care might be more prone to ask for statutory care leave, even if it is unpaid.

Existing research has shown that define the appropriate duration for care leave is challenging since a long leave may damage labour market position and career progression while a short leave might not be enough and force workers to resign from their job. However, unlike the care of young children which requires more intensive care at a younger age, care for ill or disabled relatives is unpredictable in duration and intensity over time [15]. Workers might benefit from flexibility in the possibility of fractioning leave over several occurrences. Ideally, care leave could take into account the episodic nature of illnesses, improvement or deterioration in health condition or changes in the availability of formal care [1]. Returning to work part-time might also be helpful to accommodate the changing needs of carers and disabled people.

A concern in the literature has been that care leave, particularly paid leave, could become a pre-retirement option [1]. While parents take parental leave at the beginning or through mid-career, most carers tend to be older than 45 or 50 years [4]. Long paid care leaves, particularly if they offer high replacement rates and if workers are guaranteed pension and unemployment contributions, create a risk of early retirement. This has occurred with the "Time Credit" in Belgium, which can be taken as a full or partial reduction in working time up to a maximum of one to five years [1].

4.4. Expected effect on the cared for

We could not find evidence of the effect of carer's leave on the cared for person. However, as caring responsibilities are largely influenced by the health status of care recipients [1], there is a strong case to extend carer's leave from the perspective of the cared-for person too. Indeed, research shows that while 25% of adults aged 50 and above suffering from one limitation of daily activities receive care from family and friends, this proportion doubles in the case of two or more limitations [1].

4.5. Expected effect on business outcomes

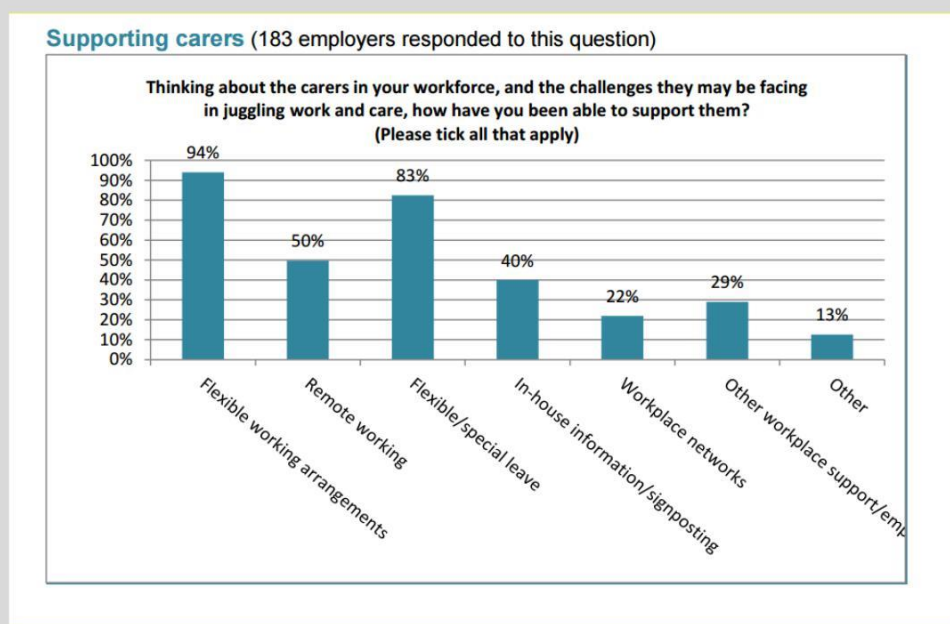
The fact that many carers currently struggle to combine work and care is damaging to employers and the wider economy. Employers are losing talented people in whom they have invested significant time and money. From the employers' perspective, informal care leads to absenteeism, irregular attendance, lack of concentration at work and loss of human capital for the organization [1]. Indeed, the Conference Board of Canada estimated that the cost of caregiving to employers (including missed work days, missed hours and employees quitting or losing a job) totaled CND 1.3 billions in 2012 [34]. It should be noted that combining caregiving and paid employment is less problematic in the Netherlands, where caregivers provide mostly non-intensive care (less than 20 hours per week) and where part-time work is more common [35, 36].

Box 4.1 – Business Benefits of Supporting Working Carers – Key findings from Employers for Carers/Department of Health Task and Finish Group (2013)

An online survey was conducted between December 2012 and January 2013 in order to gather more information on the business benefits of supporting carers in the workplace. 223 employers responded to the survey.

Key Findings:

- 88% of organisations were aware of staff that are caring for/supporting older, sick or disabled family members or friends.
- Flexible or special leave (83%) was among the most popular ways employers used to support carers in the workforce.



- The majority of employers considered that supporting carers in their workforce had either a major or some benefit in their ability to attract and retain staff, reducing sick leave and absenteeism, producing cost savings and increasing staff morale, reducing recruitment and training costs, improving staff engagement, people management and team working, increasing productivity and improving service delivery.

Source: Employers for Carers 2013 [37].

The peak age of caring (45-64) is also the point at which people are most likely to have developed the skills the employers need. Supporting carers to remain in work could unlock significant economic gains. As well as reversing the losses currently incurred a survey carried out by the Task and Finish Group in the UK demonstrated that employers who have policies in place to support carers see improved service delivery, cost savings and increased productivity (please see box 4.1).

4.6. Expected effect on the wider society

No direct evidence of the potential effect of carer's leave on the wider society was available at the time of the review. However, costs associated with caring activities provide an interesting case for supporting carers to continue or taking on caring while staying in employment.

Indeed, emerging evidence suggests that informal carers shoulder a disproportionate share of the caregiving burden across the world. Current estimates of their economic value far exceed most national spending for formal care. Across the UK for instance, the value of the care provided by family and friends is estimated to be worth £119bn per year, considerably more than total spending on the NHS (£98.8bn) and the figure has risen by over a third since 2007 [38]. In the Netherlands, recent estimates of the economic value of informal caregiving range between 3 and 20 billion Euros per year depending on the hourly cost applied to caregiving [39]. A conservative estimate of the economic contribution of unpaid caregivers for Canada for 2009 amounts to CND 25-26 billions. Estimates for the US suggest that the economic value of family caregiving totaled USD 375 billion in 2007 [40], higher than the estimated cost of USD 230 billion of paid formal LTC services in the same year [41].

There is also a strong economic case to support working carers. The public expenditure costs of carers feeling unable to continue working in the UK have been estimated to be £1.3 billion a year [21]. The true cost may be even greater if lost revenue through tax and pension contributions is included. King and Pickard show that social policy in the UK has increasingly endorsed support for people of a working age and with caring responsibilities to remain in work if they wish to do so. A key area of development is to try to understand when the carer's employment is at risk. If previous research has showed that providing care for more than 20 hours per week has a negative effect on employment, a recent study has shown that it could be only 10 hours per week that are likely to put a carer's employment at risk [42]. In addition, caring can be associated with long periods out of the workplace, leading to a "scarring effect" of detachment from the labour market [42].

4.7. Moderating effects

As mentioned in the introduction of this chapter, most of the evidence available is indirect. A key motivation for the introduction of carers' leave is that this measure would have the potential to moderate the negative effects of caregiving on a range of outcomes. In particular, carer's leave would enable carers to combine care and employment. These moderating effects are however very complex to analyse and further investigation is

needed before firm conclusions can be drawn. For example, no formal evaluation of the impact of paid or unpaid leave on the physical or psychological health of carers was available for Europe. US data show that workers in jobs that provide unpaid family leave are more likely to remain employed and maintain work hours over a two-year period, but access to these benefits has little impact on female carer's psychological distress [14]. Although carer's leave does not directly reduce the effects of care work on psychological distress, there is some evidence that they could have an indirect benefit for well-being if they allow women to remain in the labour force while providing care [14].

4.8. Expected barriers and facilitators

Support for informal carers is increasingly recognized as a pressing and important objective of long-term care across European countries. Numerous research centers and scientific societies such as the Institute of Medicine are advocating for adopting formal protection and support services for informal carers [43]. A number of barriers and facilitators will influence the adoption of carer's leave in European. They are listed below.

Barriers related to the implementation of carer's leave

The first barrier is the lack of adequate data, particularly evaluation data. It is promising that policymakers are increasingly identifying this as a gap, and supporting initiatives to collect data for carers who are registered as receiving cash payments. However, the variability in the definitions, data sources, and data collection methods poses a significant challenge when assessing the situation of informal carers and prevents an accurate cross-country comparison of support policies, including carer's leave. More systematic collection and monitoring of information on informal carers are needed to help shape and design policy and programs for interventions. The UK has made progress in that direction: a question about informal responsibilities is included in the 10 year census, and also in nationally representative household panel surveys, which allows to track trends and movements in and out of caregiving. In the US, beginning in 2015, the hospice quality reporting program will require all hospice providers to collect information from the patient's informal caregiver after the patient's death, including the quality of the communication with the patient and his/her caregiver.

A second difficulty when it comes to designing an adequate care leave policy for unpaid carers is the complexity of identifying them. Estimating the number of caregivers is consequently a difficult task: in the US for example, estimates vary considerably depending on the data sources but the number of informal carers was estimated to amount to 59 million in 2012. In Canada, the number of caregivers amounted to 3.8 million in 2007, an increase of nearly 1.5 million caregivers in just five years. In addition, the population of carers is fluid and constantly changing. Analyses of nationally representative household panel survey data covering England, Scotland and Wales during the 90s revealed that one third of co-resident carers and 40% of carers living in separate households from the person they cared for become carers each year and similar proportions ceased to provide care. Prevalence estimates over a five years period are therefore at least 74% higher than one year prevalence estimates [44].

A related issue is the need to increase the awareness and identification of carers. This is crucial in terms of both enabling data collection and appropriately targeting carers to give them the opportunity to receive support. At the public health level, wider awareness is needed, for the public and carers, in recognizing what informal care is, who is an informal carer, and what kind of support exists for caregivers. Many carers do not consider themselves as caregivers [45]. Research also shows that informal carers often have limited information regarding the available support services [46, 47]. General practitioners, being the first point of contact for patients in many countries, may be best placed to identify informal carers, assess their needs and provide them with the relevant information on available support services [45, 48]. Integration of policy and practice relating to informal carers with formal health and social care services is consequently crucial.

A fourth difficulty is linked to the current level of support. If the UK has been at the forefront of service development in the area, the level of support is still very low. In the early 90s, England was one of the first countries to recognize carers' rights and has put in place elements of a support strategy [49]. However, existing research highlights the large numbers of English carers who often go without any support for years [50-52]. The situation is similar in the US, where only 3% of informal carers access any type of support [53]. In addition, still relatively little is known about best practices, successful and innovative programs and services to support informal caregivers. In a recent survey, a third of carers say that they have given up work or reduced their hours because services are inadequate or too expensive [37]. The same survey found that the support carers receive from their employers needed to be improved. A quarter of carers responding to Carers UK's 2013 state of caring survey said that although their employer was sympathetic, they did not offer support. Only one in five medium-sized employers responding to a survey carried out by the Task and Finish Group (UK) had formal company-wide policies in place [37].

Barriers related to the efficiency of carer's leave

At the macro-level, the current developments in the countries considered show that policy coordination across LTC domains is important. In England, important policy developments over the past two decades have developed largely independently of policies relating to older and working age disabled people, have not always been accompanied by dedicated funding for implementation, and have been implemented variably, depending on individual local authority structures and priorities. Recently, a major challenge has come from the development of "personalization" policies and practice in health and social care, that aim to increase choice and control over services by older and working age disabled adults; these policies have largely developed separately from those for carers [9, 54-56]. A parallel issue to consider is the definition of who is eligible for carer's leave and other support services in a fragmented system. In England, whether carers receive support depends on the particular kinship and generational relationship between carers and the person receiving care; and on patterns of financial management within and/or between caregiving households. Although policies often consider carers and older/disabled people as financially independent from each other; in practice considerable levels of financial transfers take place within the household [22, 57]. However, services (e.g. day care, home care) for older and disabled people are rarely likely

to be sufficient to enable carers to maintain a full-time job. One group of carers in England who falls between the gaps in a fragmented set of arrangements are those in full-time or substantial part-time, well-paid work. They are likely to experience heavy care-related costs in paying for substitute care, are unlikely to be identified and offered a carer assessment, and because of their work and earnings will not be eligible for CA [23]. In Canada, a number of jurisdictions are now using a broader definition of carer to include neighbors and friends who may not be related to the care-recipient.

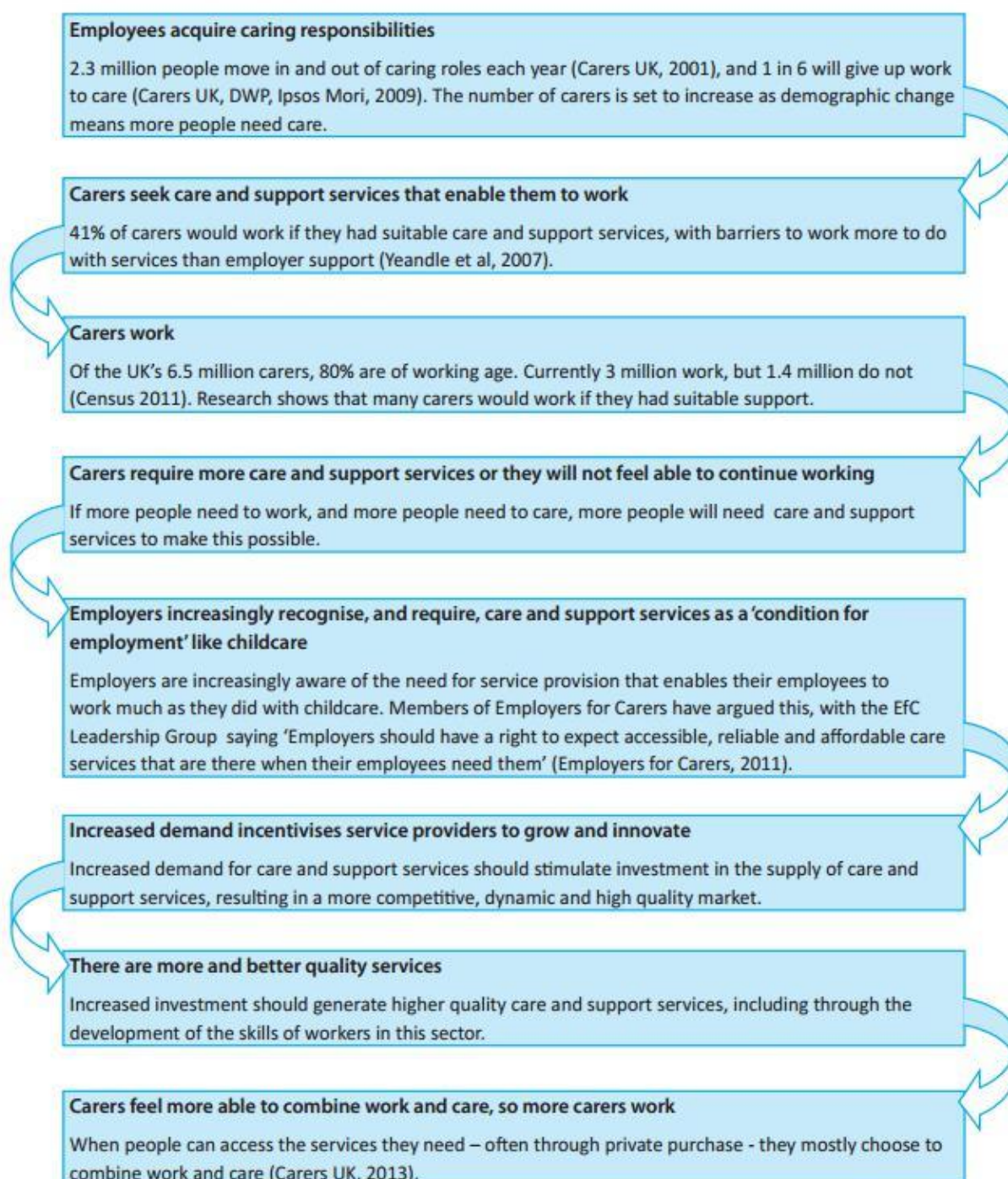
A final challenge to consider is that of the quality of care provided by informal carers. To our knowledge, no OECD country currently has in place a systematic monitoring or evaluation system to measure quality of care, with the exception of Germany and Austria in the case of carers receiving cash payments or support for their services. This is a delicate issue, yet the challenge exists as a recent European report highlighted a growing number of older people experiencing mental and physical abuse [58]. The heavy strain associated with caregiving is a predictor of abuse. Maltreatment could partly be prevented by the timely identification of carers burdened by high stress, anxiety, depression or other such risk factors that could lead to abuse of the care-receiver; by giving the carer the choice of taking up a relevant support service such as carer's leave or respite care; and by giving the carer a choice about whether to provide care at all. Policymakers should consider that this issue of quality further reinforces the importance of having identification and needs assessment systems in place to target informal carers with appropriate information and support.

Facilitators

A number of elements are likely to facilitate the adoption and implementation of a carer's leave across European countries. Policy awareness is key. Policy makers are increasingly aware that available projections on the future numbers of carers show that a significant "care gap" is expected. Care provision by partners is likely to increase considerably in the future, primarily because projected improvements in male mortality will lead to a fall in the numbers of widows and hence increase the numbers of men providing care for a partner. However, there is considerable uncertainty over the future supply of unpaid care from adult children. It is also not clear to what extent any reduction in the supply of intergenerational informal care (for example reflecting daughters' increased labor market participation) will be compensated for by an increase in same-generation caregiving. In England, the projected number of carers in 2032 is far lower than what is needed [59]. This means that a significant "care gap" is expected, starting between 2012 and 2017 and growing rapidly to 160,000 carers by 2032 [59]. The humanistic and economic cost of informal care is also increasingly recognized. High-intensity caring can lead to reduced rates of employment and hours of work, and result in a subsequent negative impact on carers' income and pension contributions. An increasing proportion of carers are trying to combine informal care and labor market participation. In England, inadequate support for carers that result in leaving the workforce costs £1.3bn per year to the economy [21]. Also, an estimated 314,000 people, mainly women, aged 16 to 64, have left paid employment to care, with adverse impact on their own careers, on the skills levels within the workforce and on current household and subsequent retirement income.

Finally, in the UK, the Employers for Carers developed a new model (presented in Figure 4.5). This positive multiplier effect can be triggered by demand for care that supports labour market participation, as the need or wish of carers to work unlocks demand for care and support replace services. To unlock this multiplier effect, carers will need access to high quality, flexible, local and affordable services, designed to meet their needs as well as the needs of the people they care for [37].

Figure 4.5 – Positive multiplier effect model



Source: Employment for Carers UK [37]

4.9. Summary

	Benefits	Costs	Inconclusive evidence
Beneficiaries	Improved health and employment outcomes, in particular for women	None based on the literature, although concerns about career progression were mentioned	Whether carer's leave in particular can alleviate some of the carer's burden (in particular in relation to employment) is unclear at the time of this review
Cared for	Informal care is often the preferred form of care in old age. Carers are more likely to continue caring or take on caring if they are supported	None based on the reviewed literature	The role of carer's leave in relation to the outcomes of cared for person is unclear
Employers	Offering leave will reduce the issues associated with combining care and employment	Financial cost of providing leave	The exact role of carer's leave among other types of support services is still under investigation
Wider society	The humanistic and economic costs associated with care, in particular for women could be alleviated. In particular, data is emerging showing that informal carers shoulder a disproportionate share of LTC there is a clear economic case to support carers	Financial cost of providing leave	No studies have examined the broader costs/benefits of carer's leave for the wider society

Barriers	<p><i>Implementation</i></p> <ul style="list-style-type: none"> - Lack of reliable and up-to-date data on informal carers in Europe, in particular in the area of evaluation of interventions or policies such as carer's leave - Complexity of defining informal carers <p><i>Effectiveness</i></p> <ul style="list-style-type: none"> - Very low level of existing support in most European countries - Lack of awareness of carers
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	<ul style="list-style-type: none"> - Lack of policy integration and fragmentation of LTC systems - “Quality” of informal care?
Facilitators	<ul style="list-style-type: none"> - Policy awareness - Multiplier effect model

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5. Right to flexible or part-time work

5.1. Baseline and reform specifications

The current Parental Leave Directive grants parents who are returning from parental leave to have the right to request changes to their working hours and/or patterns for a certain period of time. Employers should consider such requests, but workers are not automatically entitled to have these requests granted. Beyond this provision concerning parents returning from parental leave, there are no general provisions for workers (or working parents/carers in particular) to ask for flexible working arrangements (e.g. flexible working hours or telework) and to have such requests duly considered in the European Union, except in the UK.

We understand that the proposed reform:

- Requires Member States to create a right to (or the right to request) flexible work for all employees
- Requires employers to oblige or, in the case of requests, to consider these requests and refuse them only where there is a clear business ground;
- Leaves it to Member States to define the entitlement conditions (e.g. family status, number of children).
- Does not impose a minimum maximum duration;
- Does not impose a minimum or maximum payment.

Workplace flexibility fundamentally refers to “the ability of workers to make choices influencing when, where, and for how long they engage in work-related tasks” [74] (p. 152). Flexible work includes multiple practices that allow employees to have flexibility in working time (such as flexible hours, part-time, compressed work week, job sharing, annualized hours, shift work) and location (such as homeworking). Homeworking (also known as teleworking or remote working) also often entails flexibility of schedule.

5.2. Mapping of policy provisions

5.2.1. Legislated provisions

A study by the European Commission in 2015 [75] provided an overview of the current legislation in the EU Member States regarding part time and flexible working. According to this study, rights to work part time are the most commonplace of the working practices considered, with employee's rights to determine the organisation of his/her working time less common and rights to homework/teleworking less common still. The approach taken across the states varies considerably, some providing absolute or near absolute rights to part-time work to various categories of worker and others according only a right to request reduced hours. There are also a variety of approaches as regards the duration of reduced working hours: in a number of states, including Luxembourg and Portugal, reduced working hours are subject to express time limits. In Austria, Finland, Slovenia and Sweden, by contrast, they are linked to the age of the child to whom they relate while elsewhere, as in the Netherlands and the United Kingdom, hours are altered indefinitely

if a request is granted and the employee will have to make a fresh request (with no guarantee of success) if he or she wishes to resume full-time hours. Workers in a number of states are entitled to flexible and/or remote working (i.e. teleworking or homeworking), though this is very much a minority position. Only workers in the United Kingdom and, soon, the Netherlands are entitled to request remote working/homeworking though many workers in Finland and Germany have collectively agreed rights to remote working/homeworking as do some workers in Cyprus and Ireland. Table 5.1 provides a summary of the current legislated provisions.

Table 5.1 – Summary of legislated provisions

Country	Availability	Paid	Duration	Comments
AT	Yes	Yes		Parents with children born after 1 July 2004 are entitled to work part time until the child's seventh birthday (or school entry at a later date) if they are working in companies with more than 20 employees and if they have been continuously employed with their present employer for at least three years. There are no given limits concerning the extent of the part-time work. The regulations also include the right to change working hours within the day (e.g. from morning to afternoon) without reducing the number of working hours and the right to return to full-time employment. Parents working in companies with less than 20 employees may enter into an agreement on part-time work with the employer to the child's fourth birthday. Parents are protected against dismissal until their child's fourth birthday. During the remaining period of part-time work (i.e. until the child's seventh birthday or school entry at a later date) protection against dismissal without grounds is provided. Right to flexible working. No right to remote working/homeworking.
BE		Yes (reduced hours)		Right to reduced hours. There is no right either to work or to request to work flexibly. No right to remote working/homeworking.
BG		No		Right to request reduced hours and flexible working. No right to remote working/homeworking.
CY		No		Right to request reduced hours. Some collective agreements provide access to flexible working. No right to remote working/homeworking, though some Collective Agreements provide.

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CZ		No		Right to reduced hours with exceptions. No right to remote working/homeworking.
DE		No		Right to reduced hours with exceptions. There is no compensation except where the part-time carriers entitlement to Home Care Support Benefit. Many collective agreements provide access to flexible working. No right to remote working/homeworking, though some Collective Agreements provide.
DK		No		Right to request reduced hours. No right to remote working/homeworking.
EE		No		Right to request reduced hours. No right to remote working/homeworking.
EL	Yes	Yes		Parents are entitled to work one hour less per day for up to 30 months after Maternity leave, with full earnings replacement. This may be taken as: two hours less per day for the first 12 months and one hour less per day for another six months; or, with the employer's agreement, in block(s) of time of equal time value within the 30 months period after Maternity leave. This last option, of converting reduced hours into a block or blocks of leave, means that a parent can take a number of months off work, up to an estimated three and three-quarter months. This leave – titled 'alternative use of reduced hours as leave for the care of children' – is considered part of working time and paid and funded by the employer with no ceiling on payment (funded by the employer). No right to remote working/homeworking.
ES	Yes	Yes	1hr/day	During the first nine months after the child's birth (12 months in the public sector), employed mothers or fathers are entitled to one hour of absence during the working day without loss of earnings, which is paid by employers; this part-time leave (permiso de lactancia) was originally to support breastfeeding. It is a family entitlement that can be used by either employed parent, but if both parents are working, only one can use this entitlement. This absence is paid for by the employer. The period can be divided into two half-hours or be replaced by a half-hour shortening of the normal working day, or by the equivalent time on full-time days; but the public sector and many collective agreements allow for a full hour shortening of the normal working day. By consolidating this entitlement, families

				<p>can in practice extend Maternity (or Paternity) leave by two to four weeks (depending on the terms established by collective or company agreements). In the case of multiple births (or multiple adoption or fostering) the length of this leave increases proportionally.</p> <p>The law also guarantees that employees can postpone their annual holidays and use them after maternity or paternity leave, so they do not lose them. A working parent can reduce his/her working day by between an eighth and half of its normal duration to care for a child until the twelfth year or to look after a disabled child (reducción de jornada por guarda legal) Employees may decide, within their usual work schedule, the extent and period of the working time reduction. It is defined as an individual right, and there is no payment, but workers taking this 'part-time leave' are credited with up to two years full-time social security contributions (which affect pension accounts, and new leave entitlements). Besides, public employees have guaranteed some working time flexibility to adapt, for example to school hours. No right to remote working/homeworking.</p>
FI				<p>Parents of children under three years are entitled to a flexible care allowance (joustava hoitoraha/flexibel vårdpenning) if, after taking Parental leave, they work shorter hours than is normal in the respective field. The flexible care allowance is €162.09 a month if the weekly working hours are at maximum 30 hours or 80% of the normal full-time hours, and €243.13 a month if the weekly working hours are max. 22.5 hours or 60% of the normal full-time hours.</p> <p>Parents can work reduced working hours (partial childcare leave) from the end of Parental leave until the end of the child's second year at school. The employee is entitled to partial childcare leave if s/he has been working for the same employer for at least six months during the past 12 months. The employee should negotiate the reduction in hours with the employer, and the employer can refuse only if the reduced working hours would lead to serious disadvantages for the organisation – in that case, working hours must be a maximum of 30 hours a week.</p> <p>No right to remote working/homeworking, though some Collective Agreements provide.</p>

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FR		No		Right to request reduced hours. Many collective agreements provide access to flexible working.
GR		No		Collective agreements, in the private sector only, provide access to reduced working hours. No right to remote working/homeworking.
HU		No		Right to reduced hours. No right to remote working/homeworking.
IE	Yes	No		On return from Parental leave, an employee may request a change in their working hours or pattern. Employers must consider such a request but are not required to grant it. No right to remote working/homeworking, though some Collective Agreements provide.
IT	Yes	Yes		<p>Until a child is 12 months old, women who are employees are entitled to work reduced hours (one hour less per day if working six hours a day or less; two hours less per day if working longer) for breastfeeding, with full earnings compensation. Fathers are entitled to use this benefit in certain conditions, for example: if the mother is self-employed or freelancer; if the mother opts not to use it; if the mother is not employed; or if the father has sole custody of the child. Home helps, domestic workers and autonomous workers are not entitled to reduced hours, but in this case too the father can work reduced hours.</p> <p>Employees (mothers and fathers) who have parental responsibility for a child under six years or a disabled child under 18 years have a legal right to apply to their employers to work flexibly (e.g. to reduce their working hours). Employers have a legal duty to consider these requests and may refuse them only 'where there is a clear business ground for doing so...[and must give] a written explanation explaining why'.</p> <p>No right to remote working/homeworking.</p>
LT		Sometimes for reduced hours		Right to reduced working hours. Reduction of working hours is paid when the working reduced hours is by parents of children under 12 (or a disabled child under 18), who are entitled to have their weekly hours reduced by 2 hours (4 hours in the case of parents of 3 or more children under 12)
LU		No		Right to reduced working hours. Many collective agreements provide access to flexible working. No right to remote working/homeworking.

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LV		Possibly for reduced hours(unclear as yet)		Right to reduced working hours. No right to remote working/homeworking.
MT		No		Right to request reduced working hours and flexible working. No right to remote working/homeworking.
NL	Yes	No		Under the Working Hours Adjustment Act, all employees who have completed one year's continuous employment with their present employer have the right to increase or decrease their working hours. The right to adjustment of working hours is, however, conditional: the employer can refuse to grant the request if the interests of the business or service might be seriously harmed; and the law does not apply to employers with less than ten employees. Right to request to be introduced.
PL		No		Right to reduced hours. No right to remote working/homeworking.
PT	Yes			Where there are children below 12 years (no age limit in case of a child who is chronically ill or disabled living in the same household), one of the parents (or both for alternative periods of time) is entitled to part-time work after taking Additional Parental leave ('part-time work for an employee with family responsibilities'). Part-time work can be taken on the following basis: working half-time during five days a week or working three full days per week. Employers and employees can agree on another basis. Part-time work may be extended up to two years (three years in the case of third and subsequent child, four years in the case of chronically ill or disabled child). Right to access to flexible working with some exceptions. No right to remote working/homeworking.
RO		No		A few collective agreements provide access to part-time working hours. No right to remote working/homeworking.
SI	Yes	No		A parent who is taking care of a child below the age of three years, or of a child below the age of 18 years with a severe physical disability or a moderate or severe mental disability, has the right to work part time. The hours worked must be equal to or longer than half full-time working hours. There is no payment, but social security contributions based on the proportional part of

				the minimum wage are paid for the hours not worked. A parent who is taking care of two children may extend the right to work part time until the younger child completes the first grade of elementary school (and not only until it reaches the age of six years), with social security contributions paid based on the proportional part of the minimum wage for the hours not worked,. One year of this entitlement is a non-transferrable right of each of the parents. No right to remote working/homeworking.
SE	Yes	No	25%	Until a child reaches the age of eight years or completes the first grade of school parents have the right to reduce their normal working time by up to 25%; there is no payment for working reduced hours. Right to flexible working with exceptions.
SK		No		Right to reduced hours with exceptions. No right to remote working/homeworking.
SL		Yes (for reduced hours)		Right to reduced hours. Social security contributions paid for part-time workers with a child under 3, disabled child under 18, or 2 children one of whom has not completed the first year of primary schooling. No right to remote working/homeworking.
UK	Yes	No		Employees have a legal right to apply to their employers to work flexibly. Employees need to have worked for their employer continuously for 26 weeks before applying. Employers have a legal duty to consider these requests and may refuse them only 'where there is a clear business ground for doing so ... [and must give] a written explanation explaining why'.
No statutory right				
HR	No	--	--	No statutory right either to reduced working hours or to flexible working. No right to remote working/homeworking.

Sources: [2] [76] [75]

If the reform provides all employees the legal right to apply to their employers to work flexibly, the maximum scope of the reform will be all EU countries except for the UK or 87% of the EU population.

5.2.2. Evidence of take-up or demand

The European Commission report on flexible working time arrangements and gender equality (2010) [77] provides an overview on flexible working time arrangements and gender equality in the (2010) 27 EU Member States and the three EEA–EFTA countries. As stated in this report, organizations need flexibility to operate in a market with increasing competition and employees are increasingly requiring a better a balance of work and private life. As a result, there is growing flexibility in the length of working hours. Jobs are no longer organised on a strict 40-hour week, but have become more diverse. This is most easily illustrated by the rise of part-time work especially among women: the average share of female employees working part-time (aged 15+) in the EU is more than 30 %. In addition to the growth in part-time work there is also a trend towards greater flexibility in the allocation of working time over the working week. The full-time worker is therefore not excluded in the trend towards a growing flexibility in the allocation of working times.

According to the aforementioned EC report [77], there is only limited statistical evidence about the extent to which a flexible organisation of working time has been developing over recent years. Yet the available data seems to suggest a north-west/south-east divide. Flexible working time schedules are, for example, rather widespread in DK, SE, DE, FI and NO, whereas EL, CY, RO and BG score lowly. The data also indicate that in most countries male employees more often have access to flexible working time schedules than female employees, yet the differences are relatively small. Working from home does not seem to be evenly spread among Member States, although the north-west/south-east divide seems less clear than in the case of flexible working time schedules. In most countries the share of employees usually working from home is higher among women than men. The source for this data is Eurostat, EU labour force survey 2004 and LFS ad hoc module 2004. Regarding the usage of part-time, the highest part-time rate is found in the Netherlands, both for men and for women (24% and 76% respectively). DE, NO, BE, AT, UK, SE, LU, DE, and IS also have relatively high female part-time rates, with NO, UK, SE and DK also indicating relatively high rates for men (above 10%). The lowest rates are found in the east European countries, particularly in BG and RO; PT, EL and CY also have relatively low part-time rates. The gender gap (measured in percentage points) seems most pronounced in the NL with a score of almost 52. In BG and RO where part-time work is practically nonexistent, the gender gap is very low at less than one percentage point.

In all of the EU Member States, and despite wide variations in the prevalence of part-time working, women are more likely than men to work part time [75]. This is often for reasons connected with childcare and other domestic responsibilities, though the fact that there is a causal relationship between these factors does not mean that workers are content with the ‘choices’ available to them; in DE, for example where many women work part time, there are high levels of dissatisfaction with the distribution of working time between parents with dependent children; 6 % of couples would choose a male breadwinner model but 14 % have it; 40 % would choose the father to work full time and the mother part time but 57 % of couples are in this model; 38 % of couples would like both parents to work part time (30 hours per week) but 6 % have achieved this model; 13 % of couples would prefer both parents to work full time but 16 % do so [75].

A study [78] from 2014 examined flexible working in seven European countries (DE, ES, FR, NL, SE, UK and PL) provides a good overview of usage of flexible working practices responding to changes in legislation. A summary is shown in Table 5.3.

Table 5.3 – Recent legislative entitlements and outcomes concerning flexible working in selected EU countries

Country	Legislative entitlement to flexible work	Outcomes
ES	Right to request reduced hours (enhanced if responsible for a child under the age of six) in some provinces since 2002; Employers have a right to refuse on appropriate business grounds.	Some of the lowest levels of flexible work in Europe: the prevalence of 'low flexibility' organisations in Spain was over 25% higher than the EU average (Eurofound 2006).
FR	Standardised 35-hour working week since 2001. Any reduction in hours necessitates a permanent change in contract. Employees can also be made to reduce their hours by their employer.	Increasing levels of part-time work over time. However, only a low proportion of those taking on part-time work have been of parenting age, suggesting that flexibility is working for employers more than for employees.
DE	Since January 2001, employees have been entitled to contractual reductions in hours, provided that their employer's workforce is greater than 15 people. Employees can reduce their hours for up to three years after the birth of a child while retaining the legal right to return to full-time work afterwards.	Around 80,000 employees took a reduction in hours during the first year of the policy change, from January 2001 (Hegewisch 2005). The majority of organisations offset newly reduced hours by redistributing the residual workload among existing employees. One in three of these reductions in hours led to an increase in the number of staff employed (ibid).
SE	Parents have a legal entitlement to reduce their working hours by up to 25% until the child's eighth birthday, with a return to full hours guaranteed thereafter.	Part-time employment rates are above the EU average, with workers able to move between part- and full-time work with little difficulty.
UK	Until recently, only employees with care responsibilities were entitled to flexible scheduling and reduced-hour options. New laws passed in April 2014 extended the right to request flexible working hours to all employees.	Around 25% of all employees (and 36 % of female employees with dependent children under the age of six) have requested more flexible hours since the new legislation came into force, with around 80% of requests either partially or fully instated (Moss 2014).
NL	Since 2000 all people in employment with the same organisation for over a year are entitled to request an increase or decrease in their working hours. A single, non-transferable entitlement to reduced hours is offered to all employees with children up to the age of eight. This entitlement applies to all employers	It has since been found that the legislation contributed to 9% of workers reducing their hours. However, it was also found that only 53% of employees who wanted a reduction in hours actually submitted an official request (Moss 2014).

	with 10 or more employees, but organisations are able to reject requests on business grounds.	
PL	Employers face no obligation to offer part-time work to employees with caring responsibilities.	The state of family policy in Poland has been labelled an 'imposed home care' model, in which the lack of formal childcare infrastructure mirrors the lack of rights to part-time work. Around 45% of women with children under three years old and who were not in work claimed that they could not enter the labour market because of the difficulty of reconciling home and work commitments. Nearly one in three of all Polish mothers could not find a job (Moss 2014).

The aforementioned study [78] also provides information on female employee take-up of specific flexible working practices and its association with female employment rates. The most common type of flexible work available is part-time work, which is generally considered to describe working up to 34 hours a week on average. Almost 80% of women in the NL work part time, while the same is true of roughly two-fifths of women in the UK (43%), DE (46%), and SE (3%) (Eurostat 2014). Higher employment rates are positively correlated with the proportion of the general part-time rate. Those countries with higher rates of part-time work also tend to have higher employment rates. The association appears to be most striking among the female workforce, but the trend is also evident among men.

In terms of demand for flexible working practices, the potential scale of demand for increased flexibility is significant as flexible scheduling could enable matching between preferred working patterns and actual working patterns. Across the seven countries examined, between 38% (SE) and 62% (UK) of women would like to work either more or less hours than they do currently.

The UK is the only European country where all employees (not just working parents and carers) have currently the legal right to request flexible working. In the UK, access to and uptake of flexible working practices among employees have significantly increased over recent years, which may indicate that demand for flexible working practices in other Member States might have increased in recent years as well. According to a 2012 survey from the Chartered Institute of Personnel and Development (CIPD), about 96% of UK organizations offer some form of flexibility to their employees. According to the 'Fourth work-life balance employer survey' (2013) [79], part-time working was the most commonly available form of flexible working (reported by 80% of employees), followed by temporarily reduced hours (56%) and flexitime (48%). Flexitime, working from home and part-time working were the forms of flexible working most commonly taken up by employees (taken up by 49%, 44% and 40% of those where it was available to them, respectively).

The aforementioned UK work-life balance survey provides a good insight into the use of flexible working:

- *Awareness*: The majority of employees were aware of the right to request flexible working, with awareness being unsurprisingly more common among parents. Awareness was also higher among those in professional or managerial occupations, with particularly low awareness among those in routine or manual occupations.
- *Characteristics of employees who take up flexible working practices*: The take up of many forms of flexible working was more common among women, parents, those with higher qualifications, those in the public sector and trade union members. However, the patterns of take up for part-time working and job share were different in some respects, such as being more likely among those in manual or routine occupations and employees who are not trade union members.
- *Reasons given by employees for not requesting a change in their working arrangements*: Those who had not requested a change to their working arrangement typically had not done so for personal reasons, such as being happy with their current arrangement (84%). However, there was a proportion (15%) who had not done so due to reasons related to the business/employer, which may be real or perceived.
- *Part-time employees were more likely than their full-time counterparts to take up all other forms of flexible working where available*. The most common form of flexible working for both groups was flexitime. Working flexibly was more common among full-time employees who were carers or parents, older, had higher income and qualifications, and had managerial responsibilities. Working flexibly was also more likely among those full-time employees with contracts of employment, those working in professional occupations, in large workplaces, among trade union members and in the public sector. Once other factors were accounted for using multivariate analysis, flexible working for full-time employees is positively associated with being well educated, older, working in a mixed gender or female-dominated workplace and in industries outside retailing and manufacturing, hotels and restaurants. Among part-time employees, working flexibly in other ways was more likely among higher earners, those in managerial and professional occupations, those with trade union members and in the public sector. Unlike full-time employees, part-time employees were more likely to work flexibly if they were in male-dominated workplaces. Multivariate analysis showed that, among part-time flexible workers, working in the public sector and male-dominated workplaces were positively associated with working flexibly once other factors were controlled for, as was higher personal income.

5.3. Expected effect on beneficiaries

5.3.1. Health and well-being

A growing literature links job stress to poor health (such as chronic hypertension and heart disease) [80] and researchers are increasingly linking poor worker health to poor economic outcomes, such as lower productivity and slower economic growth [81]. As a result, it is not surprising that recent studies establish a positive relationship between flexible workplace arrangements and worker health [82].

Past empirical research seems to suggest that flexible working on a volunteer basis benefits workers' health and well-being [83] [84] [83] [40] [85]. Using a large sample of U.S. workers from several businesses across a variety of industries ($N=19,704$), a study in 2008 [85] tested hypothesized associations among employee participation in formal flexible work arrangements (with a focus on schedule flexibility), perceived flexibility, and stress and burnout. Results indicated that stress and burnout was lower among workers engaged in all types of formal flexible arrangements, and that 30–50% of observed differences between workers engaged in flextime (either alone or combined with compressed workweeks) and those not engaged in a formal arrangement were explained by perceived flexibility. Greater perceived schedule flexibility has been associated with better self-reported cholesterol values [40] and fewer physical symptoms as well as lower levels of distress and burnout [84]. Thus, results suggest that workers who perceive having necessary flexibility in their jobs report better health.

The element of choice in flexible arrangements is important. Past research [83] seem to indicate that flexibility in working patterns which gives the worker more choice or control is likely to have positive effects on health and wellbeing. In contrast, interventions that were motivated or dictated by organizational interests, such as fixed-term contract and involuntary part-time employment, found equivocal or negative health effects [83].

Further evidence supports the view that flexible working practices positively impacts workers' health. A study conducted by researchers at the University of Minnesota found that a workplace intervention to allow employees greater control over their work time resulted in employees being less likely to say that they felt obliged to come to work when they were sick, or to not see a doctor even though they felt they should. The intervention also resulted in improved sleep quality, increased energy, and reduced psychological stress among employees.

With regard to flexibility of location, it is generally accepted that homeworking is negatively associated with work-related stress. Homeworkers are more likely to report less work-related stress than office-based workers and as the amount of homeworking time increases this negative association with work-related stress becomes stronger [86] [87]. Although past research has reported that homeworkers may work harder and longer, this does not seem to translate into work-related stress given the degree of employees' autonomy or discretion involved in homeworking [88] [89].

The impact of homeworking on well-being is complex, and empirical evidence is not conclusive on whether homeworking is beneficial or not for an individual's well-being [90]. The work by Standen and colleagues (1999) suggests that there are several conditions that mediate the relationship between homeworking and well-being, such as an individual's experience of control, skill use, physical security or interpersonal contact. For example, working from home can enhance well-being if employees perceive they have the ability to control when, where and how they work and create boundaries to separate work from non-work activities [90] [91]. Conversely, homework can negatively affect well-being if employees experience little interpersonal contact [90].

Isolation is one of the most cited drawbacks of homeworking [3] [92]. Professional isolation refers to the feeling of being out of touch with others in an organization. A

perception of isolation among homeworkers is related to the lack of personal interaction with others, and limited information learning and mentoring [93]. Professional isolation has been associated with a reduction in job performance [92]. Perhaps understandably, the impact of professional isolation on these outcomes is stronger with higher homeworking intensity and weaker with more face-to-face interactions and access to communication-enhancing technology [92]. Organisational commitment has also been associated with isolation: homeworkers who report experiencing a lack of human contact are more likely to feel disconnected from the organization employing them [94].

5.3.2. Work-life balance

Flexible working arrangements have been identified as one important means of balancing work and personal commitments as they may help to reduce work-life conflict [95] and increase work-life enrichment [96] [97], and, as result improve overall work-life balance [98]. Having perceived control over where, when and how an employee works may be one of the main predictors of work-life conflict [99]. For example, having flexibility at work might help an employee to choose a working pattern to fit his/her children's schedule and, consequently, reduce work-life conflict. At the same time, flexible working may increase the perception of the positive side of the work-life interface (or work-life enrichment). Work-life enrichment is defined as the “extent to which experiences in one role improve the quality of life in the other role” (p. 73) [97]. Flexibility at work is one job resource that may enhance private life, following the influential work-life enrichment model by Greenhaus and Powell (2006) [97]. For example, in their empirical study, McNall and colleagues (2009) [96] found that the availability of flexible work arrangements (flexitime and compressed workweek) is associated with an increase in work-life enrichment. In terms of overall work-life balance, an study [98] examined the effects of perceived flexibility in the time and location work on work-family balance. Data are from a 1996 International Business Machines (IBM) work and life issues survey in the United States (n= 6,451). Results indicate that perceived job flexibility is related to improved work-family balance after controlling for paid work hours, unpaid domestic labour hours, gender, marital status, and occupational level.

Greater freedom to manage time and tasks, and ability to better manage family responsibilities while keeping the job are frequently mentioned benefits for employees [100]. Consistent with this literature, in the most recent Work-life Balance Employee Survey published by the UK Department of Business, Innovation and Skills (2013) [79], employees reported that the main advantages of flexible working for those who had done so were an increase in the amount of free time (cited by 24%), increased time spent with family (18%), improved work-life balance (17%) and greater convenience (14%).

Regarding homeworking, the relationship with work-life balance is complex. Being a work-life initiative, homeworking is expected to benefit work-life balance by helping individuals to manage their work-life interface [87]. This benefit has been echoed by empirical evidence, which suggests that homeworkers report significantly less work-life conflict than office-based employees [86] [87]. Homeworking intensity (the frequency of the use of homeworking) plays a role in this relationship. High-intensity homeworking (more than 2.5 days a week) accentuates its beneficial effects on work-life conflict [86]. Homeworking saves employees time from commuting and this saving may mean more

time to reduce time-based work-life conflict [101]. In addition, the flexibility of working from home allows individuals to better accommodate the demands of their private life domain, for example by helping parents in adapting a work schedule around their children's school timetable [102].

Conversely, working from home can also increase work-life conflict as it has been found that employees working from home report longer hours and working harder, which suggests that working from home is more a form of work intensification [88]. In addition, homeworking can make the boundaries of work and life more permeable (they share the same physical space) and, thus, increase levels of work-life conflict [90].

5.3.3. Career advancement

Flexibility of schedule and/or location may be perceived to be associated with less potential in career progression and lower pay. The 4th Work-life Balance Employee Survey published by the UK Department of Business, Innovation and Skills (2013) [79] found that nearly half (48%) of those working flexibly did not feel that there were any negative consequences of doing so. Lower pay was the most frequently cited negative consequence (18%). Around one third of employees (32%) believed that people working flexibly were less likely to get promoted. This view was most commonly held by those not working flexibly (38%), men (37%), those in routine and manual occupations (36%), those in managerial and profession occupations (33%) and those in the private sector (35%). The perception that flexible working may negatively impact career advancement and pay is one of the barriers to employee take-up [16]. More information can be found in the 'barriers and facilitators' section.

A recent study [103] examined whether a woman working a flexible schedule would be perceived as having less career advancement potential than a woman on a regular schedule. Participants reviewed a packet of materials simulating the personnel file of a female employee in an accounting firm who was seeking promotion from manager to senior manager. Results indicated that participants perceived the female employee on the flexible schedule as having less job-career dedication and less advancement motivation; there was no difference in perceived capability.

Similar to flexibility in schedule, flexibility in location can also have a perceived negative impact on career progress. Employees may feel that choosing to work from home gives a signal to the organization that they are not as committed to their work as office-based employees and fear the impact of homeworking on their career prospects, as being "out of sight" could mean "out of mind" when career opportunities or job promotions arise [104] [105]. This fear may be related to professional isolation. Employees experiencing isolation reported reduced access to informal development opportunities, informal learning and mentoring in a qualitative study with employees working in the private and public sectors [93]. According to this study, compared to the public sector employees, private sector employees were more likely to report that homeworking meant a reduction in career development opportunities. This can be explained by the private sector giving more importance to informal routes to gain information, and to informal networking and visibility to achieve promotions [93].

Is the fear of missing out on promotions justified? Whilst there is research that suggests that this may be the case, that companies promote into leadership roles those employees that have been consistently seen and evaluated [106], other research results indicate that this fear may be unfounded [105]. Using a sample which included 53 homemaker-supervisor pairs and 44 office-based homemaker-supervisor pairs from one large U.S. organization, McCloskey and Igbaria (2003) [105] did not find that homeworking had a negative effect on career advancement prospects compared to non-homeworkers. Moreover, employees who worked from home more often (more than 1 day a week) did not have fewer career advancement opportunities than those who worked from home less often. The negative link between homeworking and career advancement varies by organization by organization, depending on the culture and the importance of face time versus a results-oriented approach to evaluating performance. Organizational culture and performance evaluation system can obstruct or facilitate the successful implementation of flexible working practices and are discussed in the Barriers and Facilitators section.

5.4. Expected effect on the cared for

Increasing numbers of organizations offer flexible working hours to help employees balance work and personal life, including caring for dependents. For instance, evidence from past research [79] suggests that flexibility in the workplace help employees to take care of their dependents when they are ill. According to the 4th Work-life Balance Employee Survey published by the UK Department of Business, Innovation and Skills [79], around three out of every ten parent employees reported some disruption to their working time due to child illness in the three months prior to the survey. This was most commonly dealt with by taking leave (47%), followed by working flexibly (30%). Even among those without a flexible working arrangement, 17% were able to respond to their child's illness by working flexibly. Regarding the 30% of parents with an ill child who responded by working flexibly (including home working), this was more common among men (35%), those in managerial/professional occupations (35%) and private sector employees (36%). Supporting the idea that flexible working helps employees with their caring responsibilities, results from a recent qualitative research [107] indicate that the more family responsibilities the respondents have, the more they tend to perceive flexible working hours as a necessity rather than an extra benefit.

5.5. Expected effect on business outcomes

The availability and usage of flexible working has been associated not only with multiple benefits for employees but also for employers [100] [107] [12]. Flexible working (including flexibility in schedule and location) is related with employee's work-related attitudes (such as greater job satisfaction and organizational commitment), employee's work-related behaviours (such as increase in job performance, reduction in turnover intention and absenteeism) and organizational outcomes (such as enhanced recruitment and retention, greater organizational performance). Flexible working may also have disadvantages for employers such as initial set-up costs and increased communication demands between co-workers because of varying time schedules. A list of some of the

advantages and disadvantages of flexible working for companies is provided in the Table 5.4 below.

Table 5.4 – Advantages and costs of flexible working for companies [100]

Advantages	Costs
<ul style="list-style-type: none"> – Enhanced recruitment and retention of valuable employees and associated recruitment and training cost savings. – Improved employee morale, satisfaction, commitment, and productivity resulting from support for personal style preferences. – Creation of a favourable view of the job, company, and workload – Reduced stress, absence, tardiness, and turnover through the ability to better balance work and personal responsibilities. – Improved coverage and scheduling (e.g. of peak workloads) for the department. – (Un)interrupted time for creative, repetitive, or highly detailed work. – Savings in office space and equipment through more office space options and expanded use of equipment. – Improved transportation and parking options; time lost in traffic jams can be invested in work. 	<ul style="list-style-type: none"> – Initial start-up costs (e.g. setting up the contract). – Additional administrative duties/time for managing different schedules, organizing meetings and training, workload management. – Increased communication demands between co-workers because of varying time schedules. – Recruitment and training expenses for new employees (e.g. additional part-time workers)

5.5.1. Employee's work-related attitudes

Work-related attitudes (such as job satisfaction and employee engagement) are important because they are often associated with behavior (such as job performance). Past empirical research [96] [108] [31] suggests that employees' perception of the availability of flexible working practices (regardless of whether employees make use of them) is associated with positive work-related behaviours. In this section, we discuss the association of flexible working practices with job satisfaction, organizational commitment and employee engagement.

Job satisfaction

The positive relationship between working flexibly and job satisfaction is one of the most commonly reported consequences of flexible working [88] [96] [86]. The main explanatory factor for the link between flexible working and job satisfaction is that being able to exercise discretion over where, when and how to work may lead to an increased sense of job control and autonomy [109], which, in turn, is positively associated with job satisfaction [110].

The positive association between flexible working practices and job satisfaction is also

influenced by perceived work-life conflict and work-life enrichment. As mentioned earlier, flexible working arrangements have been found to enhance work-life balance as they may help to reduce work-life conflict [95] and increase work-life enrichment [96]. Lower levels of work-life conflict are associated with greater job satisfaction [86]. With regard to homeworking, results from research examining work-life conflict as a mediator in the relationship between homeworking and job satisfaction have not been entirely consistent. Some researchers [86] found that homeworking was associated with a reduction of work-life conflict, leading to an increase in job satisfaction. They also found the highest reduction in work-life conflict among employees who used homeworking more extensively. In contrast, other scholars argued that homeworking may increase work-life conflict as it may blur the lines between the work and non work domains, making boundary violations more likely and, as a result, create conflict [111].

There is also empirical evidence that work-life enrichment mediates the positive relationship between flexible working and job satisfaction. For example, McNall and colleagues [96] found that the availability of flexible work arrangements such as flextime and compressed workweek seems to help employees experience greater work-life enrichment, which, in turn, is associated with higher job satisfaction and lower turnover intentions.

The frequency of the use of homeworking also influences the relationship between homeworking and job satisfaction. Past research has suggested that there is a curvilinear inverted U-shaped relationship between the extent of homeworking and job satisfaction, with increases in job satisfaction dropping off as homeworking becomes more extensive [87]. When the extent of homeworking is small, homeworkers can minimize negative effects from homeworking (such as isolation and frustration) and benefit from the perception of increased autonomy and report higher job satisfaction [112]. However, extensive use of homeworking increases reliance on technology to communicate with others at the workplace, and also increases the likelihood of isolation and frustration, which may counteract the benefits of homeworking and reduce job satisfaction [87]. In addition, homeworkers' relationships with managers, coworkers, and family may mediate the relationship between the extent of homeworking and job satisfaction [87]. In contrast, Fonnor and Roloff (2010) [113] found that employees extensively using homeworking remained more satisfied than office-based employees, questioning assumptions regarding the value of and need for frequent face-to-face interactions in the workplace. This study helps to explain that satisfaction can be associated with working away from the stress of a traditional office setting; stress caused by meetings, interruptions and awareness of organizational politics.

Organizational commitment

Past research links flexible working practices with an increase in organizational commitment. For example, Scandura and Lankau (1997) [108] found in their empirical study that female employees who perceived that their organizations offered flexible work hours reported higher levels of organizational commitment and job satisfaction than women who did not. They also found a positive association between the availability of flexible working hours and organizational commitment and job satisfaction among employees with family responsibilities. Employees may feel that when organizations offer

flexible working hours, it indicates caring about the well-being of their employees. Since psychological contracts “...refer to beliefs that individuals hold regarding promises made, accepted, and relied upon between themselves and another” [114] (p. 466), employees may increase their organizational loyalty and job satisfaction as they feel they work for an employer that cares about them.

The perception of greater autonomy among homeworkers is also positively related to greater commitment to the employer [86] [87]. This positive relationship may be explained by the social exchange theory [115] with the norm of reciprocity [116] and the concept of perceived organizational support [117]. The perception of homeworking as organizational support can generate the need among employees to reciprocate with increased commitment to their employer. Alternatively, increased organizational commitment may reflect homeworkers’ (and other type of flexible workers’) desire not to lose their working arrangement and its associated benefits; employees working flexibly and experiencing higher levels of autonomy have reported beliefs that it would be difficult to find comparable working arrangements in another organization [89] [88].

Employee engagement

Empirical research has suggested that flexible working may have a positive relationship with employee engagement [89]. In their mixed method study, Anderson and Kelliher (2009) [89] found that flexible workers (who include homeworkers) were likely to be more engaged than non-flexible workers, as they reported higher levels of organizational commitment, job satisfaction and organizational citizenship behavior than non-flexible workers. Having a choice over their working pattern and feeling the support and trust of their employer, who allowed their individual needs to be accommodated, are some of the factors that explained the referred positive outcomes of flexible working.

However, there is contrasting evidence that shows a negative relationship between homeworking and employee engagement, mediated by increased isolation [118] [94]. As Davis and Cates (2013) [94] contend, social relationships drive human motivation and if the social need is thwarted, perceptions of isolation will emerge, which can have a negative influence on engagement among homeworkers. This relationship can be contingent upon the frequency of homeworking. Frequent use of homeworking has been associated with high isolation, which in turn, negatively impacts work engagement [118].

5.5.2. Employee’s work-related behaviours

Absenteeism and turnover

Many firms report benefits in the form of lower absenteeism and turnover and improved health of their workers [12]. Recent longitudinal studies has found associations between perceived schedule control and fewer objectively assessed sickness absence [119], as well as reductions in sickness absence and work-related impairment [120].

Compelling evidence of the impact of workplace flexibility on absenteeism comes from a single large public utility that temporarily adopted a flexible work schedule in one of its sub-units while retaining standard scheduling for other sub-units [12]. The average rates

of absenteeism were roughly similar between the sub-unit that was offered a flexible work schedule and those that were not. In the year after the programme was adopted, the sub-unit with a flexible schedule reported a more than 20% reduction in absences, with the absenteeism rate in the other sub-units essentially unchanged. Moreover, when the company reverted back to standard scheduling for all of the sub-units considered after a one-year trial, the rates of absenteeism of the two groups became, once again, similar.

Working from home has been negatively associated with absenteeism and turnover [104]. Given the greater flexibility that employees working from home usually have compared to office-based employees, homeworkers may be able to accommodate demands from private life (for example, taking an elderly parent to a hospital appointment) without needing to request a day off. At the same time, as discussed earlier, flexible workers may believe that it would be difficult finding similarly flexible conditions in other organizations [88] and choose to stay working for their employer.

Employee's productivity

Past empirical research [88] suggests that flexible employees may work longer and/or harder than their co-workers. There is evidence of work intensification being experienced by both those who work reduced hours and those who work remotely [88]. The apparent paradox of the association of flexible working with high job satisfaction and organizational commitment, alongside work intensification can be explained by employees trading flexibility for effort. This explanation is based on the social exchange theory [115]. Employees respond to the ability to work flexibly by exerting additional effort, in order to return benefit to their employer. In line with previous research, results from the latest Work-life Balance Employee Survey by the UK Department of Business, Innovation and Skills [79] indicated that employees with flexible working practices were more likely to work longer hours than those without (10% compared with 6% among full-time employees), suggesting that such practices facilitate greater labour market participation. Working longer hours was particularly notable among full-time employees who regularly worked from home (18% working more than 48 hours), and part-time employees who worked flexitime and those who had had temporarily reduced hours (19% and 34% respectively working 35 to 40 hours).

Regarding job performance, flexible working may lead to increased job performance via increased job satisfaction. As mentioned earlier, empirical research has associated flexible working with job satisfaction, and there is substantial evidence that job satisfaction is positively related to job performance [121].

With regard with homeworking, numerous studies support the positive association between homeworking and productivity [122] [123]. Some researchers have questioned this finding as performance is often based on self-report measures rather than on more objective evidence [122]. However, there is considerable empirical evidence that working from home leads to not only greater self reported productivity but also greater supervisor-rated performance [124]. For example, a recent study using field data from 323 employees and 143 matched supervisors across a variety of organizations found that homeworking was positively associated with task performance [123].

The positive relationship between homeworking and productivity can be explained by the following five reasons, which are attributed to multiple factors. First, the practice of homeworking may provide employees the flexibility to better manage the demands of their jobs and private lives and become more productive [125]. Second, as homeworkers lack the distractions of the office and have less involvement in organizational politics [113], they may be able to focus on their job tasks more effectively than at the office. Third, having a relatively high level of discretion over the conditions under which the work is conducted (for example, choosing to work in the hours when one is more efficient) could lead to a gain in productivity when working from home rather than in a traditional office setting [126]. Fourth, the perceived increase in autonomy when working from home [86] could help employees to meet job-related goals and respond to job demands [123]. Fifth, employees working from home may simply put more hours into work: they may have more time than office-based workers (as they do not travel to the office) and choose to use this extra time to work, or they may feel the need to reciprocate the flexibility provided by the organization [88].

However, as mentioned earlier, there is extensive empirical evidence that homeworking may lead to social and professional isolation [127]. Unsurprisingly, extensive use of homeworking may imply less face-to-face interactions with colleagues, increasing the sense of feeling out of touch with others in the workplace. Professional isolation among homeworkers may negatively affect job performance [92]. Golden and colleagues [92] argue that professionally isolated homeworkers are less confident in their abilities and knowledge to perform their work; they have less opportunity to interact with co-workers and acquire and accurately interpret and use information that may be essential to performing the job well. Supporting this argument, Golden and colleagues (2008) found in their empirical study that the intensity of homeworking accentuates the negative impact of professional isolation on job performance. Their results also revealed that more face-to-face interactions and access to communication-enhancing technologies (such as audio/video conferencing, e-mail/web meeting software) are likely to decrease professional isolation's negative impact on job performance.

Organizational citizenship behaviour

Although there are fewer studies of the impact of flexible working on extra-role behaviors (as opposed to in-role behavior), theoretical and empirical evidence suggests that those making use of flexible working practices are likely to exhibit enhanced citizenship behavior [111] [123] [128]. There is a significant association between employee citizenship behavior and the extent to which employees believe that their organization cares about their well-being [128]. Consistent with this notion, providing work-life benefits and other types of employee support is likely to elicit citizenship behavior. For example, Gajendran and colleagues (2015) [123] found a positive link between homeworking and contextual performance, which is defined as “a set of interpersonal and volitional behaviors that contribute to the organization by creating a positive social and psychological climate” (p. 3). Employees having access to the flexibility of working from home are likely to feel obligated toward those who granted them that access (their employer). To relieve that obligation, employees may not only work longer or harder but also reciprocate through discretionary citizenship behaviors. Another reason for proactively stepping up efforts to contribute to the organization among flexible workers

is to counteract the effect on co-workers who may not have access to such flexible arrangements. In the case of homeworking, as the homeworking practice becomes more common in a workplace, there is a risk that it negatively impacts the office-based co-workers by increasing the “scope and amount of workload experienced by those remaining in the office, since non-teleworking individuals must often assume additional responsibilities which might otherwise be handled by a teleworker but which are not due to their absence” [123] (p. 1644).

5.5.3. Organizational outcomes

Impact on the team

Flexible working practices may have an impact on the co-workers of those who use such practices. According to the 4th Work-life Balance Employee Survey published by the UK Department of Business, Innovation and Skills [79], the views of employees regarding flexible working were generally positive. An overwhelming majority of employees agreed that having more choice in working arrangements improves morale (90%), although over one third thought that people who work flexibly create more work for their colleagues. The availability of flexible working was important for just over two in five employees when they made their decision to take their current position. Those employees who mentioned flexible working arrangements being available in their workplace were then asked if any of their colleagues worked in these ways and if so, asked to comment on the positive and negative consequences for them of their colleagues working flexibly. Over half of respondents with colleagues working flexibly did not think that this had positive or negative consequences for them personally (55% and 57% respectively). However, staff flexibility (7%) and a better working atmosphere (14%) were most frequently cited as positive consequences. Colleagues being unavailable (9%), a lack of interaction between staff (9%), and increased workload (8%) were the most commonly cited negative consequences. Around one quarter of employees thought that it was not the employers’ responsibility to help people balance their work and life. This was more common among those employees with no qualifications (36%), in routine and manual occupations (33%) and those with low incomes (i.e. less than £15k). These groups were also less likely to view the availability of flexible working as important and more likely to agree that people working flexibly create more work for others.

In terms of the impact of homeworking on office based co-workers and team performance, results suggest that the number of homeworkers in an organisation is negatively associated with co-worker satisfaction [129]. This relationship is moderated by the amount of time employees work remotely, the extent of face-to-face interactions, and job autonomy. The study by Golden (2007) [129] reveals that the more employees work from home, the more negative the impact of homeworker prevalence on co-worker satisfaction. Similarly, the more face-to-face interactions and the more autonomy, the less that homeworker prevalence reduces co-worker satisfaction. Whether homeworking is seen as the norm or as an exception in an organization may help to explain its effects on team performance. Gajendran and Harrison (2007) [86] speculate that in organizations that view homeworking as an exception, homeworkers may feel responsible for minimizing any negative impact of not being physically present at the office (for instance, by working longer hours to indicate their commitment to their office-based co-workers). In contrast,

in organizations where homeworking is the norm, office-based workers may have adapted their processes to accommodate homeworkers (for example, by not starting team meetings earlier than 10:00 in order to allow employees working from home to travel to the office) in order to maximize the benefits for homeworking, which, ultimately, would lead to an increase in team performance.

Enhanced recruitment and retention

It seems to be clear that employees place high value on flexibility [12] [78]. A recent report by the Executive Office of the President Council of Economic Advisers [12] refers to a study of more than 1,500 U.S. workers who reported that nearly a third considered work-life balance and flexibility to be the most important factor in considering job offers. In another survey cited in the same report, two thirds of two hundred human resource managers referred to family-supportive policies and flexible hours as the single most important factor in attracting and retaining employees [12].

Past research indicates that the availability of flexible working may have a positive impact on recruitment as it increases the attractiveness of the organisation and expands the human resources pool [130]. For example, in the latest UK work-life balance employee survey by the UK Department of Business, Innovation and Skills [79], the availability of flexible working was important or very important for a significant proportion of employees (41%) when they made their decision to take their current position. When asked about the importance to them, 57% of employees reported that the availability of flexible working was very or quite important to them. Flexible working was more important to women, those with caring responsibilities and parents. Among these groups, a third thought that the availability of flexible working was very important when they made their decision to take their current position. It was also most important to those actually working part-time or having some other flexible working arrangement at the time of the interview. The gender differences in the importance of flexible working were significant across all employees, among those with caring responsibilities and among parents. There were also significant differences by industry. The availability of flexible working was least important to those in the manufacturing and construction industries.

Flexible working also expands the labour market as it provides the right conditions for more people (single parents, people with disabilities, older people) to work and thus increases human resource capacity and quality [126] [130]. A higher quality workforce may increase competitive advantage by adding value to the organisation and enhancing organisational performance [130].

Organizational effectiveness

There is a growing body of evidence that has established a strong connection between flexible working practices and organizational performance [12] [131]. In their study [131], Beauregard and Henry (2009) examine the literature to identify the empirical support available for the link between work-life practices (such as flexible working practices) and organizational performance at both the individual and organization level of analysis. The study concluded that the business case for work-life balance practices relies on their ability to enhance recruitment and retention, and reduce work-life conflict

among employees. However, employee take-up may be low due to concerns that using work-life practices will result in reduced advancement opportunities or perceptions of the employee as being less committed to the organization. Employees who do make use of these practices may or may not find they experience less work-life conflict. The presence of supportive managers and organizational climates may be at least as if not more important in decreasing conflict. It also concluded that making practices available to employees appears to give organisations a competitive advantage in terms of recruitment and increase positive job-related attitudes, work effort and contextual behaviors. Providing work-life practices can also a) allow organizations to offer lower wages in exchange, b) attract investors by signaling the organization's legitimacy and c) incur cost savings via longer work hours and enhanced productivity.

Good management practices may also explain the relationship between work-life initiatives and organizational performance as better-managed firms also have better work-life practices. A study [132] using a new large data set on over 700 firms in Europe and the United States found no relationship between productivity and work-life practices once control for good management was considered.

Regarding homeworking, as discussed previously, homeworking may be associated with an increase in individual productivity and job performance for a variety of reasons (such as working in peak efficiency hours and lacking distractions) that generate an improvement in organizational productivity and performance. A recent meta-analysis of 22 studies that examine the organizational consequences of homeworking [133] suggests that there is a positive, although small, relationship between homework and productivity, employee retention, organizational commitment and performance. However, one of the main limitations of this study is that the outcome variables were based on perceptions of homeworkers or managers, rather than more objective measures. Empirical evidence that links homeworking with quantifiable organizational outcomes is scarce. One example, an experiment conducted in a large Chinese travel agency [125], found that working from home led to a 13% performance increase (9% of which was due to working more minutes per shift and 4% from handling more calls per minute). Another organizational benefit of homeworking is ensuring business continuity through external crises, such as terrorism attacks or epidemics (e.g., swine flu), that may lead to temporary office closures [91].

Homeworking is perceived as having important drawbacks for organizations as well. Innovation, direction, and culture are some of the main reasons that critics of homeworking advocate for employees to work at the office [106]. Sharing ideas, knowledge and information in order to meet an objective is an important part of collaborative work for which effective group communications are required, and there is evidence that homeworking may negatively affect knowledge transfer in organizations [134]. This negative effect is the result of homeworking having a negative impact on components of organizational socialisation (i.e., shared mental schemes, quality of relationships) that are key enablers of knowledge transfer. Past research has found that employees working remotely while relying on technology to communicate may experience lower levels of communication, information sharing, discussion quality and communications richness than those employees who mainly interact face to face [135]. In contrast, there is recent evidence indicating that even though working from home for at least 50% of the time leads to less frequency of information exchange, it does not

necessarily mean that it will affect the quality of information exchange, and fewer interactions with others may even prove to be beneficial (as interactions with others may disrupt work) [113].

One may conclude that, based on existing empirical evidence, flexible working could bring significant benefits to organizations but it presents challenges as well. Quantifying the costs and benefits of flexible working arrangements for organizations is challenging. And while we do not have direct estimates on the benefits and costs of providing flexible workplace arrangements, benefits and costs associated with other workplace outcomes can provide some insights into the likely net benefit for employers in the form of reduced turnover, lower costs for recruitment, reduced absenteeism, and more productive workers.

5.6. Expected effect on the wider society

A justification for promoting work-life balance is that flexible practices may help society in ways that are not taken into account by either an employer or employee (what economists call “social benefits”). For several reasons it is possible that these social benefits are larger than the private ones [12].

5.6.1. Gender equality

From a gender equality point of view, the increased flexibility should be rated positively inasmuch as more individualized working arrangements can help employees to reconcile their work obligations and personal life. Availability of flexible work arrangements allows women to better balance their formal employment with other demands on their time [136]. It is therefore likely that more flexibility in the workplace have a positive effect on the female participation rate [78].

Greater flexibility in the length of working time, however, also seems to have some adverse effects on gender equality, taking into account that the main form of flexibility among female employees is part-time work. In most countries, part-time work is still concentrated in low-paid sectors with low career and training opportunities. It is thus difficult to claim that greater flexibility — in terms of the length of the working time — will have the desired effect of greater gender equality [137]. At the same time, flexible working may help to reinforce and maintain traditional work and family roles [138]. The rationale behind this idea is that since women are more likely than men to choose to work flexibly for childcare reasons and to fit their work responsibilities around their domestic responsibilities [138]. Flexible working does not challenge the traditional gendered division of labour; instead, it enables women to continue taking on primary responsibility for care of home and children while also being in paid employment.

The fact remains that it is primarily women who take advantage of family-friendly policies like flexible working arrangements, so perpetuating the idea that family responsibilities are a woman’s affair [139]. Policies could encourage a more gender-neutral use of flexible work arrangements and a larger uptake of parental leave benefits by fathers.

5.6.2. Social equality

Extending the availability of flexible working practices to lower paid workers positively contribute to social equality as well educated and in better paid employment are significant predictors for flexible working [79]. Full-time employees without the legal right to request flexible working were more likely to work flexibly if they had higher qualifications (62% of employees with a postgraduate degree), were higher earners (60% of those who earned £40,000 or more), were trade union members (44%) and in managerial or professional occupations (48%) [79]. They were also more likely to work flexibly if they worked in the public sector (52%), in mixed gender workplaces (44%) and had a contract of employment (37%) [79]. Furthermore, less skilled workers have less workplace flexibility in terms of the scheduling of when they work than do more highly-skilled workers [12].

5.6.3. Labour force participation

On average, adopting flexible practices likely encourages labour force participation among those workers that would otherwise find it too “costly” to work or invest in workplace skills [14] [12]. It may allow individuals who would not otherwise be able to work, for reasons such as a disability or care giving responsibilities, to undertake paid employment. Taxpayers and society as a whole benefit from having productive individuals in the workforce because they are more likely to make contributions in the form of taxes (and conversely are less likely to use the social safety net).

With regard to female participation in the workplace, flexible work practices can result in higher rates of employment, and better matches between qualifications and job skill-level, for women and mothers. As women and mothers represent a group who are underrepresented in workplaces across Europe [78], improving the scale and quality of their representation in the labour market promises significant net gains for the economy. A recent study by the Institute of Public Policy Research (IPPR) [78] found that:

- There is significant scope for raising female employment rates further through more part-time work.
- However, it is also noted that the current distribution of reduced hours across most Member States is a contributing factor to the lack of female job progression. This in turn may be contributing to an apparent misallocation of skills across Member States, particular within the full-time labour market. Higher-level occupations may already be more likely to accommodate flexible working practices that do not require reduced hours. However, an assessment of employee preferences shows that even within these job types, there is substantial scope for further expansion.
- Offering more flexible scheduling arrangements at the point of recruitment would also be an important step to help mothers re-engage with the labour market in a way that makes best use of their skills and potential.
- There is considerable demand for a larger range of flexible working options among working women. Giving employees more control over the scheduling of their working hours would be particularly popular.

The IPPR reported that the countries with the highest levels of employee's autonomy over work schedule (Germany, the Netherlands and Sweden) had the highest female employment rates while those with the lowest levels of autonomy (France , Poland and Spain) had the lowest levels of female employment. This study, of course, focused on only 7 EU states but it may be indicative of a broader pattern.

5.6.4. Other social consequences

Allowing workers to work during atypical hours or from home can reduce the commuting time for other workers and help to lower pollution. Work-life initiatives can also help to address the labour market challenge of an ageing population as it enables people who would not otherwise work to do so, and improve the economic dependency ratio [140]. It can also help to raise low fertility rates (which contribute to the ageing of society), as work-life initiatives support women to meet the demands of paid work and childcare [140].

Homeworking may also contribute to the creation of a society where members are isolated and detached from one another and from public institutions [126] [141]. Baruch (2001) [141] argues that the excessive use of technology may contribute to create an 'autistic' society and considers homeworking as a sign of this social phenomenon. In other words, new ways of working that rely heavily on technology to communicate and where the human touch is missing, such as homeworking, may lead to social isolation and contribute to a society that is severely impaired in terms of interpersonal communications.

5.7. Expected barriers and facilitators

Almost one-third of firms cite costs or limited funds as obstacles to implementing workplace flexibility arrangements [12]. However, the benefits of adopting such management practices can outweigh the costs by reducing absenteeism, lowering turnover, improving the health of worker, and increasing productivity. The costs and benefits of adopting flexible arrangements differ across industries and employers of different sizes. Because many employers may not have accurate information about the costs and benefits of workplace flexibility practices and because some of the benefits may extend beyond the individual employer and its workers, wider adoption of such policies and practices may well have benefits to more firms and workers, and for the wider country economy as a whole.

A recent report [142] on flexible working, commissioned by the Employers group on Workplace flexibility (EWF) and based on qualitative data from the 20 member organizations, outlines four cultural and procedural barriers to flexible working, and suggests how each can be overcome. A summary is provided in Table 5.5.

Table 5.5 – Barriers and enablers of flexible working [142]

Barrier	Enabler
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<p><i>A lack of senior sponsorship:</i> Within the EWF, the most commonly cited barriers were cultural in nature. At the highest level, flexible working arrangements can be undermined by a lack of senior sponsorship. The need for leadership and support at a department or company level cannot be underestimated, and a lack of visible sponsorship can stifle the adoption of flexibility.</p>	<p><i>Make a Business Case:</i> One of the most important factors in enabling flexible working is senior management support. Mentioned by the majority of our EWF companies, a lack of senior sympathy can become an insurmountable barrier. In order to generate support from more traditional managers, the economic benefits of flexibility need to be made as tangible as possible.</p>
<p><i>A Culture of Presenteeism:</i> Though senior sponsorship is a prerequisite for flexibility to thrive within a company, scepticism from direct managers can still undermine the transition. Reluctance most often comes from managers who operate on more traditional views of work, and their desire to persistently observe the actions of their teams enforces a culture of process and presenteeism that restricts employee flexibility.</p>	<p><i>Promote a Culture of Trust:</i> Flexible working is grounded in autonomy, the exercise of which requires mutual trust. The majority of the EWF companies agreed that a workplace that aims to facilitate ad-hoc working styles must ensure that managers trust their employees in flexible working arrangements</p>
<p><i>A Lack of Guidance and Support:</i> Once flexible working is embraced by management, it is important to ensure that support is provided at the level of the individual employee. Flexibility represents a substantial shift in working style and, though its benefits are clear, it is often difficult for employees to adjust to new ways of working. Without proper instruction or guidance, the Future of Work research shows that flexible working can produce isolation and reduced visibility, which can in turn have long-term effects on productivity and career progression.</p>	<p><i>Create Support Platforms:</i> The consensus among the EWF companies is that employees require clear guidance and support when adopting flexible working arrangements.</p>
<p><i>A Risk-Averse Culture:</i> The ability to maintain a culture of flexibility requires an agile organisational structure that is able to constantly innovate around employee working arrangements.</p>	<p><i>Support Pilots and Experiments:</i> Many of the EWF companies that have been successful in expanding flexible working initiatives have benefitted from low-risk experimentation by undertaking pilot groups in order to trial and refine possible processes</p>

This study is consistent with the barriers and facilitators found by past research on work-life initiatives. There are several potential barriers that might preclude work-life initiatives such as flexible working from being effectively implemented and used at the individual, work group, supervisor and organisational level. At the individual level, lack of knowledge of programs and fear of negative consequences are some of the identified barriers [16]. For example, there is often a perception that work-life practices are mainly for women [143], who are perceived (and expected) to be more committed to family than to work. Men, meanwhile, are often seen (and expected) to be more committed to work than to family [15]. These perceptions and expectations may make it difficult for

employees to make use of flexible working, as they may fear being perceived as less committed to the organisation and thus suffer negative career implications [16]

At the work group level, Thompson (2008) [16] identifies barriers such as lack of co-worker support and task interdependence. Regarding co-workers, work-life initiatives can generate resentment among co-workers who perceive they do not benefit from work-life practices and their lack of support can make it difficult for employees who use work-life practices to benefit from them [143].

At the supervisor level, there is empirical evidence that a lack of informal support by supervisors could limit the number of employees accessing and using work-life practices, and, therefore, training supervisors to develop their family supportive behaviours, for example, may have a positive impact on the uptake of work-life initiatives [144] [145] [146]. In fact, supervisors are considered the gatekeepers to work-life programs as their support is seen to be critical for employees to use such programs [147] [16].

At the organisational level, a supportive work-family culture has been identified as a critical factor for employees to decide whether or not to use work-life initiatives [147][14]. The norm of the "ideal worker" also constitutes a potential barrier at the organisational level: employees who use flexible working practices may challenge the basic assumption about the 'ideal worker' for whom work is primary and private life secondary [15] [17]. Research has revealed that management trust is essential for the homeworking practice to succeed [148] and that traditional managerial attitudes about employees needing to be present at the office (presenteeism) to be positively evaluated is a major barrier to the effective implementation and management of homeworking in an organization [149]. Researchers have also noted that despite the advancements in technology that allow working more flexibly, away from the traditional office setting, many organizations are hesitant to change practices and still positively value employees' physical presence at the office [150]. Management trust is required for a results-based management system, in which the employee's output (such as deliverables of the work) is evaluated, rather than the input (such as the behaviours or processes involved in producing the work deliverables) [151].

The above barriers contribute to marginalised policies. Marginalised policies refer to those that are not fully integrated in an organisation. Marginalised work-life initiatives are perceived to be privileged accommodations for those employees who use them. Since these work-life initiatives are usually marginalised in organisations, they are not as efficient as they could be. Reduced employee stress, increased talent attraction and retention, gender equality, and wider employment of human resources are some of the main benefits that mainstreamed work-life policies could yield [14] [152]. Another reason behind the marginalisation of work-life initiatives in organisations is the underlying organisational and societal assumption that progress is about economic (rather than social) success, an assumption that may explain tensions in the interests of different stakeholders such as employees, families, organisations and society [153] [14]. As Bailyn (2006, p. IX) [153] explains, "Despite talk about family values, and despite awareness of these problems [e.g. care of elders or one's own children], the integration of economic purpose with equity and care has not been made". Furthermore, Bailyn (2006) posits that, given the requirement of meeting economic organisational objectives and employee

needs, if emphasis is put on meeting only one of these concerns, it will unavoidably undercut the other.

5.8. References

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6. Paid parental leave

6.1. Baseline and reform specifications

The Parental Leave Directive guarantees both parents a minimum of four months parental leave, but the question of pay is left up to the Member States.

We understand that the proposed reform:

- Requires Member States to create a right to paid parental leave;
- Does not require a minimum or maximum duration;
- Does not a minimum or maximum amount;
- Does not impose a limit on the child's age;
- Does not require any specific type of financing (e.g. insurance vs. general taxation).

6.2. Mapping of existing provisions

6.2.1. Legislated provisions

A statutory right to a paid parental leave exists in 21 of the 28 Member States. Out of those, six offer a flat-rate allowance and 15 offer an income-dependent compensation. Table 6.1 shows that the average replacement in these 15 countries rate is 77%. However, there is great variation (from 25% to 100%, with a standard deviation of 24 percentage points).

Table 6.1 – Summary table of legislated provisions

	Max.	Min.	Mean	Median	Std deviation
Compensation rate (%)*	100	25	77	85	24

(*) Excluding countries offering a flat rate.

Table 6.2 – Detailed table of legislated provisions

Country	Paid	Amount	Source
Paid parental leave with rate based on previous earnings			
DK	Yes	100% of previous earnings	Consolidation Act no. 1084 of 13 November 2009 on Entitlement to Leave and Benefits in the Event of Childbirth §9, 10
EE	Yes	100% of previous earnings	Holidays Act
HR	Yes	100% of previous earnings	Labour Act §70
LT	Yes	100% of previous earnings	Labour Code §180
CY	Yes	90% of previous earnings	The Maternity Protection Act

Challenges of work-life balance faced by working families

SE	Yes	90% of previous earnings	Parental Leave Act
SI	Yes	90% of previous earnings	Parental Protection and Family Benefits Act
RO	Yes	85% of previous earnings	Emergency Ordinance No. 148/2005 on support of the family for child raising
PL	Yes	80% of previous earnings	Unknown
FI	Yes	75% of previous earnings	Employment Contracts Act Health Insurance Act
HU	Yes	70% of previous earnings	Labour Code §128, 130, 118
DE	Yes	67% of previous earnings	Parental Allowance and Parental Leave Act
LV	Yes	60% of previous earnings	Labour Law §156
IT	Yes	30% of previous earnings	Legislative Decree No. 151 of 2001 §32
PT	Yes	25% of previous earnings	Labour Code §40
Flat rate			
AT	Yes	Range of options	Parental Leave for Fathers Act Maternity Protection Act
BE	Yes	Flat rate, 800 EUR	Royal Decree on Parental Leave.
CZ	Yes	220,000 CZK max	Labour Code section 196, 198
FR	Yes	Flat rate, 390 EUR	Labour Code §L1211, L1225
LU	Yes	Flat rate, unknown amount	Act Establishing Parental Leave Labour Code §234
SK	Yes	Flat rate, unknown amount	Labour Code §166
Unpaid parental leave			
BG, EL, ES, IE, MT, NL, UK.			

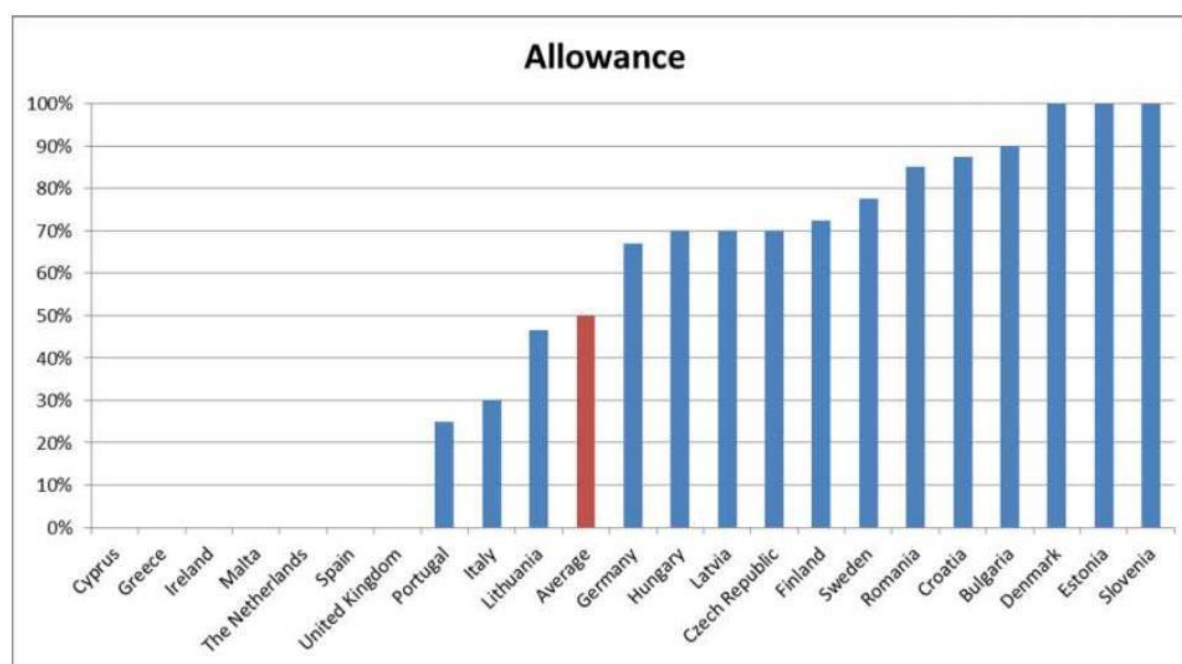
Sources:

- OECD Family Database, Council of Europe Family Policy Database, MISSOC;
- Reviewed by MISSOC national correspondents in June 2015;
- ILO Travail Database.

Compensation in form of percentages of previous incomes

The average parental leave allowance is at 50% of previous incomes which is due to the large amount of countries that offer no allowance to parents on parental leave⁹. When excluding the countries that have unpaid parental leave, the average compensation rate of previous incomes during parental leave amounts to 73% [1].

Figure 6.1 – Overview of the compensation rates of previous incomes during parental leave and unpaid parental leave in all Member States that do not have a flat rate allowance



Source: [1]

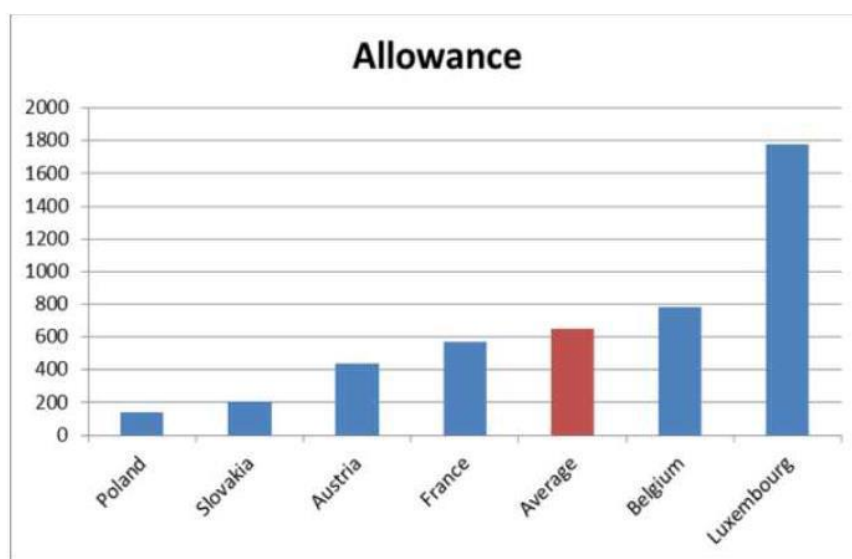
Compensation in form of flat rate

Six countries offer allowances during parental leave in the form of a flat rate: Austria¹⁰, Belgium, France, Luxembourg, Poland and Slovakia. The differences between the amounts of the flat rates are enormous. The lowest amount is found in Poland which offers only 139 EUR to parents on parental leave. On the other hand, in Luxembourg the amount is as high as 1,778 EUR. The average flat rate amount is 653.3 EUR.

⁹ Austria, Belgium, France, Luxembourg, Poland, and Slovakia are not included in this table as they provide flat rates.

¹⁰ Austria offers a wide range of different parental leave options (five in total). For this analysis only the most used option (Option 1) has been taken into account.

Figure 6.2 – Flat rate for parental leave in Austria, Belgium, France, Luxembourg, Poland and Slovakia



Source: [1]

6.2.2. Maximum scope of the reform

Assuming there are no other provisions beyond the existing legislation, the reform is expected to affect seven Member States (CY, EL, ES, IE, MT, NL, UK) with a cumulated population of 147 million (29% of the EU population).

Proportion of MS affected by the reform	1/4
MS affected by the reform	CY, EL, ES, IE, MT, NL, UK
Percentage of the EU population affected by the reform	29%

6.2.3. Real scope of the reform

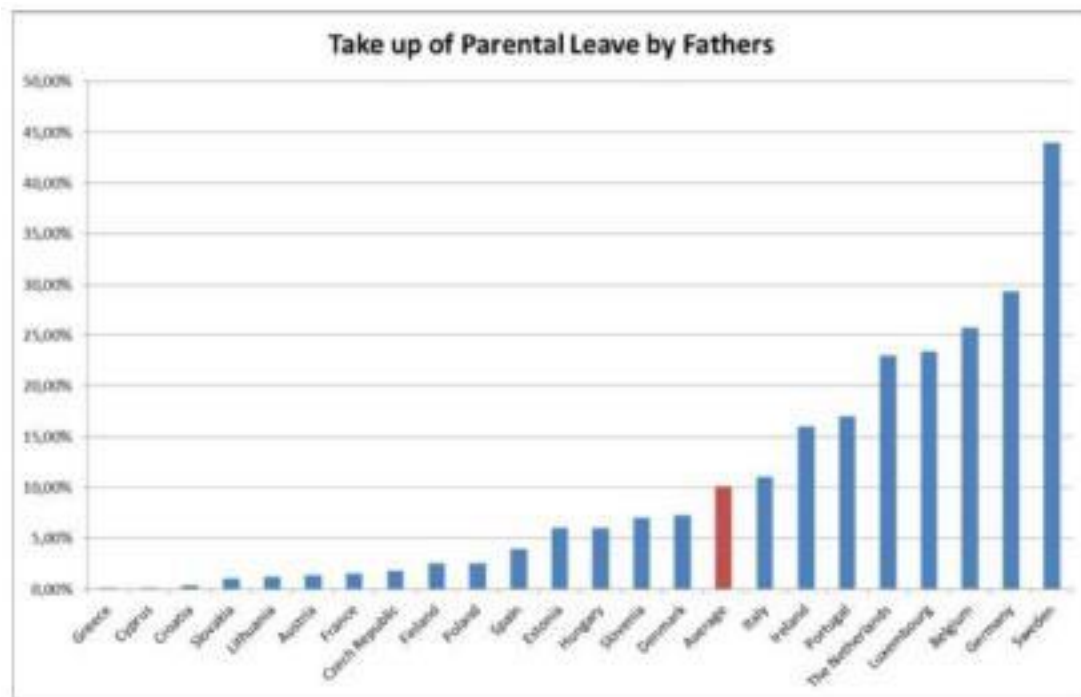
In some Member States, the right to a paid parental leave might be guaranteed by collective agreements. For example, in 10% of the collective agreements made in the Netherlands in 2009, Parental leave was partly paid, at between 40% and 75% of previous earnings (75% of previous earnings including the tax reduction referred to in 'payment and funding' above). However, since Parental leave has been doubled from 13 to 26 weeks (since 1 January 2009) payment sometimes is restricted to the first 13 weeks.

6.2.4. Evidence of take up

Figure 6.3 shows the take-up of parental leave for fathers only. Very little research and even less statistics are available for the take-up of parental leave, especially in the cases of Bulgaria, Latvia, Malta and Romania. Therefore, the aforementioned countries are not

included. For the other countries it has to be noted that not all information was collected at the same time and the types of information also differ.

Figure 6.3 – Take-up of parental leave by fathers in 23 Member States in percentages of the available leave¹¹



Source: [1]

6.3. Expected effect on beneficiaries

This section reviews the effect of variations in leave payment on beneficiaries' outcomes, including labour market participation and earnings.

There is a large body of literature analysing the effect of parental leave policies on labour market participation from recent years. This literature has two important characteristics. First, it focuses on *female employment*. This is due to the fact that mothers still take the lion's share of parental leave in Europe. Second, most contributions focus on a variation in the *duration of total parental leave* (referring to paid and unpaid leave taken together), rather than on a *variation in the compensation rate*. These studies are reviewed separately, in section 6.7.

¹¹ Because of incomparable statistics, the UK could not be included. Additionally, in the case of three countries, the statistics were not specific, which resulted in calculating the average for those three countries. The take up for Austria is between 0.6% and 2%, for France between 1% and 2%, and for Finland between 2% and 3%.

6.3.1. Effect on labour supply

Macro-level studies

The findings with regard to the impact on employment are rather positive for short-term leaves and rather negative for leaves that are too long. More details about the moderating effect of leave duration on labour supply can be found in section 6.7. Among aggregate-level studies:

Ruhm (1998) finds evidence that paid parental leave increased employment rates in the nine OECD countries covered by his study. However, taking parental leave for an extended period may also deteriorate labour market skills, and damage future career paths and earnings. The problem is more acute when the parental leave is not accompanied by a job-guarantee, and the mothers are low-skilled [2].

Jaumotte (2003) examined the determinants of female labour force participation in OECD countries. His findings to those of Ruhm (1998): Female employment rates seem to increase in response to leave legislation, but the positive effects diminish as leave duration increases [3].

Pronzato (2009) also finds positive (yet diminishing) effects from leave, as the provided job security increases the proportion of mothers returning to work. Making leave paid, however, decreases participation in the first year after birth [4].

Ondrich et al. (1996) evaluated the 1986 reform of parental leave in Germany. According to the authors, the reform turned parental leave “into a powerful instrument for delaying mothers’ return to work after childbirth”. They find that leave periods lasting more than a year may have an adverse effect on return rates, both in terms of lengthening the time out of work and decreasing the probability of returning to work in the long term [5].

While the literature results tend to suggest that parental leave legislation has positive effects on participation, there are findings that increased participation rates through generous welfare schemes come at the cost of increased vertical segregation. For instance, Mandel and Semyonov (2005) argue that policy-induced higher labour force participation results in a more gender-segregated labour market, with detrimental effects on income inequality between. Clearly, these negative effects of welfare policies do not imply that lower participation would be preferable for gender equality. Rather, the results suggest that increasing the female participation rate does not necessarily imply a higher score in all dimensions of gender equality [6].

Micro-level studies

We found a few papers focusing explicitly on a variation in the amount of parental leave payments provided in a country. Lapuerta, Baizán and González (2011) study a variation in the amount of parental leave payments on return to work of mothers using administrative data for Spain of 2006. In Spain, there are big variations in payments across regions. Whereas some regions, such as the Basque country, Navarra or Castilla la

Mancha, provide parental leave payments between 200 and 560 Euros per months, others do not provide any payments. Their results indicate that the provision of payments delays return to work of mothers [7], [8].

Ondrich et al. (2003) studied a variation in the amount of parental leave payments provided during leave on return to work of mothers using micro and macro data for Germany between 1985 and 1991. They find a negative effect of the benefit-wage ratio on the return to full-time and part-time work during the parental leave period, i.e. the higher the earnings-replacement provided by the benefit the longer the return to work is delayed [7], [9].

Matysiak and Szalma (2014) compare Hungary and Poland, two low-fertility countries which share many similarities in their institutional, cultural and economic frameworks but which differ in their parental leave provision. The parental leave mandate in Hungary is universal and provides much higher financial compensation than does the means-tested programme in Poland. The authors show that paid parental leave leads to substantial delays in women's entry into employment. Polish women, for their part, have a higher propensity to enter employment shortly after the first birth than Hungarian mothers. The authors also find that a woman's educational level has a clear effect on mothers' intensities of employment entry after leave: highly educated women clearly have a higher propensity for taking up work than lower educated women in both countries [10].

Drange and Rege (2013) analyse the effect of the Cash-for-Care programme introduced in Norway in 1998, which increased mothers' incentives to withdraw from the labour market when their child was one and two years old. They find that the subsidy decreased full-time employment among mothers of two-year-olds by about four percentage points, which is similar to the estimates in other studies. In addition, the authors find that:

- For mothers without a university degree or with pre-reform earnings below the median, the programme had effects on earnings and full-time employment even when the child was no longer eligible for Cash-for-Care at ages four and five. However, from age six, any effect disappears.
- Conversely, for the sub-sample of mothers with high education or high earnings, there is no effect of the Cash-for-Care subsidy at ages four and five.
- The effects of the Cash-for-Care subsidy dissipate because most mothers who exit full time employment while the children are young remain attached to the labour force through part-time employment [11].

6.3.2. Effect on earnings

Empirically, there exist a number of studies utilising individual-level data to determine the effects of leave legislation on wages, employment and occupational segregation:

Ruhm (1998) find evidence that extended parental leaves have a negative impact on the salary of returning mothers [2].

Using data from Germany, Ondrich et al. (2003) find a substantial decrease of 18% in wages for every year spent on parental leave [9].

Buligescu et al. (2008) conclude that the negative effects of parental leave take-up on wages are fairly minimal or non-existent in the long term, while being substantial in the short term. The rebound in wages after an initial decrease upon return from parental leave seems faster than other types of career interruptions.

Datta Gupta et al. (2008) review family policies in Scandinavian countries and conclude that there may be negative effects from the presence of long-term parental leave legislation on wages and, consequently, for the career opportunities of women [12].

Waldfogel (1998) observes that leave coverage diminishes the wage penalty on return for returning women. Long-term absence from work of any kind has negative effects on wages, but it is not clear whether parental leave decreases or amplifies these effects during early motherhood [13].

Gupta and Smith (2002) report a (progressive) catch-up of mothers' salary to those of childless women, as they compensate for their lack of human capital accumulation.

6.3.3. Expected effect on work-life balance

Allen et al. (2014) investigated relationships between four dimensions of work-family conflict (time- and strain-based family interference with work, time- and strain-based work interference with family) and three key national paid leave policies (paid sick leave, paid parental leave, paid annual leave) among a sample of 643 working married parents with children under the age of 5 across 12 high-income countries. No association between any of the four dimensions of work-family conflict and parental leave was found. Family-supportive organisational perceptions and family-supportive supervision were tested as moderators with some evidence to suggest that paid leave policies are most beneficial when employees' perceptions of support are higher than when they are lower. Family-supportive organisational perceptions and family-supportive supervision were both associated with less work-family conflict, providing evidence of their potential benefit across national contexts [14].

6.4. Expected effect on the cared for

There are very few studies analysing directly the effect of parental leave compensations on children's outcomes. This section reviews them, as well as a few others on the effect of the *take-up* of parental leave on children's outcomes.

6.4.1. Effect of paid parental leave on children's well-being

Broadway et al. (2015) examined the causal effect of paid parental leave on different measures of child health in Australia. Using extensive information from the Australian

Longitudinal Study of Children (LSAC), they estimate the effect of paid parental leave entitlements on child health up to age seven. Exploiting detailed information on children's health, family background, mothers' pre-birth work histories and mothers' health behaviours during pregnancy within a propensity score matching framework. The authors show that paid parental leave entitlements reduce the probability of a child having multiple ongoing health conditions, but do not significantly affect any single condition. They find that the effect on multiple conditions is strongest for children from lower socio-economic backgrounds. This study implies that the provision of paid parental leave, even for short periods (as usually available in Australia), will benefit children's health [15].

Exploiting a Canadian reform in paid parental leave rights, Baker and Milligan (2008) combined a regression-discontinuity with a difference-in-difference design and found no consistent effect on child health, but showed that the reform had a very large, positive and significant effect on the duration of breastfeeding, which is itself thought to improve children's health outcomes. The authors also looked for impacts of the reform on self-reported indicators of maternal and child health captured in their data, but for most indicators they found no effect [16].

6.4.2. Effect of the take-up and duration of parental leave on children's wellbeing

Macro level

At a macro level, a country's parental leave regime is an important facilitating context for achieving an optimal infant quality of life. Engster and Stensöta (2011) explored how the different family policy regimes of twenty OECD countries relate to children's well-being in the areas of child poverty, child mortality, and educational attainment and achievement. The authors focused specifically on three family policies: family cash and tax benefits, paid parenting leaves, and public child care support. Using panel data for the years 1995, 2000, and 2005, they tested the association between these policies and child well-being. Their analysis shows that dual-earner regimes, combining high levels of support for paid parenting leaves and public childcare, are strongly associated with low levels of child poverty and child mortality. They find little long-term effect of family policies on numeracy/literacy, but a significant positive association between high family policy support and higher numeracy/literacy. The authors conclude that family policies have a significant impact on improving children's well-being, and that dual-earner regimes represent the best policy for promoting children's health and socio-cognitive development [17].

Galtry's (2003) international comparison demonstrates a positive association between parental leave policies and duration of breastfeeding. She shows how the Swedish model encourages both high breastfeeding rates and high female employment participation rates over a mother's working life through a policy mix that enables many mothers to be home-based for the first six months of a child's life and extends men's access to paid parental leave beyond the first year of a child's life. The issue of breastfeeding highlights how specific national leave policies can invest in children's health while addressing father involvement and gender equity. As such investment in time for breastfeeding can be seen as a societal good,

for instance, in support of World Health Organization (WHO) norms, which currently advise breastfeeding for the first six months for optimal health benefits to infants [18].

Huerta et al. (2013) analysed data of four OECD countries – Australia; Denmark; United Kingdom; United States – to describe how leave policies may influence father's behaviours when children are young and whether their involvement translates into positive behavioural and cognitive outcomes. Their study shows that father's involvement, fathers' leave and child development are related. First, fathers who take leave, especially those taking two weeks or more, are more likely to carry out childcare related activities when children are young. Second, children with highly involved fathers tend to perform better in terms of cognitive test scores.

However, evidence on the association between fathers' involvement and behavioural outcomes was found to be weak. When data on different types of childcare activities was available, results suggest that the kind of involvement matters. These results suggest that what matters is the quality and not the quantity of father-child interactions [19].

Ruhm (2000) and Tanaka (2005) have conducted large-scale secondary analyses of parental leave arrangements and child health outcomes for sixteen European and eighteen of the thirty countries in the OECD, respectively. In both programmes of work, where the subject of inquiry has been on maternal rather than paternal leave-taking, reductions in infant mortality and morbidity have been associated with parental leave. Tanaka's analysis, which attempted to control for some confounding variables such as national investment in child welfare, found a positive association between paid parental leave and child health outcomes, notably infant mortality. The strongest effect was on post-neonatal infant mortality (twenty-eight days to one year) when compared to neonatal mortality (under twenty-eight days), suggesting that parental availability to care beyond the first month may be an important parenting practice to enhance child outcomes. Further positive gains were indicated for immunization. The particular features of parental leave provision that were most significant in promoting child welfare were difficult to disentangle, but the secondary analysis suggests that, internationally, positive child effects of parental leave are maximized when the leave is paid and provided in a job-secure context [18].

Micro level

Liu and Skans (2010) studied how the duration of paid parental leave affects the accumulation of cognitive skills among children. Using a reform that extended parental leave benefits from 12 to 15 months for Swedish children born after 1988, they evaluated the effects of prolonged parental leave on children's test scores at age 16. The authors show that, on average, the reform had no effect on children's scholastic performance. However, they do find positive effects for children of well-educated mothers. They find no corresponding heterogeneity relative to parental earnings or fathers' education, or relative to other predictors of child performance. They find no effects on intermediate outcomes such as parental fertility, child health, mothers' subsequent earnings, divorce rates, or the mothers' mental health. Overall the results suggest positive causal interaction effects between mothers' education and the amount of time mothers spend with their children. Since the institutional context is one in which the alternative is subsidized day care, the results imply that subsidizing longer parental

leave spells rather than day care reinforce the relationship between maternal education and school outcomes.

Cooklin et al. (2012) analysed the association between the mother-infant relationship, defined as maternal-infant emotional attachment, maternal separation anxiety and breastfeeding, and maternal employment status at 10 months following first childbirth. A sample of 129 employed, pregnant women, over 18 years of age and with sufficient English literacy was recruited systematically from one public and one private maternity hospital in Victoria (Australia). The authors found that a reduced employment participation in the first 10 months postpartum was associated with continuing to breastfeed at 10 months (OR=0.22, $p=0.004$) and reporting higher maternal separation anxiety (OR=0.23, $p=0.01$) controlling for maternal age, occupational status, education and use of paid maternity leave [20].

6.5. Expected effect on business outcomes

This section reviews the effect of parental leave on (i) productivity, (ii) absenteeism; and (iii) business performance. This literature considers both paid and unpaid leave.

6.5.1. Expect effect of the take up of parental leave on productivity

The only study analysing the effect of paid parental leave on productivity (and related variables) to date is Gray (2002). She finds that the provision of paid parental leave has no significant impact on manager-reported measures of labour productivity, financial performance, turnover or absenteeism, but significantly increases employee-reported satisfaction with pay. But paid parental leave increases significantly employee-reported satisfaction with pay [21], [22].

We found another study analysing the effect of *unpaid* parental leave. Bassanini and Venn (2007) estimated its impact on productivity for a sample of 18 OECD countries over the period 1980-99. Their estimation is based on the assumption that the availability of parental leave has a larger effect on productivity in female-dominated sectors. The results suggest that longer unpaid parental leave is associated with somewhat higher productivity levels. Assuming that there is no effect of unpaid parental leave on productivity in male-dominated or mixed sectors, the authors show that a one-week increase in the length of available leave is associated with an increase in the level of aggregate labour productivity of between 0.005 and 0.01 percentage points [23] [22].

To the extent that higher productivity results in higher wages, studies examining the effect of parental leave on wages provide more evidence on the expected association between parental leave and productivity. Time spent out of the workforce after childbirth can have a negative effect on subsequent earnings for women. Much of this negative impact is due to human capital depreciation or loss of opportunities to accumulate human capital while away from work [23]. However, a number of studies have shown that the availability and use of parental leave mitigates the negative impact of childbearing on women's earnings. The authors present two reasons for this.

First, access to parental leave seems to reduce the length of career breaks following the birth of a child. For instance, Ronsen and Sundstrom (1996) find that women in Sweden and Norway who have access to paid maternity leave are more likely to return to work after child birth and return two to three times faster than other women. Similar results are found for women in the UK (Burgess et al., 2007) and the US (Berger and Waldfogel, 2004). The negative effect of career breaks on wages tends to increase with the length of the break. Joshi et al. (1999) find that women who took a break of less than 12 months after childbirth had similar wages to women who had never had children, and significantly higher wages than women who took a longer break [23].

Second, women with access to parental leave are more likely to return to the job they held before the birth of their child (Waldfogel, 1998; Baker and Milligan, 2005; Waldfogel, Higuchi and Abe, 1999). Returning to the same job has a positive effect on earnings compared with returning to a new job, so that the overall negative impact of taking a birth-related career break on wages is small or eliminated altogether (Baum, 2002; Waldfogel, 1995, 1998; Phipps, et al. 2001). Returning to the pre-birth job appears to allow women to capitalise on the benefits of accumulated tenure with their existing employer, such as seniority, training and access to internal labour markets [23].

6.5.2. Expect effect of longer parental leaves on productivity

Many studies of the wage effect of parental leave use an indicator variable for access to or use of parental leave, rather than examining differences in the length of leave available. They suggest that the availability of leave can play a role in helping women progress in their job. However, the effect of the length of parental leave is unclear. It is possible that the positive effect of leave on productivity occurs only for shorter leaves, whereas longer leaves result in substantial depreciations of human capital, even if women eventually return to their pre-birth job. Ruhm (1998, already cited) finds some evidence of a non-linear association between the length of parental leave and wages in nine European countries. Rights to short periods of paid leave (three months) have little effect on earnings, while long periods of paid leave (nine months) are associated with a decrease in hourly earnings by around 3% [2].

Bassanini and Venn (2007, already cited) tested a number of specifications to determine whether the positive effect of parental leave on productivity decreases with very long periods of leave. Their results are inconclusive, but suggest that the effect of additional weeks of leave on productivity is greater in countries with relatively short periods of leave than in countries that already have generous leave policies. Increases in the duration of unpaid parental leave only appear to be associated with higher productivity in countries where paid maternity leave is short. In countries where women already have access to ten weeks or more of paid maternity leave, changes in unpaid parental leave have no significant effect on productivity [22].

6.5.3. Expected effect on turnover and absenteeism

We found one study analysing the effect of parental leave on staff turnover. Lee and Hong (2011) investigated the relative impacts of various kinds of family-friendly policies, including paid parental leave, on US federal employees' turnover and federal agencies'

performance. Their research uses data from several sources, and the unit of analysis is the agency, including 15 cabinet agencies as well as other independent agencies. Data for the independent variables are collected using the 2004 and 2006 Federal Human Capital Surveys, and data for the dependent variables was gathered using each agency's Performance and Accountability Report for fiscal years 2005 and 2007. Contrary to the authors' initial hypothesis, paid parental leave did not have statistically significant effects on the employee turnover rate [20]. She found that managers of companies

Gray (2002) used the Management and Employee Questionnaires from the 1998 Workplace Employee Relations Survey (WERS98) to explore the impact of several family-friendly policies on absence rates in the private sector. She found that the probability that absenteeism is below average in a workplace which offers parental leave was higher than that for a workplace without such a policy. However this effect is not significant [21].

6.5.4. Expected effect on overall business performance

Lee and Hong (2011 – already cited) analysed the effect of paid parental leave on public agency performance measured by the percentage of met or exceeded annual performance indicators in an agency's total annual performance indicators (i.e., the number of met or exceeded annual performance indicators divided by the total number of annual performance indicators). They found that each additional point on a five-point satisfaction scale measuring the agency's parental leave provisions by employees was associated with a decrease of 0.1% in the agency's performance (not significant). Contrary to their initial hypothesis, the authors found that paid leave for family care had a negative and insignificant relationship with agency performance [20].

We did not find similar studies analysing the effect of parental leave on the profitability of private-sector companies. However, we did find some qualitative and quantitative evidence of the costs of parental leave on business. For example, Eurofound (2007) found that only 11% of businesses in a 21 country survey, encountered difficulties from workers taking parental leave [25].

The idea that parental leave has a neutral (or slightly positive) impact on business performance suggests that there could be a business case for firms in countries with little or no legislated parental leave to introduce parental leave at the firm level. However, there are a number of reasons why such an interpretation should be made with caution. First, higher productivity does not necessarily result in higher profits for companies – for example, higher productivity could translate into higher wages for parents returning from leave, leaving profits unchanged. Second, even if parental leave was found to increase firm profits, it is unclear whether the benefits accruing to firms would exceed the cost of providing company-level parental leave [23].

Empirical evidence of these costs is very difficult to find. We found a review of the costs and benefits of a few work-life balance measures on business commissioned by the UK Department for Business, Innovation and Skills [22]. The measures considered include parental leave and shared parental leave. With regards to parental leave, implementation costs to businesses associated with the 2001 maternity and parental leave regulations were estimated to £5 million [26].

With regards to shared parental leave:

- The *one-off costs* for employers were estimated as being between £3 million and £14 million. The one-off costs of administration of Shared Parental Leave included changes to payroll and HR systems [26].
- The *recurring costs* for employers of administering requests were estimated at between £1 million and £5 million (not including costs of absence). For larger employers it was assumed that handling each case involves an hour of a personnel manager's time and two hours of a wages clerk's time. In small firms it was assumed that this takes half a day of a manager's time [26].

Regardless of the true costs and benefits of paid parental leave on business, employers' perceptions are often negative. A 2014 survey commissioned by the UK Department for Business, Innovation and Skills found that employers were concerned with:

- The idea that male employees would begin to take more leave than they had done before.
- The impact on other employees, particularly if male employees started to take more leave and it was not possible to cover short periods of absence. This may be considered unfair by other members of the team having to take on an additional workload [7].

6.6. Expected effect on wider society outcomes

The section reviews:

- The effect of paid parental leave on gender equality at work;
- The effect of paid parental leave on gender equality at home;
- The effect of paid parental leave on fertility;
- The costs of paid parental leave for taxpayers.

6.6.1. Expected effect on gender equality at work

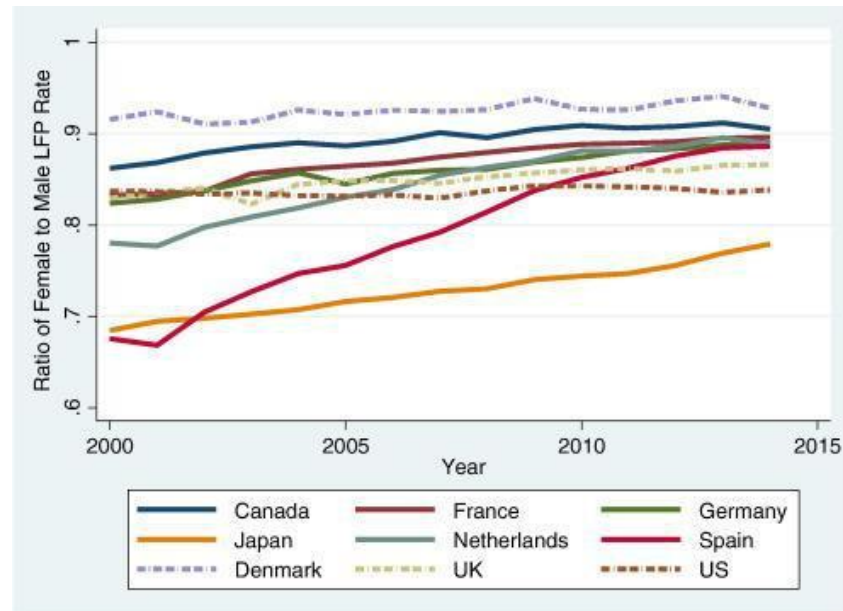
Macro level

We found a vast literature on the effect of paid parental leave on the employment and wage gap. However, this literature analyses variations in terms of *duration of paid leave* rather than variations in terms of *compensation rate*, which is more relevant to this study. This literature is reviewed separately in section 6.7 (moderating variables).

For want of in-depth studies on the question, one can compare the ratio of female to male labour force participation (LFP) in countries with different levels of parental leave generosity (for example Nordic countries vs. other welfare regimes). Figure 6.4 plots this ratio for 25 to 54-year-olds – an age range typical for rearing children – for a number of OECD countries between 2000 and 2014. The figure shows significant variation across countries in the LFP rates of women in this age range, particularly early in the period. For example, in 2000, LFP rates among women aged 25-54 in Japan and Spain were less than 70% of those of their male counterparts. In Denmark, by contrast, relative female LFP stood at over 90% at this time. Over time, the across-country variation has diminished

substantially. By 2014, many countries that were initially lagging behind Denmark – not just Spain and Japan, but also Canada, the Netherlands, Germany and France – have largely converged [27].

Figure 6.4 – Ratio of female to male LFP for 25–54-year-olds for select OECD countries, 2000–2014.



Notes: Authors' tabulations based on OECD labor force participation data (downloaded 9 July 2015).

Source: [27]

While this convergence has many possible explanations, it is notable that all six countries expanded benefits for families over the last several decades as well. These reforms have varied across countries and have been wide-ranging, encompassing increased childcare subsidies, expansions of guaranteed paid leave around childbearing and the provision of early education for children of preschool age. By 2011, the average country in this group of six spent about 1.8% of its GDP on such interventions, up from about 1.5% in 2000 and 1.2% in 1990 (OECD Social Expenditure Database 2014). While a central aim of these policies has been to promote healthy child development, another important aim has been to make it easier for women to combine family and work obligations [27].

Micro level

At micro level, Verma and Wang (2009) investigated the consequences of taking parental leave, for both men and women, on promotions received in the year following the leave. Using unique longitudinal data from the Canadian Workplace & Employee Survey (WES) collected from both employees and their workplaces, they found that in an earlier cohort (2001-2002), women were 14-percentage points more likely to receive a promotion after returning from a parental leave compared to men who also went on parental leave. They authors speculate that men pay a heavier penalty because taking parental leave does not fit in with their gender-assigned role within organisations. In a later cohort (2003-2004)

this effect becomes statistically insignificant and this change is attributed to a change in public policy that allows people to take a much longer parental leave [28].

6.6.2. Expected effect on gender equality at home

A growing body of cross-national studies has provided evidence of significant variations in men's and women's contributions to housework and child care by socio-political context. Following two parental leave reforms in West Germany, Schober (2014) explores how housework and childcare time changed among couples who have just had a child. The reform in 1992 extended the low unpaid or paid parental leave period, whereas the 2007 reform introduced income-based compensation. The findings point to a significant reduction in paternal childcare time 18 to 30 months after childbirth among couples with children born after the 1992 reform. The 2007 reform was associated with increased childcare time of fathers in the first year and 18 to 30 months after childbirth. Changes in both partners' housework and maternal childcare were not significant. Alterations in paternal and maternal labour market participation, leave taking and wages accounted for most of the observed variations in paternal childcare except for 18 months after the 2007 reform [29].

Drago (2011) used time diary data to simulate the effects of parental leave and reduced hours arrangements on childcare time among parents of infants. Estimates suggest that fathers would apply 70% of working time reductions under reduced hours or leave to childcare. Both coupled and single mothers translate working time reductions into childcare at higher rates. Indeed, coupled mothers would use around 74% of the time for childcare under a leave system, and 100% under reduced hours. Single mothers, quite differently, were estimated to use around 86% of time freed up by leave for childcare, and 70% for childcare under a reduced hours system. This analysis highlights inequalities across lines of marital status, gender and socioeconomic status associated with existing policies and suggests policy innovations to both reduce levels of inequality and increase parental investments in childcare time.

Using data from the first wave of the Millennium Cohort Study, covering a large birth cohort of children in the UK at age 8 to 12 months, Tanaka and Waldfogel (2007) examined the effects of unpaid leave-taking and work hours on fathers' involvement in four specific types of activities: changing diapers; being the main caregiver; getting up during the night and feeding the baby. The authors also investigated the effects of policies on fathers' leave-taking and work hours. They found that taking leave and working shorter hours are related to fathers being more involved with their children, and that policies affect both these aspects of fathers' employment behaviour. Thus, policies that provide parental leave or shorter work hours could increase fathers' involvement with their children [30].

Existing evidence is contradictory as to whether take-up of leave by fathers results in greater continued involvement in childcare beyond the period of leave. Having taken any leave was positively related to paternal childcare involvement in the UK [30], whereas associations with weekday childcare proved weak in Australia and Germany (Hosking et al., 2010; Wrohlich et al., 2012). Fathers did not share leave days to care for sick children more equally with mothers after the introduction of the 'daddy month' in Sweden, despite

significantly larger paternal leave take-up rates (Ekberg et al., 2013). Studies from Sweden and the US (Haas and Hwang, 2008; Nepomnyaschy and Waldfogel, 2007) found that it was not fathers' take-up of leave but the length of leave taken that was positively associated with greater participation in childcare. This research extends the literature by exploring whether and through what mechanisms parental leave policy reforms may impact on fathers' sharing of child care and by also considering their contribution to housework.

6.6.3. Expected effect on fertility

Another area on which leave policy may have an impact is that of fertility rates, although this issue is not fully resolved by scholarship on the topic. Fertility concerns continue to be a major driver for leave legislation. The most recent example was in Germany where the low fertility of women led to a switch to an earnings-dependent benefit system for the first year of leave. The general findings tend to be positive, though the combination of short parental leave durations and high fertility rates in some countries give some ambiguity to the results.

Lalive and Zweimuller (2009) analysed the effects of changes in the duration of paid, job-protected parental leave on mothers' higher-order fertility and post-birth labour market careers. Identification is based on a major reform in Austria, which increased the duration of parental leave from one year to two years for any child born on or after July 1, 1990. The authors found that mothers who give birth to their first child immediately after the reform have more second children than pre-reform mothers. Fertility was found to respond across the population in ways suggesting that both cash transfers and job protection were relevant. Increasing parental leave for a future child increased fertility strongly. Partially reversing the 1990 extension, a second 1996 reform was found to compress the time between births [31].

Paid parental leave has also been shown to affect the timing of pregnancies. Lichtman-Sadot (2014) made use of a 21-month lag between announcing California's introduction of the first paid parental leave programme in the United States and its scheduled implementation to evaluate whether women timed their pregnancies in order to be eligible for the expected benefit. Their difference-in-differences approach compared California births to births in other states before the programme's introduction and in 2004, when California introduced paid parental leave. The study shows that the distribution of California births in 2004 significantly shifted from the first half of the year to the second half of the year, immediately after the introduction of the reform [32].

Matysiak and Szalma (2014) compared Hungary and Poland, two low-fertility countries sharing many similarities in their cultural, institutional and economic frameworks but which differ in their parental leave provision. Parental leave in Hungary is universal and provides more generous compensation than does the means-tested programme in Poland. The authors show that paid parental leave encourages the conception of a second child. Hungarian women who are on leave are more likely to conceive a second child than their working counterparts. Polish women, for their part, have a higher propensity to enter employment shortly after the first birth than Hungarian mothers. However, it seems that while parental leave payments have an impact on birth timing, they do not affect the

probability of second births. Finally, the authors find that a woman's educational level does not modify the effects of parental leave on second birth risks [10].

6.6.4. Other benefits

As mentioned in the *OECD Employment Outlook* (2007), there are likely to be other external benefits to society as a whole from helping parents maintain their links to the workforce, such as higher tax revenues, reduced dependence on welfare and lower rates of child poverty. This would suggest that there is a role for government in financing at least part of the cost of providing parental leave [23].

6.6.5. Expected costs for the taxpayer

Macro-level estimates

All experts agree that family-friendly policies have at least one clear drawback: they are expensive and from a partial equilibrium view, a burden on the public budgets. Unsurprisingly, Gupta et al. (2008) reckoned that the public cost of leave schemes was highest in Sweden (0.8% of GDP) and about 0.5% of GDP in Denmark and Norway. Compared to the rest of the OECD countries, these figures are very high. In the U.S. and UK, only 0.1% of GDP is spent on leave schemes. Thus, Denmark and Sweden spend roughly four to five times as much (measured as a percentage of GDP) as the U.S. and UK [12].

In 2007, DG EMPL commissioned an Impact Assessment of a proposal for two Directives amending two Council Directives in order to promote better reconciliation of private, family and working life [33]. The study applied a widely accepted Cost Benefit Analysis (CBA) approach to analysing the impacts of reforming the following five types of leave schemes: (1) maternity leave; (2) paternity leave; (3) parental leave; (4) adoption leave; and (5) filial leave. With regard to parental leave, the report considers four scenarios:

Scenario*	Description
6	12 months (6 months per parent), 66.6% of last salary, with ceiling normally used for social security payments
7	12 months (6 months per parent), 66.6% of last salary, without ceiling
7x	6 and 7 months (3 months per parent), 66.6% of last salary, without ceiling - with a focus on assessing the impacts of increasing parental leave with one month (i.e. from 6 to 7 months)
8	6 months per parent - without possibility of converting the father's 6 month to the mother, 66.6% of last salary, without ceiling

(*) The scenario numbers are those used in the original report.

In general the analysis shows that the additional socioeconomic costs of introducing 12 month of shared parental leave probably would be in the interval of 0.01% of GDP to 0.38% of GDP. For each country the additional costs will be in the range of:

- Belgium: 0.01% to 0.12% of GDP;
- Denmark: 0.10% to 0.24% of GDP;
- France: 0.03% to 0.22% of GDP;
- Hungary: 0.02% to 0.03% of GDP;
- Poland: 0.08% to 0.38% of GDP;
- Spain: 0.03% to 0.17% of GDP;
- UK: 0.002% to 0.06% of GDP.

Readers are referred to Tables 2.15 to 2.18 (p.85 to p.87) for a more detailed breakdown.

Case studies

The literature also includes a number of individual case studies. These case studies are based on different methodologies and assumptions, and thus are not directly comparable. The most complete economic assessment of a reform of parental leave we found was carried in 2013 by the UK Department for Business, Innovation and Skills, to inform the introduction of a new Shared Parental Leave [34]. The IA considered four scenarios:

Scenario	Description
1	Do nothing.
2	Create a system of shared parental leave including; rights for the father to attend 2 hospital appointments during a partner's pregnancy; maternity leave of 52 weeks but mothers can end their maternity leave, the remainder becoming flexible parental leave up to 50 weeks (37 paid); 18 weeks unpaid leave up to age of 18 - the preferred option.
3	A system of shared leave but with either 26 or 18 weeks maternity, and only 26 or 34 weeks sharable parental and various paternity durations of no additional weeks, 2 additional weeks and 4 additional weeks.
4	The second and third options, but, allowing for lump sum payments to be made to individuals (which would also allow them to return to work having received a payment).

Option 2 was identified as the preferred option. An overview of the main costs and benefits of this option can be found on p.4 of the IA. In a nutshell:

Costs to employers:

- Recurring costs: (for Shared Parental Pay rebate £0.0m to £0.1m, absence costs between £7.8m to £33.7m & administration £2.9m to £6.6m);
- One-off costs: £48.8m to £49.1m (for familiarisation and payroll changes etc.).

Costs to the Exchequer:

- Recurring costs: (from statutory payments £0.0m to £1.2m & administration £0 to £1.5m);
- One-off costs: £6.9m.

Benefit to families:

- Can be represented (as a lower bound estimate) as the total value of new payments received.

Key assumptions of the IA:

- Estimated take-up of the shared leave period ranging from 2 to 8%.
- Estimated take-up of extending parental leave to parents with older children between 6% and 12%.
- Amount of time taken is unlikely to be the full 18 weeks, more likely to be one or two weeks.

6.7. Moderating variables

This section reviews the effect of two key moderating variables, namely the duration and the strictness of eligibility of paid parental leave. It also focuses on two key outcomes: female labour market participation and fathers' involvement in family tasks. The following section is largely based on Dearing (2015) [7].

6.7.1. Effect of parental leave duration on female labour market participation

This section reviews the effect of: (i) variations in the duration of paid parental leave; and (ii) variations in the duration of total parental leave (i.e. paid and unpaid).

Studying a variation in the duration of paid parental leave entitlements

The relationship between leave duration, gender differences and labour market outcomes, has seldom been analysed at the macro level. One of the most important studies is Ruhm (1998), who looks at the effect of paid leave durations on employment trends in nine European countries from 1969 to 1993. The results show that longer paid leave is associated with increases in female-to-male employment rates, but with small reductions in their relative wages. A modest, negative effect has also been found for the duration of leave on the female-to-male ratio in weekly working hours.

Thevenon and Solaz (2014) investigate how increases in periods of paid leave after a birth affect employment participation for women and men in 30 OECD countries between 1970 and 2010. They find that extensions of paid leave have a positive, if small, effect on female employment participation and on the gender ratio of employment, as long as the total period of paid leave does not exceed two years. Weeks of paid leave also raise the average number of hours worked by women relative to men, up to a certain point. By contrast, the provision of paid leave widens the male-female wage gap among full-time employees [35].

Ronsen and Sundström (2002) study return to work of women using survey data between 1972 and 1992 for Finland, Norway and Sweden. The variable capturing the variation in

the duration of leave is the duration of paid leave provided at the time of birth by each country. The dependent variable is the probability of returning to a part-time or full-time job. For mothers having their first child, the findings show that longer durations of paid parental leave delay the return to work. For Finland and Norway, however, this negative association is only significant for mothers returning to full-time jobs [9], [40].

Similarly, Ondrich et al. (2003) study a variation in the duration of paid parental leave on return to work of mothers using macro and micro data for Germany from 1985 to 1991. Within this period, leave was extended at several rates from six months in 1985 to 18 months in 1991. They use three different dependent variables to capture return to work, referring to the return to work (i) within the parental leave period, (ii) within the maternity leave period and (iii) within a post-parental leave period (i.e. six months after the end of parental leave). Their results indicate a negative effect of the extension of parental leave on full-time return to work within the maternity leave period [8], [10].

Three other studies are based on a micro level and study the effect of paid parental leave entitlements. Lalive and Zweimüller (2009) study the variation of paid parental leave on employment outcomes using administrative data for Austria between 1985 and 2000. Their findings show different effects of the reform in the short run (i.e. within three years after birth) and in the long run (i.e. within ten years after birth). They find that (i) reforms extending leave significantly delay the return to work of mothers, and (ii) this negative effect is more pronounced in the short run. In addition, they find a small negative effect of the reform on earnings and employment in the short run, but no effect in the long run [7], [31].

Lalive, Schlosser et al. (2014) reveal that longer parental leave durations induce a substantial delay in return-to-work. Extending both job protection and cash benefits by one year (as in the 1990 reform) increases the time at home after birth by nearly eight months. Reducing the duration of benefit payments by six months while keeping job protection at 24 months (as in the 1996 reform) reduces the time spent at home by over three months. Finally, extending payment duration by 12 months again keeping job protection at 24 months (as in the 2000 reform) extends the time spent at home by three months. The authors also show that these changes are driven by both delays in return to new jobs and in return to pre-birth employer. Despite the delays in return-to-work among mothers exposed to the more generous leave regimes, the authors find no effects on their labour market participation in the medium run [7], [37].

Bergemann and Riphahn (2011) study a variation of paid leave in Germany on mothers' return to work using panel-data between 2005 and 2007. In 2007, the government introduced a more generous but shorter parental leave. The new benefit amounts to 66% of the pre-birth income and is paid for 12 months to one of the parents, whereas an extra two months are available to parents sharing the leave. The dependent variables capture the respondents' intention to (i) return to work (ever) and (ii) a fast return to work (within one year after birth). The authors find no significant effect from the 2007 reform on the intention to ever return to work. However, they find a clearly positive effect of the reform on fast return to work, suggesting that well paid and short leaves speed up the return to work compared to low-paid but longer leaves [7], [38].

Joseph et al. (2013) evaluate the effect of short parental leave on mothers' employment participation and earnings, with a special focus on the part-time parental leave option. The authors exploit a reform introduced by the French government in 2004, which increased the incentive to extend the maternity leave through a six-month paid parental leave. The authors show that full-time short paid parental leave had almost no effect on the employment and wages of primo-parents on average. However, for part-time paid leave-takers, the reform increased the employment rate but decreased the subsequent wages. The wages remained lower two years after childbirth, especially among the highly educated, who often choose the part-time option [7], [39].

Studying a variation in the duration of total parental leave entitlements

Several studies have focused on the impact of a variation in the duration of parental leave (paid and unpaid) on female employment outcomes. Akgunduz and Plantenga (2012) study the variation in the duration of total parental leave entitlements on female labour market participation using macro-level data from European countries between 1970 and 2010. They find that parental leave increases female employment-to-population. However, this positive effect gets weaker as the leave gets longer. Therefore very short and very long durations of leave negatively affect women's employment participation, whereas moderate duration has a positive effect. The authors indicate an optimal leave length, where employment is maximised at 28 weeks of parental leave. They also find a positive association between the duration of the parental leave and the number of working hours. In addition, they find a negative effect of the duration of leave on wages, but only for highly educated women. Looking at the effect of the duration of leave on occupational segregation, the authors find that the duration of leave negatively influence the proportion of women working as managers, professionals or senior officials; however this effect is small [7], [13].

Genre, Salvador and Lamo (2010) study a variation in the duration of total parental leave on female employment using macro data from 12 European countries between 1980 and 2000. Given that the authors do not explicitly state whether the variable indicating the duration leave refers to paid or unpaid leave, it can be inferred that the authors considered both types of entitlements. Like Akgunduz and Plantenga (2012), they find a positive effect of the duration of leave on female employment outcomes with diminishing returns indicating an inverted U-shape association between leave duration and labour market participation. According to their estimates, the positive effect on employment is maximized at about eight to nine months of leave, turning negative afterwards [7], [40].

Taking both a micro and macro perspective, De Henau, O'Dorchai and Meulders (2010) study the effects of a variation in the duration of total leave entitlements on a 'child gap' in women's employment using data from 15 European countries in the years 2000-2003. A 'child gap' refers to the employment gap in full-time participation rates between mothers and non-mothers. Again, the authors do not explicitly state whether the variable indicating the duration of leave refers to unpaid or paid leave. The authors find that the duration of leave has a modest and negative effect on the child gap. In other words, the duration of leave increases the gap in full-time employment rates between non-mothers and mothers [7], [41].

Pettit and Hook (2005) take a similar approach, but focus on a slightly different outcome. They study a variation in the duration of total parental leave on a 'child penalty' in women's employment rates using both macro and micro data from 19 predominantly European countries in the 1990s. A 'child penalty' in employment participation is defined as the extent to which the negative effect on mothers' employment participation rates (compared to non-mothers) can be explained by the presence of children. The two variables capturing the duration of parental leave refer to the number of weeks of (i) paid maternity leave, and (ii) total parental leave. The authors find that the duration of leave positively affects the child penalty in employment participation, i.e. the child penalty is weaker in countries providing longer parental leaves. Here again, the strength of this association is U-shaped. According to the authors' estimates, the positive effect on the child penalty is maximized at about three years of leave [7], [42].

Misra, Budig and Boeckmann (2011) study a variation in the total duration of leave policies on a child penalty in employment hours and wages of mothers using both macro and micro data between from 21 predominantly European countries between 1996 and 2001. The operationalization of the variables is similar to the Pettit and Hook study (2005). The authors find that the duration of paid maternity leave and the duration of total parental leave available are associated with a lower child penalty for both wages and employment hours. Furthermore, just as Pettit and Hook they find evidence of an inverted U-shaped relation between the duration of total parental leave and the child penalty, where the child penalty on working hours and wages is minimized at around 80 to 100 weeks of leave [7], [43].

We found two micro-level studies on the same subject. Grunow, Aisenbrey and Evertsson (2011) study a variation in leave policies on return to work of mothers born between 1950 and 1980 using panel data from the United States, Sweden and Germany. They use several variables to indicate different duration of leave over time in each country. These vary from variables indicating shorter leave durations in the 1970s and moderate duration in the 1980s to longer leave durations in the 1990s. Their results indicate that extended leave durations delay return to work in all three countries [7], [44].

Puhani and Sonderhof (2011) study a variation in the duration of total parental leave on the incidence of job-related trainings using survey data from Germany between 1988 and 2000. As previously mentioned, the German parental leave scheme was extended at several rates, within this time span. On average, the authors find an increase in job-related trainings in the population. However, their results indicate that the increase in training incidence between 1988 and 1994 was the smallest for young women [7], [45].

6.7.2. Effect of a variation in the eligibility for parental leave entitlements on female labour market participation

Pronzato (2009) analysed the effect of a variation in the eligibility for parental leave on return to work of mothers using data from 10 European countries between 1994 and 2001. Two variables capture the variation in the eligibility for parental leave among women: (i) whether a mother is eligible for parental leave payments during leave; and (ii) a binary variable indicating whether a woman is eligible for some unpaid or paid leave. The author finds a positive association between a woman's eligibility to total leave in the

second or the third year after birth and her likelihood of returning to work. The author also finds a negative association between a mother's eligibility to leave payments and her probability of returning to work, however only for the first year after birth. Breaking down the results according to different skill levels, she finds that the positive effect from the eligibility for leave is especially pronounced for moderately and highly skilled women, whereas the negative effect from the eligibility for payments is strongest for low skill women [4], [7].

Ronsen and Sundström (2002) investigate the impact of a variation in the eligibility for paid parental leave on the return to work of mothers using survey data from Finland, Sweden and Norway for the years 1972 to 1992. In all three countries, the authors find a positive association between a mother's eligibility for leave and her probability of returning to work. However, they also find that eligibility was not associated with the probability of returning to part-time work in Finland [7], [36].

6.7.3. Effect of parental leave duration on fathers' involvement

Studying a variation in the duration of paid parental leave entitlements

Pull and Vogt (2010) study a variation in paid parental leave on the take-up of leave by fathers using survey data from Germany between 2001 and 2008. Like Bergemann and Riphahn (2011), the authors analyse the effect of the 2007 reform that introduced a new scheme of shorter, but more generous parental leave payments. A crucial element of the reform was, not only, that the new benefit was income-dependent, but also that paid parental leave was extended for two months if both parents shared some leave. The dependent variables refer to (i) whether a father used some parental leave days, (ii) whether a father used more than two months of leave, and (iii) the duration of leave in months taken by the father. They find that the probability of fathers' leave taking increases after the introduction of the reform. However, the study also indicates that the probability that fathers use more than two months of leave decreases after the introduction of the reform, as does the average duration of leave taken by them [7], [46].

Studying a variation in the duration of total parental leave entitlements

We found three micro-macro studies focusing on the effects of a variation in the duration of total parental leave on fathers' household work. Hook (2006) studies this variation using time-use surveys and conducted in 20 predominantly European countries between 1965 and 2003. The variable indicating the duration of leave refers to the number of weeks of total parental leave available in a country. Fathers' household work is measured in minutes per day and includes (i) core household work, such as cooking and cleaning; (ii) non-routine housework, such as shopping and gardening; and (iii) looking after children. Her study concludes that longer durations of total parental leave are associated with fewer hours of household work [7], [47].

Whereas Hook (2006) studies the effects on fathers' household tasks including childcare, Hook (2010) concentrates on their involvement in time-inflexible household tasks, excluding childcare. This study analyses the effect of a variation in the duration of total parental leave on the amount of time spent cooking or cleaning. The dataset is the same

as in the 2006 study. The variable indicating the duration of parental leave refers to the weeks of total parental leave available in a country. The dependent variable is the time per day spent on cooking and cleaning. The results show that the duration of total parental leave is associated with a small reduction in fathers' cooking time and with a rise in mothers' cooking time, suggesting that long leave entitlements reinforce the gendered division of cooking. The results show no significant association between leave duration and probability of sharing cleaning tasks [7], [48].

Similarly, Fuwa and Cohen (2007) study the effects of a variation in total parental leave entitlements on the division of household tasks using macro and micro data from 33 predominantly European countries in 2002. The parental leave variable refers to the duration of total parental leave in months. Their dependent variable measures the division of household work amongst mother and fathers. Their results show that the duration of total parental leave has an equalizing effect on the division of household work. Countries with more generous parental leave provisions also have a more egalitarian division of housework. At the same time the authors find a strong association between full-time employment of women and egalitarian division of domestic tasks. However, this effect becomes weaker as the parental leave becomes longer. As suggested by the authors, women working full-time might have a stronger position to bargain themselves out of housework but long parental leaves undermine this bargaining power [7], [49].

6.7.4. Effect of a variation in the eligibility for parental leave entitlements on fathers' involvement

Hook (2006) analysed the effect of a variation in fathers' leave entitlement on the fathers' share of household work (details of the study see above). Her results suggest that in countries where men are eligible for leave they do more household work [7], [47].

6.8. Factors affecting take-up

6.8.1. Compensation rate

Lapuerta et al. (2011) studied the effects of a variation in parental leave payments in Spain on fathers' parental leave take-up using administrative data from 2006 (details of the study see above). They found a positive effect on the probability of using leave; but no significant association on the duration of this leave [7].

Ziefle and Gangl (2014) analysed the relationship between leave provisions and mothers' employment participation. Using event history analysis and 1984–2010 data from the German Socio-Economic Panel, the authors showed that mothers have strongly responded to various changes to Germany's parental leave policy, including both incentives to speed their return to work and entitlement extensions. They found that the five consecutive entitlement extensions between 1986 and 1992 have followed by respective increases in the duration of parental leave. This positive association has partly been reversed by stronger procedural and financial incentives for shorter leave-taking implemented in 2001, but more consistently so by the introduction of a new 12-month earnings-related parental leave benefit scheme in 2007. Behavioural changes have been

observed among both West and East German mothers despite long-standing differences in availability of childcare and gender culture [50].

6.8.2. Eligibility criteria

A growing branch of research has investigated how non-transferable leaves (also known as ‘father’s quota’ or ‘daddy days’) impact the take-up rate and the duration of leave taken by fathers. A cross-national comparison of twenty-four countries suggests that fathers’ use of statutory leave is greatest when high income replacement is combined with extended duration of job-protected leave, in particular when a certain proportion of leave is reserved for fathers [18]. Such policies, however, have mainly been found to increase the probability of paternal leave take-up, but not the leave duration beyond the proportion reserved for fathers [51]. See section 7 for a comprehensive review of the costs and benefits of non-transferable leaves for fathers.

6.8.3. Social and cultural factors

Personal situation

Moss reports that in the Netherlands, the take-up among mothers with a higher level of education is 56% whereas for mothers with a low level it is 17%. The figures for fathers are 26% and 8% respectively. Women working full time (i.e. a minimum of 35 hours a week) are more likely to take up leave than those working part time (12 to 24 hours a week): 55% and 30% respectively. Furthermore, twice as many women with a high personal income (40,000 to 50,000 EUR a year before tax) take up leave than women with a low personal income (10,000 to 20,000 EUR): 60 and 31% respectively [52].

Influence of spouses, friends, colleagues and relatives

Marital bargaining theories suggest that demands for childcare are resolved through a cooperative bargaining game between mother and father. Share of unearned income, household income, education and relative human capital determine an individuals’ bargaining power. Bargaining theories imply that mothers’ education and income may give them relatively higher bargaining power. Social structure theories argue that situational constraints in the workplace explain the prevalence of an unequal division of household work. These theories suggest that fathers are more likely to participate in household work if mothers’ availability is limited. They also suggest that a father will use parental leave if the opportunity cost of mother’s time is higher than the father’s or at least as high as the father’s opportunity cost [53].

Nepomnyaschy and Waldfogel (2007) used the Early Childhood Longitudinal Study–Birth Cohort, a new nationally representative panel study of over 10,000 children born in 2001 in the US, to examine the determinants of leave-taking among men. The authors show that the determinants of longer leave-taking are different than the determinants of any leave-taking. In particular, they find that the probability of taking two or more weeks of leave is associated with fathers being better educated, US-born, and in higher professional positions. Having two children or more reduces the odds of taking two or more weeks of leave, as does having a mother who was did not work before birth. The results for dual-

earner couples are similar with one exception: the father's level of education is not a significant predictor of leave duration [54].

Moss (2015) reports that, in Ireland, take-up of (unpaid) parental leave is linked to mothers' ability to afford it. Mothers with an unemployed partner are four times less likely to request parental leave than mothers with a working partner. Conversely, mothers with higher earnings are more likely to have requested parental leave [52].

Budd and Mumford (2002) demonstrate that statistics on workplace availability in the UK drastically overstate the extent to which employees perceive that family-friendly policies are accessible to them personally. British workplaces appear to be responding slowly, and perhaps disingenuously, to pressures to enhance family-friendly work practices [55].

Dahl et al. (2014) estimated peer pressure in paid paternity leave in Norway using a quasi-experimental design. Their study shows that brothers and colleagues are 11 and 15 percentage points, respectively, more likely to take paternity leave if their peer was exogenously induced to take up leave. The estimated peer effect snowballs over time, as the first peer interacts with a second peer, the second peer with a third, and so on. This leads to long-run employment rates which are significantly higher than would otherwise be expected [56].

Moss (2015) reports that traditional male cultures at the workplace play a role in Denmark. A survey conducted among the Danish population in general showed that more than half of the fathers who took less than three month leave mention "if my employer had clearly indicated that my job situation would not be negatively affected" and "if my work place had a tradition for male employees taking leave" as factors that may have made them take longer leave. This shows that Danish fathers' limited leave take-up may be explained by a fear of negative professional consequences. That role models and support from superiors and colleagues are important for Danish fathers' leave take-up is in line with another survey [52].

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7. Father quota

7.1. Baseline and reform specifications

There is currently no EU-level provision for a father quota.

We understand that the proposed reform:

- Requires Member States to allocate a certain share of the parental leave to the father;
- Does specify the share of leave to be allocated to the father;
- Does not require this leave to be paid.

7.2. Mapping of existing provisions

7.2.1. Legislated provisions

Table 7.1 – Detailed table of legislated provisions

Country	Duration	Compensation	Comment
EU Member States where a father quota is currently available			
SE	60 days	80%	The quota comes on top of a ten-day leave and another 360-day family entitlement to be divided between parents as they choose.
EU Member States which have introduced and repealed a father quota			
DK	2 weeks	100%	The father's quota was introduced in 1998 and repealed in 2002.
Countries where a father quota is currently available (outside the EU)			
NO	10 weeks	80%	The quota comes on top of the two-week paternity leave (i.e. to be used at the time of birth)
IS	3 months	80%	The quota comes on top of the three-month paternity leave (i.e. to be used at the time of birth) and another three-month family entitlement to be divided between parents as they choose.
Quebec	5 weeks	70%	The quota can also be considered as a paternity leave.

Source: [1].

7.2.2. Real scope of the reform

Tables 7.1 probably *under-estimates* the entitlement of new fathers across Europe.

First, some collective bargaining agreements exceed legislated provisions. For example, in SE, a common collective agreement is that the employer pays 10% extra under the ceiling (i.e., workers receive 90% of earnings) and up to 90% above the ceiling [1].

In 2007, about 7,000 Danish employers in a number of sectors including service, production and IT, introduced a paid father's quota. Parents were entitled to up to nine weeks paid parental leave. Three of these weeks were reserved for the mother, three weeks for the fathers and three weeks for the parents to share. The weeks for the father and the mother respectively were quotas and therefore lost if taken up. Later agreements extended the period to 4+4+3 weeks. A 2012 agreement removed a clause. This clause determined that pay during parental leave was contingent on leave being taken immediately after the maternity leave, i.e. the 15th week after birth. This reduced the flexibility of use considerably, especially in fathers' take-up of parental leave. Presently, parents covered by this agreement are allowed to take Parental leave within a year from the birth of the child with pay. As part of the labour market negotiations in Spring 2008, a similar collective agreement was also introduced for public sector employees. If both parents work in the public sector they are entitled to leave with full payment for 6+6+6 weeks after maternity leave, which is 14 weeks in DK. As a part of the labour market negotiations in Spring 2015, fathers employed in the public sector got a further one week earmarked with full payment, making a total of seven weeks [1].

Second, some countries provide financial incentives or non-transferable shares of leave rather than quotas. Table 7.2 provides an overview of these provisions.

Table 7.2 – EU Member States which offer incentives or non-transferable shares of parental leave

Country	Duration	Compensation	Comment
A. EU Member States offering a 'father-only' birth leave			
PT	20wd	100%	The quota can also be considered as a paternity leave (see 'paternity leave' section of this report).
FI	54wd	75%	The quota can also be considered as a paternity leave (see 'paternity leave' section of this report).
B. EU Member States offering non-transferable, paid parental leave			
HR	2 months	100%	--
SI	130cd	90%	--
PT	3 months	25%	In addition to the above-mentioned 'father-only' parental leave, fathers are entitled to 3 months of 'additional parental leave'. This leave is not transferable.
LU	6 months	Flat rate	--
DK	32 weeks	100%	Although each parent can take 32 weeks of leave, each family can only claim 32 weeks of paid leave.

C. EU Member States offering an incentive if both parents take leave			
DE	--	67%	2 months of benefit are paid if father takes leave
IT	--	30%	1 month bonus if father takes some leave
AU	--	Flat rate	Between 2 and 6 extra months of benefit are paid if both parents take a share of parental leave.
FR	--	Flat rate	Increased financial payments if both parents take some leave
D. EU Member States offering non-transferable, unpaid parental leave			
EL	4 months	0%	--
ES	156 weeks	0%	--
IE	18 weeks	0%	--
NL	26 weeks	0%	--
UK	18 weeks	0%	--

Source: [1].

7.2.3. Maximum scope of the reform

The impact of the reform depends on what is considered to be the 'baseline'.

Table 7.3 – Member States affected by the proposed reform

Baseline 1 – Father quota only	
Proportion of MS affected by the reform	27/28
MS affected by the reform	All but SE
Percentage of the EU population affected by the reform	98%
Baseline 2 – Father quota + Provisions A, B and C (see table 7.2)	
Proportion of MS affected by the reform	17/28
MS affected by the reform	All but SE, PT, FI, HR, SI, LU, DK, DE, IT, AU, FR
Percentage of the EU population affected by the reform	50%
Baseline 3 – Father quota + Provisions A, B, C and D (see Table 7.2)	
Proportion of MS affected by the reform	12/28
MS affected by the reform	BE, BG, CY, CZ, EE, HU, LT, LV, MT, PL, RO, SK

Percentage of the EU population affected by the reform	22%
--	-----

Source: [1].

7.2.4. Evidence of take-up or demand

Effect on the reform on the probability of taking leave

A cross-national comparison suggests that fathers' take-up of statutory leave is greatest when high income replacement is combined with extended duration of job-protected leave, in particular when a certain proportion of leave is reserved for fathers.

In NO, every expansion of the father's quota has been followed by an increase in fathers' leave take-up. In 2012, 21% of fathers took exactly 12 weeks (60 working days), compared with only 0.6% in 2011. The father's quota increased from ten to 12 weeks between these two dates. In 2014 fathers took 49 days parental leave on average, up from 46 days in 2013. The sharable parental leave is for the most part taken by mothers and has in practice become a maternity leave. In 2012, only 15% of fathers took any of this part of Parental leave (which comes in addition to the father's quota) [1].

In SE, the proportion of leave days taken by men in Sweden doubled between 1997 and 2004, with the introduction and then the extension of a father's quota, though the doubling to two months had a less dramatic effect than the initial introduction of a quota [1]. There is empirical evidence of take-up as well. Ekberg, Eriksson and Friebe (2013) studied the effect of the Swedish father's quota on their parental leave take-up using administrative data collected between 1993 and 2003. They focused on the first reform in 1995 that introduced a one-month father's quota. Their findings show that the reform increased fathers' use of leave by about 15 days. They also find a change in the take-up behaviour of women, suggesting that they have used more of the flat-rate paid parental leave days since the introduction of the reform [2].

Duvander and Johansson (2012) investigated the effects of three Swedish reforms (1995, 2002, 2008) on parental leave use by means of a difference-in-difference approach with parents of children born just before and just after the introduction of each reform. The authors' found a strong effect on parental leave use resulting from the introduction of the first reserved month (1995 reform), a more modest effect resulting from the second reserved month (1998 reform) and no significant effect resulting from the gender equality bonus (2008 reform). Possible interpretations of the results are that (i) reserved time may be more effective than an economic bonus; (ii) change from low levels of use may be easier; and (iii) reforms are less effective as they become less salient [3].

In IS, with the extension of father-only leave from 2001, the average number of days of leave taken by men has more than doubled: up from an average of 39 in 2001 to 103 in 2008 [1]

In DK, an analysis of register data including over a million fathers in the period 1990-2007 has shown that the introduction of the fathers' quota had a clear effect on fathers' take-up

of leave. Although the length of the quota was relatively short (in comparison with other Scandinavian countries), it had a significant effect on fathers' take-up: from 12% of those becoming fathers in 1997 to 36% of fathers in 2001, when at its height. From 2002, following the ending of the quota, there is a drop to 22% of fathers. Interestingly, the number again begins to slowly increase after 2002. This development suggests that fathers increasingly take parental leave, regardless of the legislation. The hypothesis is that this is partly due to the introduction of a father's quota in some of the collective agreements. Another reason is believed to be the cultural shift in male attitudes to fatherhood and in men's role in childcare, which the introduction of the father's quota may have encouraged [1].

In FI, the number of fathers using their quota increased from 1,700 men in 2002, the year before the introduction of the bonus scheme for fathers, to 17,625 in 2011 [1].

In Québec, take-up of leave by fathers was already high in 2004, with 22% of fathers using some leave compared with 9% in other Canadian provinces. The paternity and parental leave scheme, introduced in 2006, has had a visible impact on fathers' participation: in 2006, 56% of eligible fathers in Québec took a period of Paternity and/or Parental leave, rising in 2011 to 84%. In other Canadian provinces, take-up of Parental leave by fathers was 11% [1].

Effect on the reform on the share of leave days taken

The proportion of the shared leave taken up by the father (i.e. the father's share of the leave period and father's use of quota leave periods) is another important question. Here the picture is very different. The proportion of fathers taking daddy days, parental leave and father quota leave is far from 100% meaning that the share of the total leave used by fathers is still relatively low in all Nordic countries.

Table 7.4 – Father's share (%) of the total leave period, including maternal, parental leave and 'daddy days'

	Denmark	Finland	Iceland	Norway	Sweden
1990	4.2	–	–	–	7.7
1995	4.4	3.6	0.1	5.8	10.3
1996	6.5	–	–	–	10.6
1997	5.7	–	–	–	9.9
1998	5.4	–	–	–	10.4
1999	5.6	–	–	–	11.6
2000	5.5	4.1	3.3	7.2	13.7
2001	5.7	4.3	11.5	8.3	15.0
2002	5.5	4.8	19.6	8.6	16.6
2003	5.9	–	31.3	13.2	–
2004	4.7	5.4	–	13.7	–

Note. For the years 1995, 2000–2002 the figures includes leave periods related to birth and adoption while adoption is not included for the other years

Source. NOSOSCO (2003) (1995, 2000–2002). For other years: Statistics Denmark, Unpublished statistics, Kela (Finland), Statistics Norway, SOU (2003) (Sweden), Sundström and Dufvander (2002) (Sweden), Einarsdóttir and Pétursdóttir (2004) (Iceland)

Source: [4]

Table 7.4 shows the share of the total parental leave that is taken by fathers in five Nordic countries. The general picture is that this share is still far from 50%. In SE and IS (see Table 7.5), fathers' share has clearly increased, while it has decreased in DK. The overall impression is that the introduction of transferable parental leave schemes does not change behaviours to a large extent. Mothers tend to take the largest proportion of the additional leave. However, the take-up by fathers seems to be very sensitive to quotas. The introduction of daddy days has increased fathers' share considerably, especially in SE, IS and NO. The introduction of short periods of father quota in FI and DK has also had effects on fathers' use; however the period is still very short in these two countries.

Table 7.5 – Average length of maternity/paternity leave per parent in Iceland by birth year of child 2001-2005

Maternity/paternity leave		
	Average number of days	
	Men	Women
1998–2001 ^a	14	188
2001	39	186
2002	67	187
2003	95	183
2004	96	182
2005	95	181

Source: State Social Security Institute – <http://www.Statice.is> (2005).

Notes: The independent right of fathers to paternity leave was 1 month in 2001, 2 months in 2002 and 3 months as of 2003. The independent right of mothers to maternity leave is 3 months. The parents can then share the other 3 months. Illness of children, mother and multiple births can increase the number of days a parent is entitled to.

^aNot actual number. Shows the maximum paternity leave men

Source: [5]

7.3. Expected effect on beneficiaries

This section reviews the effect of the father's quota on beneficiary outcomes including labour market participation, earnings and well-being.

7.3.1. Expected effect on fathers' labour supply

Cools, Fiva and Kirkebøen (2015) investigated how paternity leave affects a broad range of outcomes using Norwegian register data. To minimize the selection problem and to learn about the causal effects of paternity leave on parents and children, the authors used two parental leave reforms, implemented in 1992 and 1993. A main feature of the 1993 reform was the introduction of a four-week paternal quota. This reform caused a drastic change in fathers' leave-taking behaviour. To isolate the effect of the paternal leave, the authors contrasted the 1993 reform with the 1992 reform, which did not include a father quota, but which otherwise was very similar. They found no significant effect on fathers' working hours. However, they did find some evidence of negative effects on mothers' employment participation. This result must be interpreted with caution, as the father quota reform also increased maternal leave-taking in some families. However, their main analysis and robustness checks gave no support to the contention that the introduction of a father quota would counter the working hours and earnings differential between women and men [6].

Kluve and Tamm (2013) evaluated the *Elterngeld*, which was introduced in Germany in 2007. The *Elterngeld* replaces two thirds of previous earnings for up to 12 months after birth of the child. If both parents take up the transfer, they can receive a two-month bonus, and the resulting total of 14 months can be freely distributed between the two parents. Their empirical analysis used a natural experiment created by the implementation of the *Elterngeld*. Their evaluation shows that, the year after its introduction, 16% of fathers with newborn children received the *Elterngeld*. However, more than two thirds of these fathers took up the *Elterngeld* transfer only for the exact two months that could be added to the mother's 12 months to obtain the joint maximum transfer period of 14 months.

While two months is longer than paternal leave in other countries, it is still a rather short period of time and, thus, it does not come as a surprise that the evaluators did not find any significant effects on fathers' job outcomes. Their estimates indicate that the *Elterngeld* had no effect on the employment rates of fathers during the first two years after birth of the child [7].

7.3.2. Effect on earnings

The effect of the father's quota on fathers' earnings is unclear. Cools et al. (2015, already cited) found that the introduction of a four-week paternal quota had no statistically significant effect on fathers' earnings [6].

Rege and Solli (2013) used the same reform and research design as Cools, Fiva and Kirkebøen (2015) to investigate the effect of paternity leave on fathers' long-term earnings. Their analysis suggests that four weeks of paternity leave during the child's first year decreases fathers' future earnings, an effect that persists through their last point of observation, when the child is five years old. A battery of robustness tests supports their results [8].

7.3.3. Effect on well-being

Mansdotter et al. (2007) examined the relationship between paternity leave in 1978-1979 and male mortality during 1981-2001 in Sweden. They demonstrate that fathers who took paternity leave had an 18% lower risk of alcohol-related care and/or death than other fathers and a 16% overall reduced risk of early death [9].

7.4. Expected effect on the cared for

7.4.1. Effect on children's outcomes

Cools, Fiva and Kirkebøen (2015, already cited) find evidence that children's school performance improves as a result, particularly in families where the father has higher education than the mother [6].

Some have suggested that leave-taking by fathers would be associated with greater incidence of child injury. This is not born out in the research: in Sweden, child injury (age 0-2 years) was lower during paternity as compared with maternity leave [10].

7.4.2. Effect on factors affecting children's outcomes

Macro level

Boll et al. (2014) merged data from the Multinational Time Use Study (MTUS) with national parental leave characteristics from eight high-income countries from 1971 to 2005 to estimate the association between parental leave provisions and paternal childcare. They also tested whether this association varied according to a father's educational level. They found a positive and significant association between the generosity of national provisions and fathers' childcare time. Similar results were obtained after controlling for country-specific variables such as female employment rates. In particular, high parental leave benefits compared to none was found to be associated with an increase of almost 1 h per week in fathers' childcare time. This relationship between benefit rate and time spent on childcare was found to be strongest for highly educated fathers. They were also found to benefit the most from exclusive 'daddy weeks' whereas the positive association of transferable leave to paternal childcare was found to be solely driven by lowly educated fathers [11].

Meil (2013) used a sample from the European 2005 Working Conditions Survey to analyse whether paternity leave had a positive effect on father's involvement in housework and childcare. Adjusting for family circumstances, working conditions, women's empowerment in society, level of schooling and duration of leave, the author found a positive association between paternity leave-taking in the year prior to the survey and fathers' involvement in housework and childcare [12].

Micro level

Research has shown that Swedish fathers who use a higher proportion of leave than average (20% or more of all potential leave days) appear, at least in the short term, to sustain more engaged family commitment, work fewer hours, and are more involved in child care tasks and household work (Haas and Hwang 1999).

Similarly, Huttunen's (1996) survey of Finnish fathers who had taken parental leave found that the opportunity it gave to develop a closer relationship with infants was valued most by the fathers. Norwegian research suggests that fathers who take the "daddy quota" in a "home alone" manner become more aware of the rhythms of and "slow time" than those who take parental leave with their partner (Brandth and Kvande 2001). Brandth and Kvande's (2002) research found a complex process of couple negotiation and bargaining influenced by couple values and preferences as well workplace and economic factors. The couple relationship is a key one, setting the scene against which parents negotiate and balance their family and employment roles and responsibilities [13].

Two recent father-focused studies build on this earlier body of work by conducting large-scale secondary analyses of longitudinal nationally representative samples, enabling statistical control for some confounding variables such as paternal pre-birth commitment. Using the UK Millennium Cohort Study, covering a large birth cohort of children at age eight to twelve months, Tanaka and Waldfogel (2007) find that taking leave and working

shorter hours are related to fathers being more involved with the baby and that policies affect both these aspects of fathers' employment behavior. They examine fathers' involvement in four specific types of activities: being the main caregiver, changing diapers, feeding the baby, and getting up during the night. Analysis showed that fathers who took leave (any leave) after the birth were 25% more likely to change diapers and 19% more likely to feed and to get up at night when the child was age eight to twelve months. In addition, higher working hours for fathers was associated with lower levels of father involvement. The authors conclude that policies that provide parental leave or shorter work hours could promote greater father involvement with infants but caution against definitive causality claims [13].

Nepomnyaschy and Waldfogel (2007) find a similar association between paternal leave-taking and later higher levels of father involvement, but only for those fathers able to take two weeks' leave or more. The positive relationship between longer duration of leave-taking and greater participation in caring for the child was maintained after controls for a range of selectivity factors including indicators of paternal pre-birth commitment (attendance at antenatal classes and the birth itself) [13].

The findings from these two studies suggest that paternal leave-taking has the potential to boost fathers' practical and emotional investment in infant care. Further follow-ups and direct assessments of child well-being and the influence of maternal leave-taking are required to reveal underlying mechanisms at play (e.g., Dex and Ward 2007). Fathers' leave-taking cannot be seen in isolation or in purely quantitative terms as it is embedded in a complex web of parenting styles, parental work practices, infant behavior, and wider socioeconomic factors. Paid parental leave, in particular when parents are sure of employment on return to work, can create a more financially secure context for caring [13].

7.5. Expected effect on business outcomes

We did not find studies evaluating the effect of non-transferable leaves on business outcomes.

7.6. Expected effect on the wider society

7.6.1. Expected effect on the gender employment gap

The effect of the father's quota on mother's labour market participation is unclear. Using Norwegian data, Ugreninov (2013) took advantage of the introduction of a Norwegian paternity leave reform in 1993 to empirically examine the effect of the father's quota on mothers' sick leave absence. Their results indicate that we can reject such an effect [14].

Bratberg and Naz (2014) evaluated fathers' take-up of leave on mothers' sick leave absence after childbirth. Their sample consisted of married and cohabitating women who gave birth to one child in Norway between 1997 and 1999. The authors observed mothers' sick leave absence for four years before and four years after the birth. They

found a negative association between the amount of leave taken by fathers and the frequency/duration of mothers' sick leave absence. They argued that father-specific leaves might reduce the mothers' "double burden", thus creating a positive effect on mothers' health. The study also showed that fathers who were more involved in childcare reduced mothers' sick leave absence. However, it should be borne in mind that fathers who request more paternity leave than the standard four weeks may be a selected group [15].

7.6.2. Expected effect on the gender wage gap

Johansson (2010) investigated the effect of parental leave on subsequent earnings using different sources of variation. In line with previous results, parental leave was found to decrease the future earnings of both parents. The authors also found that spousal leave was important, but only for mothers. In fact, each month the father stays on parental leave has a larger positive effect on mothers' earnings than a similar reduction in the mother's own leave [16].

Using the agent-based simulation model IFSIM, Baroni (2011) showed that an egalitarian division of domestic and childcare tasks could increase or reduce poverty among elderly women depending on the macro and behavioural (i.e. labour supply) responses that the reform off-sets. In general, egalitarian reforms can be good for highly skilled women, who will have an incentive to work more thanks to their higher earnings, which can compensate any financial loss due to the man's taking leave. For lower skilled women however, the incentive to work is not as strong and a reduction in labour supply might actually occur. This is expected to reduce also their pension rights at retirement. Furthermore, keeping men at home is expected to negatively affect production and to lower subsequent growths of income pension accounts. This effect, combined with lower pension contributions, might result in higher poverty rates for low skilled women, compared to a scenario where the woman takes the whole leave [17].

7.6.3. The 'boomerang effects' of generous family policies in Nordic countries

The 'boomerang effects' of generous family policies in Nordic countries has been best described by Gupta et al. (2008). According to the authors, the combination of generous family policies mainly in the public sector and high public sector employment in all Nordic countries may have led to a system in which women select into relatively low paying jobs in the public sector, while men tend to work in the private sector, have a low rate of leave take-up, earn the larger share of the family's income and support the household. More than half of the female workforce in the Nordic countries is employed in the public sector, while this is only the case for 20–25% of the male workforce [4].

7.6.4. Expected effect on the gender family gap

Macro level

Reich et al. (2012) carried out a study in eight European countries and Canada to understand the influence that the length of leave time, level of remuneration and reserving of non-transferable periods for fathers have had on men's participation in and

time spent on childcare. They used the Multinational Time Use Study (MTUS), along with national databases on characteristics of leaves between 1975 and 2005. Their results show that when leaves are paid and when there are non-transferable periods reserved for them, fathers are more involved in childcare [18].

Within the literature on the determinant of fathers' family work, there are three more micro-macro studies that analyse the effects of a variation in the duration of total parental leave entitlements on fathers' domestic work. These studies, already reviewed in the 'parental leave' section, are relevant to the father quota as well. Hook (2006) studies this variation using time-use surveys and conducted in 20 predominantly European countries between 1965 and 2003. The variable indicating the duration of leave refers to the number of weeks of total parental leave available in a country. Fathers' household work is measured in minutes per day and includes (i) core household work, such as cooking and cleaning; (ii) non-routine housework, such as shopping and gardening; and (iii) looking after children. Her study concludes that longer durations of total parental leave are associated with fewer hours of household work [2], [19].

Whereas Hook (2006) studies the effects on fathers' household tasks including childcare, Hook (2010) concentrates on their involvement in time-inflexible household tasks, excluding childcare. This study analyses the effect of a variation in the duration of total parental leave on the amount of time spent cooking or cleaning. The dataset is the same as in the 2006 study. The variable indicating the duration of parental leave refers to the weeks of total parental leave available in a country. The dependent variable is the time per day spent on cooking and cleaning. The results show that the duration of total parental leave is associated with a small reduction in fathers' cooking time and with a rise in mothers' cooking time, suggesting that long leave entitlements reinforce the gendered division of cooking. The results show no significant association between leave duration and probability of sharing cleaning tasks [2], [20].

Similarly, Fuwa and Cohen (2007) study the effects of a variation in total parental leave entitlements on the division of domestic tasks using macro and micro data from 33 predominantly European countries in 2002. The parental leave variable refers to the duration of total parental leave in months. Their dependent variable measures the division of household work amongst mother and fathers. Their results show that the duration of total parental leave has an equalizing effect on the division of household work. Countries with more generous parental leave provisions also have a more egalitarian division of housework. At the same time the authors find a strong association between full-time employment of women and egalitarian division of domestic tasks. However, this effect becomes weaker as the parental leave becomes longer. As suggested by the authors, women working full-time might have a stronger position to bargain themselves out of housework but long parental leaves undermine this bargaining power [2], [21].

Micro level

We found evaluations of father-specific leaves on fathers' involvement in childcare for three countries: SE, NO and DE.

Almqvist and Duvander (2014) evaluated the effect of the father quota on the division of housework and childcare in Sweden using two samples: a panel survey (2003 – 2009) and a qualitative study (2008). Their results indicate that when fathers took long leave parents shared both childcare and housework more equally after the leave. Higher expectations of sharing childcare was found associated with a more egalitarian division of childcare once becoming parents, although some tasks were found to be shared more than others. Parents also mentioned in interviews that fathers' use of leave had a positive effect on the father-child bond [22].

Examining a Swedish paternity leave reform, Ekberg et al. (2013) found no effect on fathers caring for sick children [23].

Kotsadam and Finseraas (2011) examined the impact of a Norwegian reform that introduced strong incentives for the father to take-up parental leave. The study analysed its effect on (i) attitudes assumed to be directly affected by the reform (gender equality); (ii) on policy preferences assumed to be more indirectly affected such as childcare; and (iii) on within-couple conflicts over domestic tasks. The authors defined household work by three tasks: (i) cooking; (ii) doing the laundry; and (iii) cleaning. Their results indicate that respondents share the task of doing the laundry more equally after the introduction of the father quota. They also found a positive effect of the reform on the division of cleaning tasks. However, they found no significant effect on the sharing of cooking tasks [2].

We found two studies analyzing the effect of the Elterngeld (i.e. the bonus paid in Germany to fathers taking a share of parental leave) on fathers' involvement in childcare. Kluge and Tamm (2013) found that fathers receiving Elterngeld took over considerably larger shares of childcare than fathers not receiving Elterngeld (45% and 22% respectively). Results comparing mothers in the treatment group with mothers in the control group, however, show that the share of involvement of their partners in childcare is higher by 2% points only. This difference is not significant, except for less educated mothers. That is, most of the difference between fathers receiving Elterngeld and those who do not might be a selection effect [7].

Schober's (2014) results are slightly different. She found that the Elterngeld reform had a positive effect on fathers' childcare time in the first year and 18 to 30 months after childbirth. Changes in maternal childcare and both partners' housework were not significant. Alterations in maternal and paternal employment participation, leave-taking and earnings accounted for most of the observed variations in paternal child care except for 18 to 30 months after the 2007 reform [24].

7.6.3. Effect on fertility

The effect of a father's quota on fertility is unclear. Duvander et al. (2010) examined the relationship between mothers' and fathers' use of parental leave and fertility among couples in Sweden and Norway. The two countries offer similar provisions, but differ in terms of context. While Norway has an ambiguous family policy, giving incentives both to gender equality and childrearing at home, Sweden has a more consistent policy concerning gender relations. This evaluation is based on event-history analyses of

register data and shows that fathers' parental leave use has a positive effect on fertility in both Sweden and Norway (where this effect is stronger). A long period of maternal leave was also found to be positively associated with the conception of a third child [25].

On the other hand, Cools et al. (2015, already cited) find no evidence that paternity leave affects fertility and marital stability.

7.6.4. Costs to taxpayers

The best evidence on the cost of father's quotas to taxpayers can be found in Gupta et al. (2008). The authors show that Nordic family-friendly policies have at least one clear drawback: they are expensive and from a partial equilibrium view, a burden on the public budgets. They show that childcare costs are larger in the Nordic countries than in the rest of the OECD: in 2002, Denmark spent 2.7% of GDP on public childcare and Sweden 1.9%, whereas the average across OECD countries was 1.79%. In the UK and the US, only 0.5% of GDP was spent on public childcare and about 0.1% on leave schemes. Thus, Denmark and Sweden spend roughly four to five times as much (measured as a percentage of GDP) as the U.S. and UK [4].

7.7. Factors affecting take-up

7.7.1. Compensation

The compensation structure of leave schemes has a substantial effect on take-up, especially for leave periods in excess of the quota. Since fathers tend to earn more than mothers, the replacement rate is a key parameter. When full compensation is offered, the incentives are neutral with respect to which parent takes up the leave. When compensation is partial, or when a flat rate at a low level is offered, the law creates an incentive for the parent with the lowest salary to take up most or all of the parental leave. Since no country offers full compensation, there is an economic incentive for mothers to take up most of the parental leave. In DK, the economic incentives for mothers were the strongest when the quota existed, since the public sector, which employs over 50% of the women but only 20% of men, had a full compensation policy. Thus, in many families, the mother got full compensation while the father – typically employed in the private sector – got on average a compensation rate of only 66% [4].

The flexibility of take-up is another key parameter of the leave schemes. Leaves can be made more flexible by allowing a longer period of part-time leave instead of a shorter period of full-time leave or by allowing parents to save part of the leave for later use. All Scandinavian countries have introduced flexibility over time. SE is probably the country with the most flexible provisions, while FI has the least flexible ones [4].

7.7.2. Duration

The extent to which fathers' use of leave respond to policy changes is striking. As shown in section 7.2.4, virtually all countries that have introduced a father's quota, or increased the number of 'daddy days' have seen an increase in fathers' take-up [1].

7.7.3. Interaction with other policy provisions

Ronsen and Kitterod (2015) studied whether it was possible to offset the potential negative effects on women's labour supply of long parental leaves with father-specific provisions and policies making formal daycare cheaper and more easily available. They used panel data from Norway for the period 1996-2010, since all extensions in the parental leave scheme have been reserved for fathers and at the same time the daycare sector has expanded rapidly. The authors found that mothers did enter work faster after childbirth in the late 2000s than a decade earlier. This policy mix may thus have contributed to a shortening of women's career breaks and to a more equal division of tasks among parents [26].

7.7.5. Socio-cultural factors

Personal situation

Mansdotter et al. (2010) examined how social and health characteristics were associated with paternity leave in excess of the father quota of 60 days in the Stockholm Public Health Cohort. They found that fathers taking extensive parental leave were most likely to have high income, a college degree and to be non-manual employees. More specifically, take-up was found:

- 67% lower among fathers in the oldest birth cohort;
- 48% lower among those born outside Sweden;
- 49% lower among self-employed and farmers;
- 52% higher among fathers with prior children;
- 44% lower among traditional fathers by means of division of parental income.

Family situation

Lappegard (2008) showed that gender balance in breadwinning has a strong effect on fathers' use of parental leave: controlling for parents' educational level, labour market attachment and father's income, the author found that the more mothers contribute to the family economy and the more equalized their earnings are, the more parental leave fathers take [27].

Dahl et al. (2014) estimated peer pressure in paid paternity leave in Norway using a quasi-experimental design. Their study shows that brothers and colleagues are 11 and 15 percentage points, respectively, more likely to take paternity leave if their peer was exogenously induced to take up leave. The estimated peer effect snowballs over time, as the first peer interacts with a second peer, the second peer with a third, and so on. This leads to long-run employment rates which are significantly higher than would otherwise be expected [28].

Professional situation

Haas et al. (2002) examined the impact of organizational culture on fathers' take-up of parental leave in Sweden. Results from a survey of 317 fathers in six companies suggest

that men's use of parental leave is significantly affected by organizational culture, including the company's commitment to caring values, the company's support for women's rights and fathers' perceived support from top managers [29].

Naz (2010) investigated the factors that determine use of parental leave in Norway using survey data. She found that fathers' workplace type had no effect on their use of paternity quota [30].

Conclusion

These findings may contribute to identifying target groups for parental leave strategies among fathers; they indicate also that research on gender equality and public health must carefully address the problems of confounding and health-related selection [31].

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Appendix 1. Methodology

Data sources

Our review relies primarily on evaluation evidence. Relevant studies were identified through electronic searches of bibliographic databases, government policy databanks, and other search engines. The search was conducted between November and December 2015. Bibliographical details and, where available, electronic documents were added to a Zotero database.

The following academic databases were searched:

- ISI Web of Science via the Web of Knowledge
- OECD iLibrary (<http://www.oecd-ilibrary.org>)
- Gov.uk
- Google Scholar

Search strategy

Keywords

Intervention 1

- Carer's leave
- Care leave

Intervention 2

- Flexible work
- Part-time work

Intervention 3

- Breastfeeding

Intervention 4

- Parental leave

Intervention 5

- Paternity leave

Intervention 6

- Father's quota
- Daddy quota

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