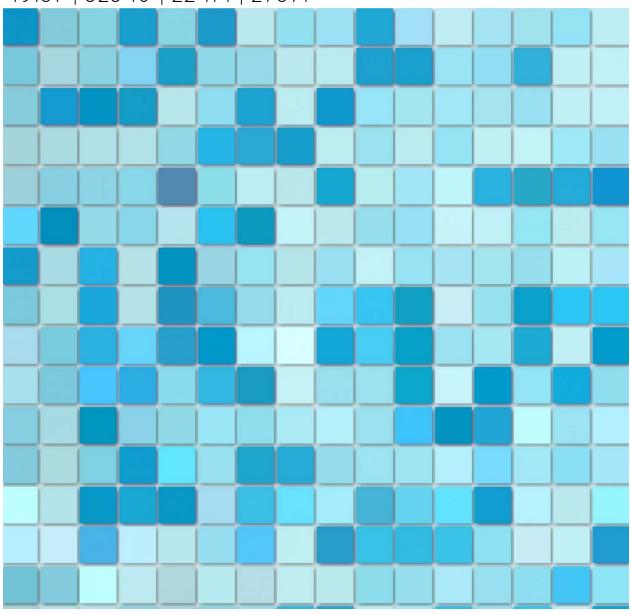
The Fatherhood Institute 2016 Fairness in Families Index

Capstone Project

MASTER OF PUBLIC ADMINISTRATION
LONDON SCHOOL OF ECONOMICS AND POLITICAL
SCIENCE





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Introduction

Since 2010, the world has seen many changes regarding gender equality, from its higher visibility in social media, to the creation of a United Nations agency to address gender-related issues. Among these changes, the promotion of active fatherhood has increasingly gained importance in many countries' agendas. However, gendered cultural norms along with economic and institutional barriers have hindered equal sharing of earning and caring roles. Gendered divisions of labour still prevail, reducing the participation of fathers in their children's care and education, and mothers' contributions to breadwinning.

In 2010, the Fatherhood Institute created the Fairness in Families Index (FiFI) to assess how well developed countries were fairing in relation to egalitarian parenting and earning. The findings of the 2010 FiFI confirmed that even the most developed countries have a long way to go before reaching equality between fathers and mothers. Six years later, this report looks again at this issue.

The 2016 FiFI aims to provide a more precise picture of the potential for mothers and fathers to share the provision of 'cash and care' in their families, through a revision of assumptions, methodology, sources, and indicators, and the addition of standardised scores and sub-indices. Countries are evaluated over nine key indicators across three dimensions of egalitarian parenting and earning: policies, social environment, and practices. The 2016 FiFI analyses 22 upper income nations, based on the most recent data available to date, across the following indicators:

Indicator One: Parenting leave design

Indicator Two: The gender pay gap

Indicator Three: Men's percentage share of the part-time workforce

Indicator Four: Percentage of GDP spent on childcare and education for children under

five years old

Indicator Five: Percentage of women sitting in parliament

Indicator Six: Percentage of women in management positions

Indicator Seven: Ratio of men's to women's time spent caring for children

Indicator Eight: Ratio of percentage of men to women in families caring for elderly

people and persons with disabilities

Indicator Nine: Ratio of men's to women's time spent on housework

Benefits are found for women, men, and children when fathers provide competent care beyond the role of breadwinner, and mothers participate substantially in the paid workforce. These benefits include but are not limited to, women's empowerment and the promotion of gender equality more broadly. The 2016 FiFI highlights the changes that have occurred since the publication of the 2010–2011 Index, and captures key policy developments and practices within the 22 countries. This report highlights the ranking across countries in these indicators, and provides context for some countries' performances through case studies. These enable a more in-depth understanding of how some countries have fared in relation to some of the indicators, based on their unique circumstances.

This report is developed using data from multiple sources, including the World Bank, the International Labour Organization (ILO), the European Quality of Life Surveys, and the Organization for Economic Co-operation and Development (OECD). This updated report also highlights some of the challenges posed in creating a policy-oriented multidimensional index and its respective indicators. In the next sections, we present the results for the 2016 FiFI, explain the new methodology and its challenges, discuss each indicator in some detail, and conclude with recommendations for future editions.

The 2016 FiFL

Measuring social phenomena can be challenging. The construction of an index depends on precise definitions of each item to be measured in order to generate a valid measurement, i.e., to ensure that the index is actually capturing what is intended. Clear definitions and attention to validity problems are especially relevant for multidimensional indices because such indices capture complex social phenomena, and the choice and construction of the indicators derive from the definition of what is measured. In this sense, it is paramount for a valid FiFI to have a clear definition of what egalitarian parenting and earning are, and what they entail.

What is egalitarian parenting/earning?

As per the 2010–2011 FiFI, gender equality in paid and unpaid work is defined by the extent to which a country's policies and practices facilitate these. The 2016 FiFI focuses on three key performance areas:

- Institutional frameworks that facilitate egalitarian parenting
- Social and economic indicators of women's participation in the public sphere
- The current distribution of unpaid work between men and women

How are these dimensions measured?

Multidimensional indices aggregate more than one aspect of social phenomena, which are usually presented in different ways; i.e., Indicator One is a score, while Indicator Six is a percentage. The 2010 FiFI scores were based on rankings, offering an ordinal comparison across countries. It was possible to know which country was faring better, but not by how much. The new aggregation method allows both ordinal and cardinal comparisons for all the indicators, assigning standardised scores between zero (worst performance) and one (best performance). The aggregation of the sub-indices and the FiFI is the average of the available scores for the countries based on their indicators. Whenever a country did not have information available, the indicator was excluded from the average, reducing its denominator.

Table 1. 2010 and 2016 FiFI, respective rankings, 2016 percentage variation regarding 2010 and absolute variation regarding the 2010 ranking

	FiFI	Ranking	FiFI	Ranking	% Variation	Variation
Countries	2016	2016	2010	2010	FiFI	Ranking
Sweden	0.749	1	0.789	1	-0.05	0
Denmark	0.745	2	0.760	3	-0.02	1
Iceland	0.720	3	0.754	4	-0.04	1
Norway	0.720	4	0.655	5	0.1	1
Finland	0.696	5	0.783	2	-0.11	-3
Belgium	0.555	7	0.492	11	0.13	4
Canada	0.522	8	0.489	12	0.07	4
Portugal	0.512	6	0.613	7	-0.16	1
New Zealand	0.493	9	0.619	6	-0.2	-3
France	0.469	10	0.577	8	-0.19	-2
Italy	0.444	11	0.441	16	0.01	5
United Kingdom	0.439	12	0.531	9	-0.17	-3
Australia	0.427	13	0.415	18	0.03	5
Spain	0.428	14	0.472	15	-0.09	1
Ireland	0.406	15	0.488	13	-0.17	-2
Netherlands	0.402	16	0.524	10	-0.23	-6
Switzerland	0.389	17	0.282	21	0.38	4
Greece	0.385	18	0.373	19	0.03	1
Germany	0.373	19	0.418	17	-0.11	-2
United States	0.344	20	0.475	14	-0.28	-6
Austria	0.275	21	0.296	20	-0.07	-1
Japan	0.240	22	0.199	22	0.2	0

What features are new to the 2016 FiFI?

In addition to revised data and methodology, a novelty of the 2016 FiFI are the sub-indices, which allow a closer look into the index without losing the advantages of aggregated information. The sub-indices recognise the complexity of egalitarian parenting and earning, and represent the following dimensions:

- **Policies.** Sub-index One is the average of the standardised scores of Indicators One and Four, and measures the policies towards the promotion of egalitarian parenting: the quality of maternity and paternity leave policies and the percentage of GDP spent on the education of children under five years old.
- Social environment. Sub-index Two is the average of Indicators Two, Three, Five and Six, and measures social, political and economic gender equality aspects, which are paramount for egalitarian parenting and earning to flourish.¹
- **Practices.** Sub-index Three is the average of Indicators Seven, Eight and Nine, and measures the current distribution of unpaid work between men and women.

The table below shows the 2016 FiFI scores and the respective scores of the sub-indices, allowing us to observe the dimensions of egalitarian parenting on which countries are performing better or worse.

Table 2. 2016 FiFI scores and sub-indices scores								
Countries	2016 FiFI	Sub-index 1	Sub-index 2	Sub-index 3				
Sweden	0.749	0.782	0.803	0.655				
Denmark	0.745	0.653	0.773	0.771				
Iceland	0.720	0.697	0.734	0.718				
Norway	0.720	0.670	0.744	-				
Finland	0.696	0.462	0.700	0.845				
Belgium	0.555	-	0.541	-				
Canada	0.522	0.206	0.685	0.515				
Portugal	0.512	0.238	0.617	0.556				
New Zealand	0.493	0.377	0.551	-				
France	0.469	0.374	0.476	0.524				
Italy	0.444	0.308	0.492	0.471				
United Kingdom	0.439	0.393	0.479	0.418				
Australia	0.427	0.221	0.530	_				
Spain	0.416	0.187	0.644	0.300				

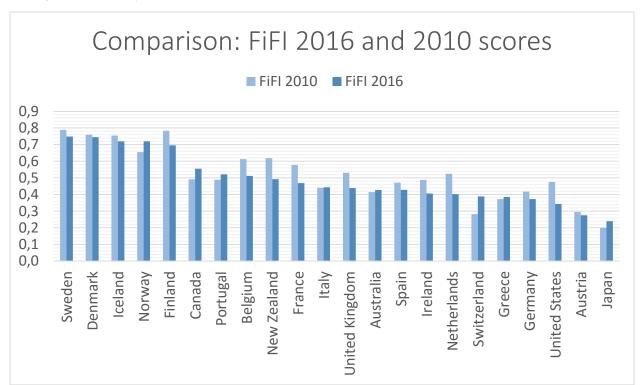
¹ In the case of the United States, the average did not include Indicator Three - for this reason, the sum of the standardized scores for the other indicators was divided by three rather than by four, as it was the case for the other countries.

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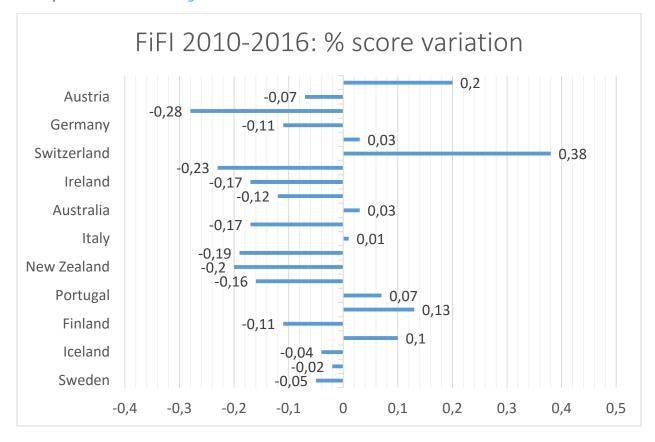
Ireland	0.406	0.214	0.448	0.477
Netherlands	0.402	0.341	0.452	0.376
Switzerland	0.389	-	0.441	-
Greece	0.385	-	0.627	0.086
Germany	0.373	0.143	0.491	0.370
United States	0.344	0.000	0.573	-
Austria	0.275	0.161	0.393	0.193
Japan	0.240	0.500	0.110	-

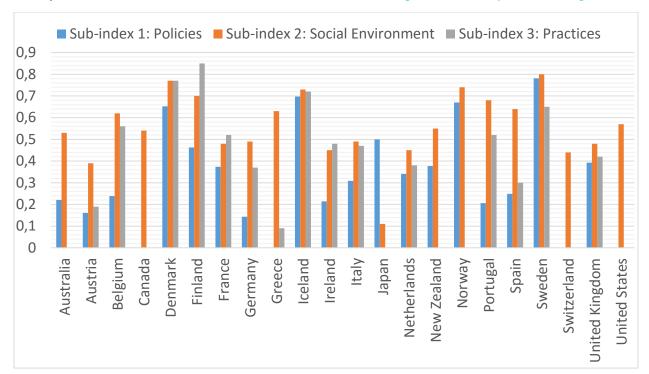
The Nordic countries once again top the FiFI in 2016, with Sweden, Denmark, Iceland, Norway, and Finland occupying the top five positions, while Japan, Austria, the United States, Germany, and Greece sit at the bottom. The United Kingdom ranks 12th. Compared to the results obtained with the previous methodology (see 2010-11 report), the UK's position seems to improve. When the revised 2010 FiFI calculations are examined, however, the UK's position has actually decreased (see Table 2). Thus, the UK is performing worse in egalitarian parenting and earning than it was in 2010.

Graph 1. Comparison between FiFI 2016 and 2010 scores



Graph 2. Percentage variation between 2010 and 2016





Graph 3. The sub-indices: dimensions of egalitarian parenting

The challenges

Despite reported improvements in parental leave policies, our findings indicate decreased scores in most countries, suggesting that egalitarian parenting and earning have not improved since 2010. Changes in the construction of the 2016 indicators limit the comparability of the updated report to the previous one. For this reason, we built a version of the 2010 FiFI using the current methodology and sources to allow for comparisons between the two time points.

Additional issues pose questions to the comparability between 2010 and 2016. The first is that it was not possible to apply the new methodology used for Indicator One to the 2010 data. The extensive amount of information necessary to calculate the 2010 score could not be processed due to time constraints. However, in future editions it will be possible to solve this problem. Another problem is that certain indicators combine data for different years into one year, or exclude countries for which data are not available. The gender pay gap, for example, is calculated using data from different years when there are missing values. Additionally, data before 2010 on women in management positions is unavailable

for Japan, Canada, New Zealand, and the United States, so Indicator Six instead uses information from 2013.

Building a multidimensional index poses several challenges. Using the most recent and comparable data entails having missing information that may affect the results of the index. In the same sense, a key challenge for the elaboration of any index is the comparability across different countries because of their varying contexts. Some countries do not have reliable or sufficient data, which creates an incomplete picture within some indicators. Additionally, some databases have different primary sources, i.e., national surveys, which might have questionable comparability. Another measurement challenge arose from having insufficient definitions for capturing information. For instance, women in management positions in small firms are excluded from measurement within the ILO database. These and other challenges have been acknowledged within individual indicator sections in this report.

INDICATOR ONE: PARENTING LEAVE DESIGN

We use Dearing's Equal Gender Division of Labour (EGDL) Indicator² to assess how well parental leave policies promote egalitarian parenting practices. The main purpose of the Indicator is to compare how similar a country's leave policies are to the ideal model of leave that best promotes the equal division of child care work between men and women who have recently had a child together. This ideal model, conceptualised by Dearing based on parental leave research, consists of a "moderate" level (14 months) of total and wellpaid leave (i.e., paid at 66 percent or higher of the parent's salary) for parents with half of the well-paid leave reserved for fathers, and half reserved for mothers. There are three versions of the indicator (see Appendix for calculations and comparisons of each version): the Baseline EGDL, Mother Cantered EGDL, and Father Centred EGDL. Indicator One is based on the Father Centred EGDL, which emphasises the caregiving opportunities that parental leave policies offer to fathers. The Father Centred EGDL is composed of three sub-indices: the total duration of leave, the total duration of well-paid leave and the share of well-paid leave reserved for fathers. The closer a country's policies are to the ideal leave model in each of the sub-indices, the better the country performs on the index since too little or too much leave and well-paid leave can have detrimental effects on the gender division of labour. Specifically, mothers may be pushed to stay out of the workforce longer, and fathers may be encouraged to focus mainly on paid labour3. Further explanations and calculations for the countries are available in the Appendix.

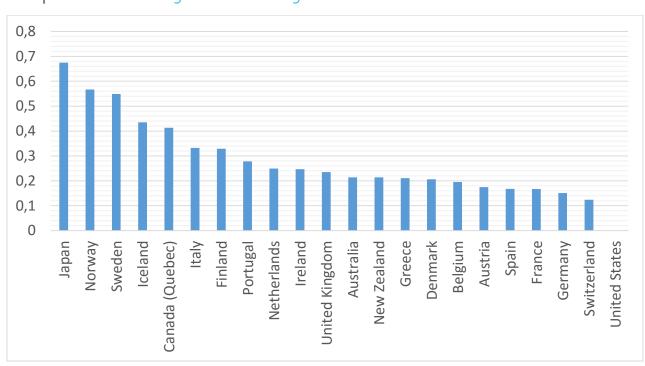
In order to explain the best policies currently available, we provide here a brief summary of the key points relating to the top five ranked countries in the Table below (Table Three). The Appendix provides a brief summary of leave policies from all 22 countries included in the report. Japan is at the top of the Father centred EGDL indicator, with 14 weeks of well-paid maternity leave, and 12 months of parental leave per parent. Each parent can be paid at 67 percent of their salary (with a generous ceiling) for approximately six months⁴.

² Dearing, H. (forthcoming) "How to assess European leave policies regarding their compliance with an ideal leave model." The Journal of European Social Policy.

³ Dearing, H. (2016) "Parental leave policies and the gender division of housework. Studying the association between different leave indicator and the unexplained gender gap in housework." Institute for Social Policy, Working Paper No 1/2016.

⁴ Nakazato, H. and Nishimura, J. (2015) 'Japan country note', in: P. Moss (ed.) International Review of Leave Policies and Research 2014. Available at: http://www.leavenetwork.org/lp_and_r_reports/

Norway offers 13 weeks of well-paid maternity leave, two weeks of unpaid paternity leave, and 49 weeks of parental leave paid at 100 percent of the parent's salary, or 59 weeks paid at 80 percent. Ten of these weeks are reserved solely for the father⁵. Sweden offers two weeks of well-paid maternity leave, ten days of well-paid paternity leave, and 18 months per parent of parental leave with 480 well-paid days per family. Of the 480 well-paid days, 60 are reserved for each parent and are non-transferable. There is a small, increased pay bonus if the parents share the remaining parental leave equally⁶. Iceland has nine months of well-paid parental leave, reserving three months specifically for the father⁷. Canada (Quebec) offers through its "basic plan" 18 weeks of well-paid maternity leave, five weeks of well-paid paternity leave, and 35 weeks of parental leave paid at 55 percent of the parent's salary, with a payment ceiling⁸.



Graph 4. Parenting Leave Design

⁵ Brandth, B. and Kvande, E. (2015) 'Norway country note', in: P. Moss (ed.) International Review of Leave Policies and Research 2014. Available at: http://www.leavenetwork.org/lp_and_r_reports/

⁶ Duvander, A.-Z. and Haas, L.(2015) 'Sweden country note', in: P. Moss (ed.) International Review of Leave Policies and Research 2014. Available at: http://www.leavenetwork.org/lp_and_r_reports/

⁷ Eydal, G.B. and Gíslason, I.V. (2015) 'Iceland country note', in: P. Moss (ed.) *International Review of Leave Policies and Research 2015*. Available at: http://www.leavenetwork.org/lp_and_r_reports/

⁸ Doucet, A., Lero, D.S., M c K a y, L . and Tremblay, D.-G. (2015) 'Canada country note', in: P. Moss (ed.) International Review of Leave Policies and Research 2015. Available at: http://www.leavenetwork.org/lp_and_r_reports/.

Table 3. Equal Gender Division of Labour Calculations									
Country	Father Centred EGDL Score	Std score	2010 Rank	2016 Rank					
Japan	0.675	1.000	9	1					
Norway	0.567	0.840	2	2					
Sweden	0.549	0.813	1	3					
Iceland	0.435	0.644	-	4					
Canada (Quebec)	0.413	0.612	7	5					
Italy	0.332	0.492	4	6					
Finland	0.329	0.487	2	7					
Portugal	0.278	0.412	4	8					
Netherlands	0.249	0.369	6	9					
Ireland	0.247	0.366	7	10					
United Kingdom	0.235	0.348	6	11					
Australia	0.214	0.317	10	12					
New Zealand	0.214	0.317	8	12					
Greece	0.211	0.313	2	13					
Denmark	0.206	0.305	6	14					
Belgium	0.195	0.289	3	15					
Austria	0.175	0.259	7	16					
Spain	0.168	0.249	4	17					
France	0.167	0.247	4	18					
Germany	0.151	0.224	5	19					
Switzerland	0.124	0.184	11	20					
United States	0.000	0.000	5	21					

We suspect that Japan's ranking at the top of the Father Centred EGDL points to an unidentified weakness in the ideal leave model used in the indicator, calculations, or assumptions. The 2013 Basic Survey of Gender Equality in Employment Management showed that only 2.03 percent of Japanese men whose spouse gave birth between October

2011 and September 2013 applied for or started parental leave by October 2013⁹. Japan's incredibly low uptake of leave by fathers suggests most fathers do not take any of the statutory leave available to them. Thus, Japan's policies do not seem to adequately promote an equal gender division of labour in practice. Perhaps leave reserved for fathers that may not be taken simultaneously with maternity leave coupled with a reduction in the leave available to mothers (see below) might be a better alternative. This would force parents to choose between having the father take leave while the infant was very small or the infant being cared for by non-parents. Once an infant is older, mothers and fathers may feel more willing to leave the child with other carers (professionals or other family members), and thus by-pass fathercare. Furthermore, leave that reserves time for fathers alone with the child is more likely to promote egalitarian parenting in the short and longer term, as it helps fathers develop skills and self-confidence as carers of children, as well as releasing the mother to engage in the paid workforce¹⁰. Additionally, in Japan, there may be cultural barriers to fathers taking parental leave that should be examined in future FiFI editions.

We believe that Iceland's leave policies are the most suited to promoting egalitarian parenting (See Appendix for full case study). Research from 2011 showed that Icelandic fathers take approximately one-third of the leave taken by parents, with fathers taking on average 91 days of leave and mothers taking on average 176 days of leave¹¹. Icelandic mothers may only take up to six months of leave, excluding childcare benefits, and are encouraged through policy to return to work sooner than Japanese mothers who may take up to a year of leave. With only six months' leave, Icelandic mothers' attachment to the paid workforce and opportunities within it may be strengthened in comparison with Japanese mothers, whose entitlement to a full year of well paid leave may count against them in the workplace. Since Icelandic fathers are taking substantial periods of parental leave, Icelandic employers may be less likely to discriminate against women of childbearing age than Japanese employers, who may recognize that a woman in Japan may be absent from work for a full year, while men in Japan will hardly ever be absent at all. Thus, a

⁹ Nakazato, H. and Nishimura, J. (2015) 'Japan country note', in: P. Moss (ed.) International Review of Leave Policies and Research 2014. Available at: http://www.leavenetwork.org/lp_and_r_reports/

¹⁰ Wall, K. (2014) Fathers on leave alone: does it make a difference to their lives? Fathering 12(2): 196–210.

¹¹ Eydal, G.B. and Gíslason, I.V. (2015) 'Iceland country note', in: P. Moss (ed.) International Review of Leave Policies and Research 2015. Available at: http://www.leavenetwork.org/lp_and_r_reports/

shorter leave period available to women could be beneficial for a mother's career. However, more research is needed to understand the career implications of one year versus six months of leave for a mother, in the context of short/longer leave uptake by fathers.

Leave policies differ greatly across countries in duration, remuneration, and incentives, making it extremely difficult for researchers to make precise comparisons and accurately represent what is happening within each country. Moss¹² has done a comprehensive job of outlining the different leave policies in each country, but his review does not allow for easy comparison as to what constitutes the ideal leave policies. Leave indicators, similar to the EGDL, attempt to make the comparison easier for policymakers to understand which policies best promote egalitarian parenting, thus having a potentially greater impact on affecting policy change. However, policymakers must understand that all indicators have their weaknesses and researchers should continue to search for the best possible comparator options.

Measuring fathers' uptake of parental leave would be ideal. Unfortunately, there are too many gaps in the data for uptake of leave by fathers, to be able to compare this data across countries¹³. Improved data on uptake would be extremely beneficial in helping us understand what types of leave promote uptake by fathers. There are many barriers to collecting this data. First, many parents may take annual leave right after the birth of a child because it is typically paid at 100 percent of the parent's salary with no ceiling, i.e., it is often better paid than the statutory leave. Fathers who state in surveys that they took leave after a child was born may be referring to annual leave and not parental leave. Additionally, the provision of payment during leave differs across countries and, sometimes, even within the country's different leave periods, such as Canada. The state may pay for part of the leave or may have the parent's employer pay part or all of the leave. Furthermore, where the state reimburses the employer for payments made, but the employer does not bother to reclaim small sums from the state, the state will not be able to accurately determine who is taking leave. Another important avenue for future research, therefore, would be improving and standardising data on uptake of leave by fathers.

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¹² Moss, P. (2015) International Review of Leave Policies and Research 2015. Available at: http://www.leavenetwork.org/lp_and_r_reports/

¹³ Moss, P. (2015) International Review of Leave Policies and Research 2015. Available at: http://www.leavenetwork.org/lp_and_r_reports/

INDICATOR TWO: THE GENDER PAY GAP

The gender pay gap is a crucial tool to understanding the extent to which men and women can share the responsibilities of work and care for their families. Continued increases in enrolment in higher education abates the argument that discrepancies in educational attainment can account for this gap¹⁴. Half of the economic growth in OECD countries in the past few decades can be attributed to increases in educational attainment for women¹⁵. Despite a marked global increase in educational attainment and the number of women in the workforce, barriers still exist to equity in the labour force, especially by means of pay.

Men in OECD countries earn an average of 16 percent more than women in similar full-time jobs¹⁶. The gender pay gap can be attributed in part to factors such as occupational segregation, differential patterns of participation in the paid workforce, and less identifiable factors such as discrimination or unconscious bias.

Occupational segregation is one of the main reasons that the gender pay gap continues to exist, leading to gender based rifts in available employment options in the labour force. ¹⁷ In many countries, women continue to work across a narrower range of sectors, and traditionally female-oriented occupations tend to yield lower wages than male-oriented occupations. The divergence in educational paths also tends to lead to occupational segregation. Boys are more likely to choose vocational training programmes, while girls often opt for higher education in post-secondary education ¹⁸.

¹⁴ OECD (2015). LMF1.5: Gender pay gaps for full-time workers and earnings differentials by educational attainment. OECD - Social Policy Division - Directorate of Employment, Labour and Social Affairs. Database available to download at http://www.oecd.org/els/LMF_1_5_Gender_pay_gaps_for_full_time_workers.pdf.

¹⁵ OECD (2011). Report on the Gender Initiative: Gender Equality in Education, Employment and Entrepreneurship. Meeting of the OECD Council at Ministerial Level Paris, 25-26 May 2011. Database available to download at http://www.oecd.org/education/48111145.pdf.

¹⁶ Ibid

¹⁷ OECD (2012) *Closing the Gender Gap: Act Now.* OECD Publishing. Available at http://www.keepeek.com/Digital-Asset-Management/oecd/social-issues-migration-health/close-the-gender-gap-now_9789264179370-en#page3.

¹⁸ Ibid.

Male and female graduates joining the workforce tend to be paid similar salaries, but this changes over time. The gender pay gap tends to widen with age, oftentimes as a result of the career interruptions women experience during their working life due to childbirth and family commitments¹⁹(See Appendix for full case study).

The OECD defines the gender wage gap as the difference between median earnings of full-time and self-employed men and women relative to median earnings of men²⁰. Due to the fact the gender wage gap information for the 2009-2010 FiFI was from several different years due to lack of up-to-date information at the time, we compared the gender wage gaps as calculated by the OECD for 2009, or the most current year for which data is available across all 22 countries examined in this report. We further examined trends in individual countries based on the most current data available since 2010 in the OECD gender pay gap database.

¹⁹ World Economic Forum (2015). The Global Gender Gap Report 2015. Available at: http://www3.weforum.org/docs/GGGR2015/cover.pdf

²⁰ Please refer to the original source for further detail about the definitions used.

Graph 5. The Gender Wage Gap

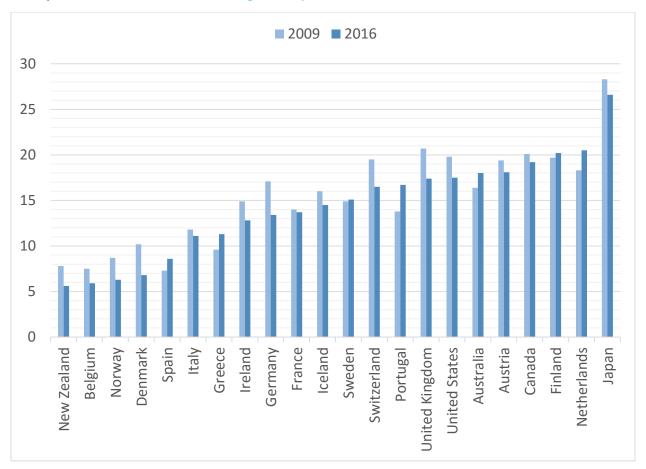


Table 4. Gender Wage Gap									
	2009 (or latest)	2014 (or latest)					
Country	Year	GWG	Year	GWG	Std Score	2010 Rank	2016 Rank		
New Zealand	2009	7.8	2013	5.6	1.000	3	1		
Belgium	2009	7.5	2013	5.9	0.990	2	2		
Norway	2009	8.7	2014	6.3	0.970	4	3		
Denmark	2009	10.2	2013	6.8	0.940	6	4		
Spain	2009	7.3	2012	8.6	0.860	1	5		
Italy	2008	11.8	2012	11.1	0.740	7	6		
Greece	2009	9.6	2013	11.3	0.730	5	7		
Ireland	2009	14.9	2013	12.8	0.660	10	8		
Germany	2009	17.1	2013	13.4	0.630	14	9		
France	2009	14.0	2012	13.7	0.610	9	10		

Iceland	2009	16.0	2013	14.5	0.580	12	11
Sweden	2009	14.9	2012	15.1	0.550	11	12
Switzerland	2008	19.5	2012	16.5	0.480	17	13
Portugal	2009	13.8	2013	16.7	0.470	8	14
United Kingdom	2009	20.7	2013	17.4	0.440	21	15
United States	2009	19.8	2013	17.5	0.430	19	16
Australia	2009	16.4	2013	18	0.410	13	17
Austria	2009	19.4	2013	18.1	0.400	16	18
Canada	2009	20.1	2014	19.2	0.350	20	19
Finland	2009	19.7	2013	20.2	0.300	18	20
Netherlands	2006	18.3	2010	20.5	0.290	15	21
Japan	2009	28.3	2013	26.6	0.000	22	22

Despite a decrease of 6.4 percent in the gender wage gap since 2006, Japan continues to rank lowest on the list with a pay gap in 2013 of 26.6 percent²¹. The discrepancy in pay between men and women in Japan stems in part from the roles and opportunities available, and the wages attached to these²². Women in Japan have a higher level of educational attainment than men, but they are taking on lower-paid roles in the health, education and welfare sectors, and are underrepresented in managerial and supervisory roles.²³ Additionally, the tax and benefit system provides financial incentives for dependent spouses to limit earning to reduce the amount foregone to income tax²⁴.

The narrowest pay gaps are seen in Spain and New Zealand. The economic crisis and volatility in Spain, however, are reflected by the two percent increase in the gender pay gap in the most recent 2012 figures. Interesting to note is the attention paid by New

²¹ OECD 2015. http://stats.oecd.org/Index.aspx?DatasetCode = Earnings and Wages: Gender Wage Gap (2006-2014) Data extracted 5 November 2015 07:43 GMT from OECD.Stat Extracts.

²² Cabinet Office, Government of Japan (2010). Summary of Third Basic Plan for Gender Equality: Approved by the Cabinet in December 2010. Available to download at http://www.gender.go.jp/english_contents/about_danjo/whitepaper/pdf/3rd_bpg.pdf

²³ Cabinet Office, Government of Japan (2014). Males' Work and Life in Transition. White Paper on Gender Equality 2014. Available to download at http://www.gender.go.jp/english_contents/about_danjo/whitepaper/pdf/ewp2014.pdf

²⁴ World Economic Forum (2014). Insight Report: Closing the Gender Gap in Japan. McKinsey & Company. Available at: http://www3.weforum.org/docs/WEF_ClosingGenderGap_Japan_Report_2014.pdf

Zealand's Ministry of Women's Affairs to the gender pay gap. In 2010, Women's Affairs minister Pansy Wong prioritised tackling the gender pay gap and an additional \$2 million NZD was allocated over four years towards the issue²⁵. The funding was earmarked towards understanding the causes of the gender pay gap and taking effective measures to reduce it.

The gender pay gap yields longer term consequences for families. Shorter careers, fewer working hours, and lower earnings contribute to lower pensions for women, affecting overall earning and savings potentials²⁶. The gender wage gap figures published in the 2010 FiFI did not match the data extracted from the OECD database. It was important for us to have a baseline for comparison, so we fixed the issues we found and constructed gender wage gap figures for 2010 using the most recent data available between 2006 and 2009 from the same source.

The data on earnings used to establish the gender pay gap can refer to hourly, weekly, monthly or average annual earnings on a gross or net basis, meaning that data is best presented as a relative measure, such as the gender wage gap, rather than as gender differences in earnings in absolute terms. When gross wages are used, the gender wage gap may be slightly overestimated due to the inclusion of taxes and social security contributions. The OECD cites differential tax thresholds for second earners, often women, as an example.

We should also be cautious in interpreting trend data because the methodology of surveys across countries changes regularly, creating breaks in the series and causing "artificial" fluctuations from one year to the next. If the median is used to capture average earnings, it may affect the size of the estimated gender gap, but mean averages are subject to distortion from extreme values.

Yearly gender wage gap data is not available for every country in the index, as some countries collect this data every few years instead of annually. The years with the most

²⁵ New Zealand Government (2009). "Women's Affairs gets boost for gender pay gap work." Pansy Wong, Women's Affairs.

²⁶ OECD (2015). "LMF1.5: Gender pay gaps for full-time workers and earnings differentials by educational attainment." Social Policy Division, OECD Publications. Available to download at http://www.oecd.org/els/LMF_1_5_Gender_pay_gaps_for_full_time_workers.pdf

complete OECD gender wage gap data are 2006 and 2010, but we felt that comparing these figures would not give us an accurate account of the gender wage gap that is present across the 22 countries today. This means that our data does not paint an accurate cross-sectional analysis of the gender wage gap in a given year. It instead looks at the data for a certain year, and for all missing values, the most recent data available is used, i.e., for 2010, values from 2009 are used, then missing values are imputed using the most recent data available between 2006 and 2009. This can lead to comparability issues as we are looking at the Netherlands whose data comes from 2006 and 2010, and Norway, whose data comes from 2009 and 2013, leading us to miss out on changes due to financial crises or the enactment of legislative policies that may be contributing to changes in the gender wage gap. We explored other data sources, but found that the OECD data on gender pay gap, despite its flaws, still has the most complete information available to help understand the gender pay gap.

INDICATOR THREE: MEN'S PERCENTAGE SHARE OF THE PART-TIME WORKFORCE

Men's participation in the part-time workforce is examined because it provides interesting insights on the experiences of mothers and fathers in sharing work and care responsibilities and gendered divisions of labour. We use the OECD's common definition of part-time, which includes people aged 15 and over in employment, whether employees or self-employed, who usually work less than 30 hours per week in their main job. Part-time work allows for flexibility to attend to the routine and non-routine aspects of family life and contributes to decreases in child-care costs, but it may come with penalties to wages, benefits, and professional opportunities²⁷.

Individuals take on part-time work for a variety of reasons ranging from pursuing education, wanting more leisure time, the need or desire to care for friends or families, and the availability of jobs in the labour market. Parents who take on part-time work are thought to have more time to allocate towards care and household work. In egalitarian countries, it is common for parents to manage work and care responsibilities through employment in part-time work²⁸. As we saw in Indicator 2, the gender pay gap can lead to the exclusion of mothers in full time work. Part-time work can become the most flexible option for mothers in the labour force, contributing to the larger proportion of women in part-time employment. This option, however, oftentimes comes at a cost to long-term career and earnings prospects²⁹.

Part-time work is a way for some parents to move towards the dual earner / dual carer model, which embraces symmetry between women and men in both earning and caring.³⁰ Women most commonly reconcile work commitments and care responsibilities as the

²⁷ OECD (2012). Gender Equality in Education, Employment and Entrepreneurship: Final Report to the MCM 2012. Available to download at http://www.oecd.org/employment/50423364.pdf

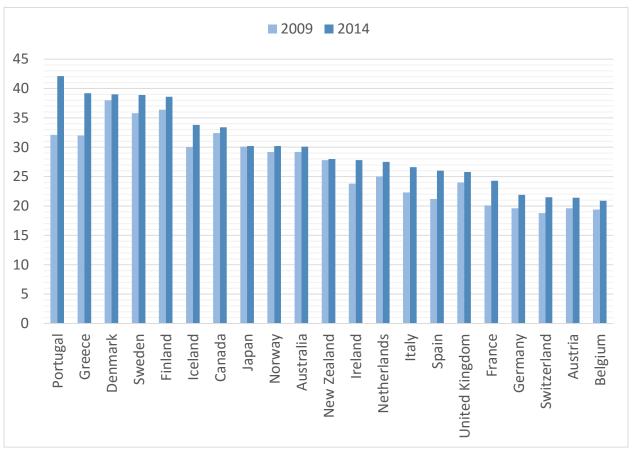
²⁸ Lyonette, C. (2015). Part-time work, work-life balance and gender equality. Journal of Social Welfare and Family Law, 37(3), 321-333.

²⁹ OECD (2015). How's Life? 2015. Available to download at http://www.oecd-ilibrary.org/economics/how-s-life-2015 how life-2015-en

³⁰ Gornick, Janet, and Marcia Meyers (2001). "Support for Working Families." The American Prospect 12.1 (2001): A3-A7.

reason for working part time. Fathers who take on part-time work may have more time available to share the responsibilities of care within the household. Some European countries have enacted policies specifically aimed at helping parents allocate their time towards caregiving through part-time work in the form of guarantees when taking reduced hours. Policymakers in France have enacted a right to part-time work that is exclusive to parents, while Belgium has granted employees the right to work 80 percent time for five³¹. Parents in Sweden have the right to work six hours per week, with job protection (and prorated remuneration), until their children reach the age of eight.³² Laws have been passed in Germany and the Netherlands granting the right to work part-time to all workers in establishments exceeding fifteen and ten workers, respectively³³.





³¹ Gornick, Janet C., and Marcia K. Meyers. (2004). "Supporting a Dual-Earner / Dual-Carer Society: Lessons From Abroad." In Jody Heymann and Christopher Beem (eds.) A Democracy that Works: The Public Dimensions of the Work and Family Debate. New York: The New Press.

³² Haas, Linda and Philip Hwang. (1999). Parental Leave in Sweden. In Peter Moss and Fred Deven (eds.) Parental Leave: Progress or Pitfall? The Hague/Brussels, NIDI/CBGS Publications.

³³ Ibid

Table 5. Men's percentage share of part-time workforce									
Country	2009	2014	Difference	Std score	2010 Rank	2016 Rank			
Portugal	32.1	42.1	10	1.000	5	1			
Greece	32	39.2	7.2	0.863	6	2			
Denmark	38	39	1	0.854	1	3			
Sweden	35.8	38.9	3.1	0.849	3	4			
Finland	36.4	38.6	2.2	0.835	2	5			
Iceland	30	33.8	3.8	0.608	8	6			
Canada	32.4	33.4	1	0.590	4	7			
Japan	30.1	30.2	0.1	0.439	7	8			
Norway	29.2	30.2	1	0.439	9	9			
Australia	29.2	30.1	0.9	0.434	10	10			
New Zealand	27.8	28	0.2	0.335	11	11			
Ireland	23.8	27.8	4	0.325	14	12			
Netherlands	25	27.5	2.5	0.311	12	13			
Italy	22.3	26.6	4.3	0.269	15	14			
Spain	21.2	26	4.8	0.241	16	15			
United Kingdom	24	25.8	1.8	0.231	13	16			
France	20.1	24.3	4.2	0.160	17	17			
Germany	19.6	21.9	2.3	0.047	18	18			
Switzerland	18.8	21.5	2.7	0.028	21	19			
Austria	19.6	21.4	1.8	0.024	19	20			
Belgium	19.4	20.9	1.5	0.000	20	21			

This indicator was constructed using OECD data on the incidence of full-time and part-time employment. In order to better understand part-time employment and trends over the past few years, we widened our scope to examine employment rates,³⁴ part-time

³⁴ https://data.oecd.org/emp/employment-rate.htm#indicator-chart =Total, Percent of working age population (2014) Data last extracted 5 March 2016 06:30 GMT from OECD Extracts.

employment, and the percentage of people in part-time versus full-time employment³⁵ (see appendix for further details about methodology). It is important to understand a broader picture of employment rates across the population to interpret the gender wage gap data. In this indicator, countries are ranked from highest to lowest by men's share of the part-time workforce. The argument here is that if men are participating in part-time work, they have more time available to share the responsibilities of work and care.

The percentage of men in the part-time workforce increased between 2009 and 2014 in all countries, with the largest increases found in Portugal and Greece. Italy, Spain, and France experienced increases upwards of four percent. In all but six countries, the ratio of people in full-time employment decreased, and part-time employment increased. Portugal and Greece top the list with men's share of the part-time workforce at 42.1 and 39.2, respectively. It is interesting to point out that Greece, Italy, and Spain had the lowest employment rates in 2014, at 49.4, 55.7, and 56 percent respectively. Greece's employment rate plummeted 11.4 percent from 2009, due in part to the financial crisis and pointing to the possibility that these numbers are reflecting underemployment³⁶. Less than 12 percent of the workforce in Greece and Italy are made up of part-time work. The highest employment rates are found in Iceland, Switzerland, Norway, and Sweden. Barring Switzerland at 21.5 percent and the second highest portion of employment in part-time work, the men's percentage share of the part-time workforce exceeds 30 percent in these countries.

It is interesting to see that despite the high employment rates and generous allowances and relatively high uptake of parental leave in Nordic countries, they continue to have amongst the highest rates of men's part-time employment. Political circumstances and homogeneity across these populations have contributed to work-family policies that have come closest to the dual earner /dual carer ideals. The commitment to a generous and universal welfare state has been central to the parties governing and powerful union movements in the Nordic countries and have enabled corporate bargaining arrangements that have eased the process of policy unification.³⁷

³⁵ http://stats.oecd.org/index.aspx?Datasetcode=ftptc_i = FTPTC_I Incidence of PT employment – common definition (2014) Data extracted 3 November 2015 15:55 GMT from OECD.Stat Extracts.

³⁶ Papapetrou, Evangelia, and Dimitrios Bakas (2012). "Unemployment in Greece: Evidence from Greek Regions." IDEAS Working Paper Series from RePEc.

³⁷ Morgan, Kimberly (2008). "Caring Time Policies in Western Europe: Trends and Implications."

Parenthood continues to be associated with a reduction in working hours or the departure from the workforce for women. Part-time work provides positive opportunities for women to share in the earning and can provide opportunities for men to shift more time towards sharing in the caring. These opportunities, however, do not necessarily guarantee sustained increases in the amount of time fathers spend in childcare and housework responsibilities. Future iterations of the report could benefits from data that breaks down father's time spent contributing to household work and care whilst in full-time versus part-time work, i.e., the proportion of time fathers in part-time work versus full-time work spend in caring, which is not currently available. Some of the most important aspects of uptake in part-time work are the ease and extent to which men and women can transition from part-time to full-time work and the detrimental effects that part-time work has on career progression and on the acquisition of health, retirement and social welfare benefits attached with full-time work.

On the other hand, the OECD data imposes limitations on the conclusions we can draw. OECD data on participation in the part-time workforce can be separated by sex and age group, but we cannot further customise the data to draw more meaningful conclusions between participation in the part-time workforce and implications for the sharing of earning and caring responsibilities. We can compare men and women but we are limited to examining the entire population, which includes teenagers from the age of 15 in their first job, to men who are winding down their careers and heading towards retirement. The data does not allow us to isolate part-time employment rates of mothers or fathers with dependent children. The data also includes underemployment due to financial crisis. We are unable to distinguish between increases in employment due to the lack of availability of full-time jobs in the labour market from those that are transitional or undertaken voluntarily to help contribute to earnings.

Politics & Society, Vol. 36 No. 3, September 2008 403-420.

INDICATOR FOUR: PERCENTAGE OF GDP SPENT ON CHILDCARE AND EDUCATION FOR CHILDREN UNDER FIVE-YEARS OLD

Governments play a crucial role in creating supporting infrastructures that enable mothers and fathers to share the responsibilities of earning and caring. In particular, access to affordable childcare increases the ability of mothers to participate in the paid workforce.³⁸ Government sponsored childcare and educational support during can demonstrate a state's commitment to egalitarian parenting. Access to childcare for children below the age of five has also proven to be beneficial for their cognitive development.³⁹

Governments can have a crucial impact on the early development of children through the allocation of funds towards education and childcare, especially for families that are unable to afford private arrangements. These low-income families need systems that enable their children to experience high quality care and education. While this indicator reveals the level of funding countries allocate as a percentage of GDP to support childcare and education, it has its limitations. A more accurate gauge, such as the amount spent per capita on childcare and education, would enable us to better understand how much countries are spending to support their individual citizens. Unfortunately, comparative data is not available.

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³⁸ Equality and Human Rights Commission Policy (2010). "Working Better- Childcare Matters: Improving Choices and Chances for Parents and Children". November 2010. Available at http://www.equalityhumanrights.com/sites/default/files/documents/research/working_better_childcare_matters.pdf

³⁹ Scottish Government (2013). Childcare and Female Labour Market Participation. November 2013. Available at http://www.gov.scot/Resource/0043/00439259.pdf>

Table 6. Countries' Allocation of GDP Spent on Childcare and Education for Children Under 5 (in percentage)

Country	2009	2011	Std score	2010 Rank	2016 Rank
Denmark	2	2	1.000	1	1
Iceland	1.7	1.6	0.750	2	2
Sweden	1.6	1.6	0.750	3	2
France	1.2	1.2	0.500	4	3
Norway	1.2	1.2	0.500	4	3
Finland	1.1	1.1	0.438	5	4
New Zealand	1	1.1	0.438	6	4
United Kingdom	1.1	1.1	0.438	5	4
Netherlands	0.9	0.9	0.313	7	5
Belgium	0.7	0.7	0.188	8	6
Australia	0.6	0.6	0.125	9	7
Italy	0.7	0.6	0.125	8	7
Spain	0.6	0.6	0.125	9	7
Austria	0.5	0.5	0.063	10	8
Germany	0.5	0.5	0.063	10	8
Ireland	0.5	0.5	0.063	10	8
Japan	0.4	0.4	0.000	11	9
Portugal	0.4	0.4	0.000	11	9
United States	0.4	0.4	0.000	11	9
Canada	0.2	_	-	13	-
Greece	0.1	-	-	14	-
Switzerland	0.3	_	-	12	-

Sweden has a high quality universal model of early childcare and learning. Up to 81 percent of children in Sweden below the ages of five are enrolled in formal childcare, of which up

to 90 percent has been subsidised for parents.⁴⁰ The key focus of the Swedish day care centres is to encourage children to play, and enhance their cognitive, social and physical development from a young age. There are no minimum staff-to-child ratios set by the Swedish national government. These are instead chosen by local governments, which have favourable ratios of 5.6:1 within childcare centres.⁴¹ This model ensures that families have access to facilities where children are well looked after, and financial subsidy makes these facilities widely accessible. Although government supported childcare and education is important, fathers and mothers continue to retain the primary caregiving responsibilities. Increased access to childcare also enables more women to participate in the economy through paid employment, which in turn allows for more taxes to be collected from incomes generated.⁴²

Iceland has a long history of providing childcare support for children under the age of five, beginning in 1973.⁴³ Although a high volume of children were already enrolled in these institutions, space was made available for additional children, allowing enrolment to continue to increase in a relatively short period of time. From 1990 to 2000, enrolment rates of children in childcare centres rose from 42.9 percent to 57.5 percent.⁴⁴

We sourced data from 2009 for better comparability as the data extracted from databases was inconsistent with 2010 FiFI report. Data was also absent or partially missing for Canada, Greece, and Switzerland from World Bank and OECD databases; and the latest data available for the category of education and childcare for the under-fives category is only available until 2011. Subsequent years' data is available only for percentage of GDP allocated for education, and not for childcare. Although we compare the latest data available per country, the incompleteness of recent data makes it difficult to assess

⁴⁰⁰ECD (2005), Babies and Bosses- Reconciling Work and Family Life (Volume 4): Canada, Finland, Sweden and the United Kingdom. OECD Publishing. Available at http://www.oecd.org/els/family/babiesandbosses-

reconcilingworkandfamilylifevol4canadafinlandswedenandtheunitedkingdom.htm>

⁴¹ OECD (2006). Starting Strong II: Early Childhood Education and Care. Paris: OECD.Print. Available at http://www.oecd.org/education/school/37423778.pdf Annex E- Sweden

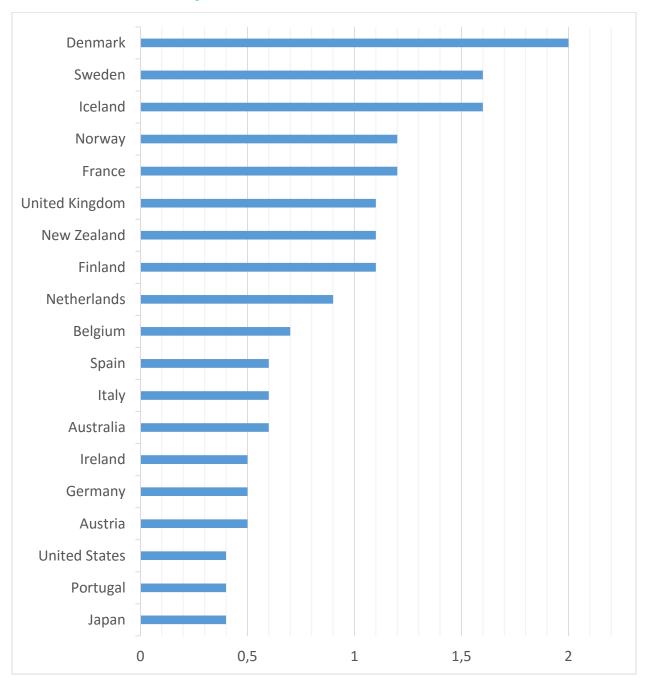
⁴² Scottish Government (2013). Childcare and Female Labour Market Participation. November 2013. Available at: http://www.gov.scot/Resource/0043/00439259.pdf>

⁴³ Eydal, Gudny and Olafsson, Stefan (2003) Social and Family Policy "The Case of Iceland: Third Report for the Project *Welfare Policy and Employment in the Context of Family Change"* Faculty of Social Sciences, University of Iceland May 2003

⁴⁴ Ibid.

changes that may have arisen in the past four years. Denmark and Iceland secured top scores for their allocation of GDP in providing childcare support for children under the age of five, while the USA, Japan and Portugal spent the least amount. There has been no significant difference in spending for most countries in the OECD between the years 2009 and 2011.

Graph 7. Percentage GDP spent on childcare and education for children under five years old



INDICATOR 5: PROPORTION OF WOMEN SITTING IN PARLIAMENTS

The proportion of women in parliament enables us to assess whether women are represented in leadership roles that can influence national policymaking.⁴⁵ This indicator helps us better understand how issues that affect women could be brought to the forefront of political attention and action.⁴⁶

Experts interviewed about this issue have raised questions about the specific roles played by women in parliament. While a higher number of women in parliament points to women's increased involvement in politics, other key factors to be assessed include the positions and associated powers held by women in these positions. Female cabinet members, shadow ministers, or females in higher ranking positions within the party are more indicative of progress in gender equality than simply increasing the number of female members in parliament.⁴⁷ In fact, a recent report by the Overseas Development Institute (ODI) states that even though women have been increasing their numbers in elected posts, women are less likely to occupy key leadership positions or cabinet posts. Further, even if women have leadership roles in social movements, they are less likely to be represented in groups that are not geared towards women or gender issues.⁴⁸ According to UN Women, the numbers of women in parliament has doubled in the period between 1995-2015, but even this dramatic increase only adds up to about 22% of all women in parliament.⁴⁹

⁴⁵ International Institute for Democracy and Electoral Assistance (International IDEA) (2005)-Women in Parliament: Beyond Numbers. A Revised Edition 2005 Available at http://www.idea.int/publications/wip2/index.cfm

⁴⁶ Ibid.

⁴⁷ Interview with Sam Smethers of Fawcett Society, conducted on 21/01/2016

⁴⁸ Overseas Development Institute (2015). "Women's voice and leadership in decision-making: Assessing the evidence" Pilar Domingo, Rebecca Holmes, Tam O'Neil, Nicola Jones, Kate Bird, Anna Larson, Elizabeth Presler-Marshall and Craig Valters. April 2015 Available at

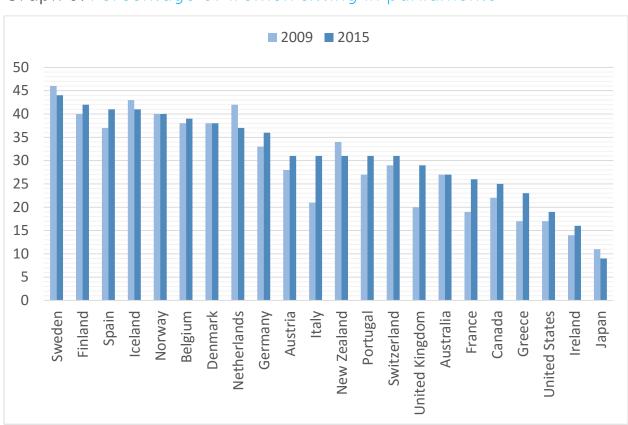
⁴⁹ "Facts and Figures: Leadership and Political Participation." *UN Women.* Web. 3 Feb. 2016. http://www.unwomen.org/en/what-we-do/leadership-and-political-participation/facts-and-figures.

Table 7. Percentage of Women Represented in Parliaments								
Country	2009	2015	Std Score	2010 Rank	2016 Rank			
Sweden	46	44	1.000	1	1			
Finland	40	42	0.943	4	2			
Spain	37	41	0.914	6	3			
Iceland	43	41	0.914	2	3			
Norway	40	40	0.886	4	4			
Belgium	38	39	0.857	5	5			
Denmark	38	38	0.829	5	6			
Netherlands	42	37	0.800	3	7			
Germany	33	36	0.771	8	8			
Austria	28	31	0.629	10	9			
Italy	21	31	0.629	13	9			
New Zealand	34	31	0.629	7	9			
Portugal	27	31	0.629	11	9			
Switzerland	29	31	0.629	9	9			
United Kingdom	20	29	0.571	14	10			
Australia	27	27	0.514	11	11			
France	19	26	0.486	15	12			
Canada	22	25	0.457	12	13			
Greece	17	23	0.400	16	14			
United States	17	19	1.200	16	15			
Ireland	14	16	0.200	17	16			
Japan	11	9	0.000	18	17			

Across the 22 countries in the FiFI, the data reveals that between 2009 and 2015, the percentage of women in parliament generally increased, with upward trends reported in several nations. Despite seeing a 2 percent reduction of women in the Swedish parliament, Sweden continues to rank first at 44 percent in 2015. The general upwards movement across countries is a positive indication of gender parity in parliament and greater involvement by women in decision making, policy formulation, and leadership. Although data was partial or incomplete for Iceland in the OECD database, the World Economic Forum annual report on gender gaps for 2015 highlights that there are four Icelandic women

in ministerial positions for every five Icelandic men in the same position. Consequently, of the 22 countries in question, Iceland is ranked at the top for the proportion of women in parliament.⁵⁰

The positive trend across nations, however, may be a reflection of rising employment levels of women, as the propensity for women to be elected officials increases with higher levels of employment.⁵¹ Additional research is needed to understand the role of women in leadership in civil society groups, political parties, community initiatives, local government and other relevant areas of political engagement. It would also be interesting to track decisions made by women in politics that affect egalitarian parenting. Unfortunately, data is limited in these areas.



Graph 8. Percentage of women sitting in parliaments

⁵⁰ World Economic Forum, Global Gender Gap Report 2015. http://www3.weforum.org/docs/GGGR2015/cover.pdf> Web

⁵¹ International Institute for Democracy and Electoral Assistance (International IDEA) (2005)-Women in Parliament: Beyond Numbers. A Revised Edition 2005 http://www.idea.int/publications/wip2/index.cfm

INDICATOR SIX: WOMEN IN MANAGEMENT POSITIONS

The role of women in management positions has consistently been considered to be an important marker of gender equality. The extent to which low and middle-ranking female staff attain senior roles is a significant indicator of the extent to which the professional environment they work in is conducive to women's career advancement. Out of 22 countries whose data is available up to 2014, nine countries have noted decreases in the percentage of women holding positions in management. The United States ranks highest with 43.4 percent of the female share of employment in senior and middle management. It is possible that the lack of paid statutory parental leave, which has led to shorter career interruptions for family and childcare purposes, may be facilitating career advancement (see Appendix for full case study).

Difference in classifications of what roles tend to be viewed as upper or middle management positions remains a key challenge for cross-country comparisons of women in management positions. The data utilized here relies on the International Standard Classification of Occupations (ISCO) which is the most commonly used framework of categorisation. The classification system that is utilised by many countries is the ISCO-88 system, and many are now transitioning into a new system since 2008 called the ISCO-08.⁵² However, not all countries have fully transitioned into the new system, and there is a break in the data series owing to this. This leads to a difference in understanding of which of the roles women work in are classified as management, and which roles are not. If all countries had completed the migration to the recent ISCO-08 system, more managerial jobs undertaken by women could be accounted for.⁵³ While the difference between two countries using the different systems is not readily apparent, there is a break in data series when examining data from within a single country that has transitioned to the new system.⁵⁴ For instance, the data from the United Kingdom is compiled with a combination of data utilizing national classifications and the ISCO-08 classification

⁵² Greenwood, Adriana Mata "Updating the International Standard Classification of Occupations", ISCO-08 ILO Bureau of Statistics. Available at

http://unstats.un.org/unsd/class/intercop/training/escwa04/escwa04-9.PDF> Web.

⁵³ OECD Family Database- Social Policy Division - Directorate of Employment, Labour and Social Affairs, LMF1.6: Gender differences in employment outcomes

http://www.oecd.org/els/LMF_1_6_Gender_differences_in_employment_outcomes.pdf> Web.

⁵⁴ Ibid.

structure.⁵⁵ Other countries rely primarily on ISCO-88 or only on national job classifications. Crucially, the ISCO-88 system excludes managers of small enterprises, and this limits our understanding of women's management roles in smaller enterprises.⁵⁶

Table 8. Percer	ntage	of W	omen in Ma	anagement	Positions
Country	2009	2014	Std scores	2010 Rank	2016 Rank
United States	-	43.4	1.000	-	1
Iceland	38.4	38.1	0.835	2	2
Sweden	31.1	37.4	0.814	9	3
Australia	30.5	35.8	0.764	10	4
Canada	-	35.8	0.764	-	4
Finland	34.7	34.3	0.717	5	5
Norway	34.6	33.3	0.686	6	6
United Kingdom	35.4	32.9	0.674	4	7
France	37.8	31.9	0.643	3	8
Portugal	34.4	31.8	0.640	7	9
Belgium	34.6	31.3	0.624	6	10
Switzerland	32.1	31.3	0.624	8	10
Ireland	41.4	30.8	0.609	1	11
Spain	24.7	29.4	0.565	14	12
Austria	23.2	27.8	0.516	15	13
Germany	27.3	27.8	0.516	11	13
Greece	27	27.8	0.516	12	13
Denmark	20.4	26.2	0.466	17	14
Netherlands	26.5	24.3	0.407	13	15
Italy	21.6	21.9	0.332	16	16
New Zealand	-	19	0.242	-	17
Japan	-	11.2	0.000	-	18

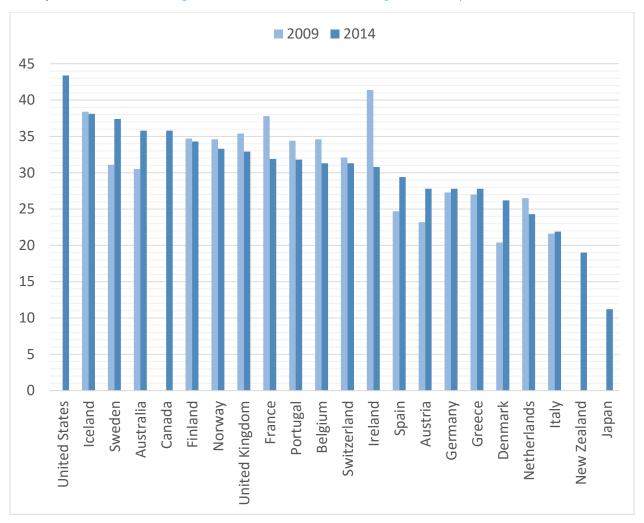
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⁵⁵ ILO Statistics Database- Female share of employment in senior and middle management (%)-Description. Available at http://www.ilo.org/ilostat/faces/help_home/data_by_subject/subject-details/indicator-details-by-

subject?indicator=EMP_XFMG_NOC_RT&subject=EMP&_afrLoop=730721402601612&datasetCode=YI&collectionCode=YI&_adf.ctrl-state=ceby0eked_429> Web. Last accessed on 3 March 2016

⁵⁶ Ibid.





INDICATOR SEVEN: RATIO OF MEN'S TO WOMEN'S TIME CARING FOR CHILDREN

The previous indicators have discussed parental leave policies and economic, social, and political aspects related to gender equality. In Indicators Seven to Nine, we observe behaviour within households regarding the division of unpaid work, composed here by three indicators: caring for the elderly and persons with disabilities, childcare, and housework. The impact of the distribution of unpaid work between men and women on gender inequality is largely recognised in the literature. In OECD countries, unpaid work accounts for one-third to half of all valuable economic activity, although it is not included in the most used measures of national accounts, such as GDP⁵⁷. Unpaid work is vital for household consumption and for the current and future family members' and communities' wellbeing. All the relevant literature and the findings in this report consistently show that women have a disproportionately higher burden of unpaid work, which negatively affects their participation in the labour force⁵⁸ and their wellbeing⁵⁹.

The source of the data for these three indicators is the European Quality of Life Surveys (EQLS)⁶⁰, which are exclusively available for European countries. Although some of the

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⁵⁷ Miranda, V. (2011). Cooking, caring and volunteering: Unpaid work around the world.OECD Social, Employment and Migration Working Papers N°. 116.

⁵⁸ Anxo, D., Mencarini, L., Pailhé, A., Solaz, A., Tanturri, M. L., & Flood, L. (2011). Gender differences in time use over the life course in France, Italy, Sweden, and the US. Feminist Economics, 17(3), 159-195. Gálvez-Muñoz, L., Rodríguez-Modroño, P., & Domínguez-Serrano, M. (2011). Work and time use by gender: a new clustering of European Welfare Systems. Feminist Economics, 17(4), 125-157. Himmelweit, S. (2007). The prospects for caring: economic theory and policy analysis. Cambridge Journal of Economics, 31(4), 581-599. Rostgaard, Tine; Olli Kangas and Liv Bjerre (2011). Time between Job and Care – How Configurations of Care Policies Shape the Patterns of Informal Care for Children and the Elderly. In Drobnič, S., & Guillén, A. M. Work-life balance in Europe: The role of job quality. Palgrave Macmillan.

⁵⁹ Boye, K. (2009). Relatively different? How do gender differences in well-being depend on paid and unpaid work in Europe?. Social Indicators Research,93(3), 509-525. Offer, S., & Schneider, B. (2011). Revisiting the gender gap in time-use patterns multitasking and well-being among mothers and fathers in dual-earner families. American Sociological Review, 76(6), 809-833.

⁶⁰ European Foundation for the Improvement of Living and Working Conditions, European Quality of Life Survey, 2007 [computer file]. Colchester, Essex: UK Data Archive [distributor], October 2009. SN: 6299, http://dx.doi.org/10.5255/UKDA-SN-6299-1. European Foundation for the Improvement of Living and Working Conditions, European Quality of Life Survey, 2011-2012 [computer file]. 2nd Edition. Colchester, Essex: UK Data Archive [distributor], January 2014. SN: 7316, http://dx.doi.org/10.5255/UKDA-SN-7316-2. European Foundation for the Improvement of Living and Working Conditions and Wissenschaftszentrum Berlin fuer Sozialforschung, European Quality

countries analysed previously are not covered in the unpaid work indicators, this source currently provides the best data in terms of comparability across countries and over time, since it is derived from homogeneous international surveys that have been updated every five years. The most referenced data available on unpaid work derives from national timeuse surveys, but these surveys may lack comparability because of different definitions of unpaid work used in each country. Other sources of data usually fail to disaggregate the different activities that make up unpaid work, especially caring for elderly and persons with disabilities. In addition, national surveys are conducted during different years, which may affect the comparability over time. The EQLS use questionnaires, rather than timeuse surveys, to collect information on unpaid work, which is not ideal because recall biases can affect responses. However, its comparability across countries and over years, and the disaggregation of unpaid work into caring for children, caring for elderly and persons with disabilities, and housework and cooking make these the best currently available data for this analysis.

Caring for children, particularly very young children, is where we find the greatest inequality between men and women among unpaid work activities⁶¹. Decisions made about time spent in the labour market are intertwined with time spent in unpaid work, and this especially affects women. Similarly, it is also possible that the gender wage gap pressures men into taking up longer hours of paid work to compensate for women's lower salaries. This could reinforce inequalities both in time use and income distribution between men and women.

For this reason, recognising inequalities in care work is paramount to labour market and parental leave policies, since the distribution of care work has long-term implications for the whole society⁶². In addition, the participation of men in care work influences generational changes: men who grow up in households where there is more involvement of men in care work are more likely to engage with these activities themselves.⁶³ In 2012,

of Life Survey, 2003 [computer file]. Colchester, Essex: UK Data Archive [distributor], February 2006. SN: 5260, http://dx.doi.org/10.5255/UKDA-SN-5260-1

⁶¹ Op. cit. Rostgaard et al, 2011; op. cit. Anxo et al, 2011; op. cit. Offer and Schneider, 2011.

⁶² Op. cit. Himmelweit, 2007.

⁶³ Barker, G., Contreras, J. M., Heilman, B., Singh, A. K., Verma, R. K., & Nascimento, M. (2011). Evolving men: initial results from the International Men and Gender Equality Survey (IMAGES). Washington, DC: International Center for Research on Women (ICRW) and Rio de Janeiro: Instituto Promundo.

considering all the countries that are part of the EQLS, men spent on average 6.51 hours per week caring for children, while women spent 14.27 hours.

Table 9. Average minutes spent by men per every woman's hour spent caring for children 2003 2007 2012 Rank 2010 2016 Country Ratio Ratio Ratio Std scores **EQLS Ranking** Portugal 19.1 41.7 38.87 1.000 5 Finland 24.35 52.9 38.13 0.951 3 1 2 Denmark 25.18 49.6 37.4 0.903 4 2 3 Italy 24.96 45.0 33.86 0.669 4 5 4 7 5 32.87 Iceland 0.603 32.72 0.594 Belgium 25.49 39.1 8 6 6 France 35.73 35.2 29.98 0.412 14 8 19.22 27.5 29.05 17 8 Netherlands 0.351 13 Ireland 15.69 37.5 28.92 0.342 18 7 9 Greece 17.99 33.6 27.65 0.258 19 11 10 11.19 22.8 26.57 0.187 21 14 11 Austria Spain 34.3 26.17 0.161 22 10 12 Germany 16.22 32.6 24.93 0.079 23 12 13 47.3 14 Sweden 35.4 24.83 0.072 24 3

This indicator captures the average minutes spent by men per every hour women spent caring for children. The average for all countries that are part of the European Quality of Life Survey 2012 was 27.39 minutes per every woman's hour, an increase of almost two minutes since 2007 (25.63 minutes) and of more than seven minutes since 2003 (18.93 minutes). In all countries, men engage less than women in caring for children (Table 1). This is not surprising since their working rates and working hours (not measured in FiFI) are substantially greater. The best positioned country included in the 2012 survey is Serbia, where men's care of children is an average of 42.42 minutes per woman's hour. Across all

0.000

26

12

15

23.74

UK

Norway

12.34

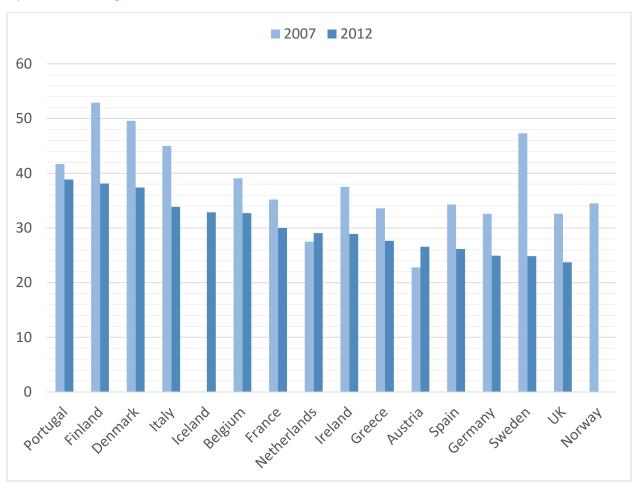
32.6

34.5

the survey years, the UK is ranked low, with men spending an average 23.74 minutes in 2012 per woman-hour, just above one quarter of the childcare work done by women. The table below only shows the countries present in the 2010 FiFI report. A table with all the countries surveyed in the EQLS is available in the Appendix. Among the countries covered in the 2010 FiFI, Portugal, Finland and Denmark are among the highest ranked with men spending approximately two thirds of the time women spend caring for children.

Although some countries have increased their ratio (e.g., Netherlands and Austria), slowly advancing towards equality, and the average for Europe remains similar, in many countries the amount of time men spent in caring for children relative to the time spent by women is decreasing (e.g., Portugal, Finland, Denmark, Italy, Belgium, France and UK). This trend also shows that improving gender equality in unpaid work distribution is not a matter of generational change, but rather needs to be a conscious effort from the government and the society as a whole.

Graph 10. Average minutes spent by men per every woman's hour spent caring for children



INDICATOR EIGHT: RATIO OF THE PERCENTAGE OF MEN TO WOMEN IN FAMILIES CARING FOR ELDERLY PEOPLE AND PERSONS WITH DISABILITIES

Although childcare makes up most of the time spent on unpaid care work, caring for the elderly or for persons with disabilities is of increasing importance, especially in ageing societies. Indicator Eight captures the ratio of the percentage of men to the percentage of women that care for elderly or persons with disabilities at least once a week⁶⁴. The cultural differences mentioned in the previous paragraph can be appreciated when one looks at the ranking for Indicator Seven in 2012, since the results for the two indicators are completely different. While in almost every country a lower percentage of men than women engage in adult care, the gender difference is far less substantial than in care of children: at worst, in at least two thirds of the countries, for every ten women in families (professional care is not included here) caring for adults once or more a week, fewer than eight men engage with this activity in the same frequency. In Sweden, the highest ranked country in 2012, the gender gap has (recently) closed. However, the lack of a consistent trend for this and other countries could mean that improvement may not be sustainable over time.

In future editions, it would be interesting to include information about not only the gender of caregivers but also about the gender of the person who is being cared for, their relationship with the respective caregivers, and their relative ages. Interviewed experts and the literature show that there is reason to believe that men tend to care for spouses, while women are more likely to take up the burden of caring for family members other than spouses. However, women still live longer than men, so their care of spouses is likely to be more common than men's.

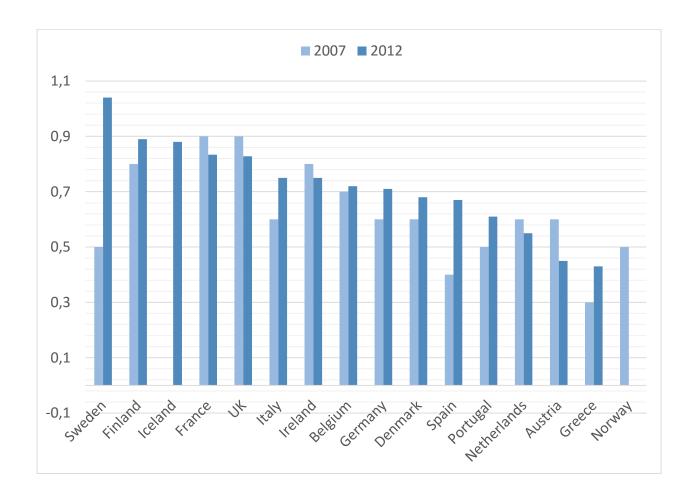
⁶⁴ Originally, this indicator was calculated in the same way as indicators 7 and 9. However, the results were not consistent. The appendix presents the original results and the explanation why the current indicator was chosen.

⁶⁵ Grigoryeva A. (2014) When Gender Trumps Everything: The Division of Parent Care Among Siblings. Princeton, NJ: Center for the Study of Social Organization. Steinberg M, Johnson S, Schierhout G, Ndegwa D. (2002) Hitting Home: How Households Cope with the Impact of the HIV/AIDS Epidemic. A Survey of Households Affected by HIV/AIDS in South Africa. Washington, D.C.: The Henry Kaiser Family Foundation.

Table 10. Ratio of the percentage of men to women that care for elderly or persons with disability at least once a week

	2003	2007	2012			Rank	
Country	Ratio	Ratio	Ratio	Std scores	EQLS Ranking	2010	2016
Sweden	0.74	0.5	1.04	1	1	5	1
Finland	0.8	0.8	0.89	0.754	5	2	2
Iceland	-	-	0.88	0.738	7	-	3
France	0.58	0.9	0.834	0.662	11	1	4
UK	0.78	0.9	0.828	0.652	12	1	5
Italy	0.75	0.6	0.75	0.525	13	4	6
Ireland	0.71	0.8	0.75	0.525	14	2	7
Belgium	0.58	0.7	0.72	0.475	16	3	8
Germany	0.65	0.6	0.71	0.459	17	4	9
Denmark	0.79	0.6	0.68	0.41	20	4	10
Spain	-	0.4	0.67	0.393	22	6	11
Portugal	0.72	0.5	0.61	0.295	26	5	12
Netherlands	0.79	0.6	0.55	0.197	28	4	13
Austria	0.53	0.6	0.45	0.033	31	4	14
Greece	0.62	0.3	0.43	0	32	7	15
Norway	_	0.5	-	-	-	5	

Graph 11. Ratio of the percentage of men to women that care for elderly or persons with disability at least once a week



INDICATOR NINE: RATIO OF MEN'S TO WOMEN'S TIME SPENT ON HOUSEWORK AND COOKING

Housework can be a very demanding activity, especially for women, taking up more than 20 hours of their weeks in some countries, such as Ireland⁶⁶. The variation among the countries is striking, which indicates a lot of cultural differences regarding the distribution of housework between men and women. However, women in all countries engage with housework and cooking more than men, and in 29 out of 34 countries, men do less than two thirds of the housework that women do. Again, it is important to acknowledge that it could be the case that men are pressured into taking up more working hours for many reasons, including the gender pay gap, which is likely to affect their availability to perform other activities.

This Indicator captures the average minutes spent by men per every woman's hour spent on housework and cooking. The mean for all countries that are part of the European Quality of Life Survey 2012 was 27.39 minutes per every woman's hour, an increase compared to 2007 (25.63 minutes) and 2003 (18.93 minutes). In 2012, among all the countries that are part of the EQLS, men spent on average eight hours per week on housework, while women spent 15.37 hours. This represents more time for both sexes than the time spent on childcare or adult care.

Denmark and Sweden rank at the top with ratios of 44.24 and 41.4 minutes per woman's hour, respectively, i.e., men spend between two fifths and three quarters of the housework time that women undertake. Even for the best positioned countries there are still significant gaps and the unequal distribution of housework is a structural problem. In six of the countries surveyed in the EQLS, including Greece, men spent less than a third of the time on housework than women did in 2012. The UK ranks tenth of 34 countries, with men spending slightly more than half the time than women spend in housework. However, it may be that men are undertaking a relatively high proportion of housework in comparison with sex-differences in time spent by women and men on paid work, and earnings derived from this. Future FiFI editions should examine this.

⁶⁶ The same is true for Malta and Cyprus. The appendix contains the full tables for this indicator, with these and other countries that are not analysed by this report.

Average minutes spent by men per every woman's hour spent on housework and cooking for 2012, 2007 and 2003

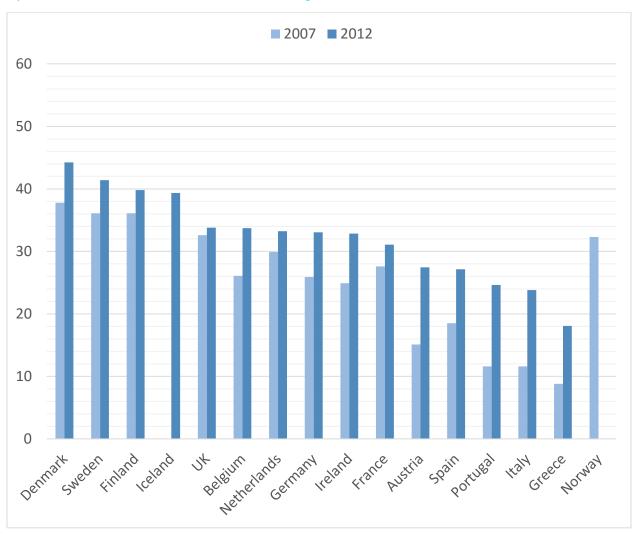
	2003	2007	2012	2012			Rank	
Country	Ratio	Ratio	Ratio	Std scores	EQLS Ranking	2010	2016	
Denmark	43.76	37.8	44.24	1	3	1	1	
Sweden	46.3	36.1	41.4	0.891	4	2	2	
Finland	48.58	36.1	39.82	0.831	6	2	3	
Iceland	-	-	39.34	0.813	7	-	4	
UK	36.1	32.6	33.8	0.601	9	3	5	
Belgium	30.62	26.1	33.72	0.598	10	7	6	
Netherlands	36.74	29.9	33.23	0.579	13	5	7	
Germany	29.99	25.9	33.04	0.572	14	8	8	
Ireland	26.15	24.9	32.85	0.565	15	9	9	
France	33.48	27.6	31.08	0.497	16	6	10	
Austria	26.78	15.1	27.44	0.358	22	11	11	
Spain	-	18.5	27.15	0.347	23	10	12	
Portugal	17.42	11.6	24.63	0.251	25	12	13	
Italy	20.03	11.6	23.8	0.219	27	12	14	
Greece	15.8	8.8	18.07	0	30	13	15	
Norway	-	32.3	-	-		4	-	

As it is the case for the previous indicators, it would be valuable to have more information regarding the activities that make up housework, such as cleaning and maintenance, and the differences between activities that are usually done by men or women. In addition, these last three indicators might not include unpaid work that is not strictly considered housework or caring, such as the collection of water and fuel, or breeding livestock. These activities are especially important for developing countries and there is evidence in the

literature that women are disproportionately responsible for such activities in the Global South.67

⁶⁷ Kabeer, N. (2012). Women's economic empowerment and inclusive growth: labour markets and enterprise development. International Development Research Centre.

Graph 12. Average minutes spent by men per every woman's hour spent on housework and cooking



CONCLUSION

Table 12. 2016 FiFI Rankings.			
Countries	Rank		
Sweden	1		
Denmark	2		
Iceland	3		
Norway	4		
Finland	5		
Belgium	6		
Canada	7		
Portugal	8		
New Zealand	9		
France	10		
Italy	11		
United Kingdom	12		
Australia	13		
Spain	14		
Ireland	15		
Netherlands	16		
Switzerland	17		
Greece	18		
Germany	19		
United States	20		
Austria	21		
Japan	22		

This report highlights the performance and ranking of 22 countries in nine key areas affecting egalitarian parenting and earning. This 2016 version of the Fairness in Families Index also includes three separate sub-indices that have been formulated to better compare certain policy areas of fairness in families: policies, social environment, and practices.

Policymakers should continue to focus on creating policies that engender the equal sharing of caring and earning responsibilities among parents and that promote gender equality in the workplace. To impact policy, future reports need to be clear and concise in their explanation of results, methodological issues, and recommendations. An important focus of both the 2010 and the 2016 FiFI reports has been to maintain a clear narrative, which is imperative to affecting change.

The knowledge shared in each Indicator has been enhanced through 16 interviews with experts from several fields of research pertaining to gender equality. This report provides an overview of areas for improvement within each country, as well as examples of countries that have more successfully created an environment for egalitarian parenting. Future FiFI reports should continue to utilise experts in each field to provide current and precise recommendations to affect change in countries struggling to obtain fairness in families.

Future editions of the FiFI could also debate the definition of egalitarian parenting, the benefits of the dual earner / dual carer model, and the respective choice of indicators. The experts interviewed for the report shed light on several possibilities. For example, equal power to make decisions about parenting should be part of the concept of egalitarian parenting. In this sense, it would be interesting to include indicators that capture women's access to sexual and reproductive rights. Likewise, the levels of intra-family violence faced by mothers and fathers could affect the distribution of power within families. Going beyond egalitarian parenting and thinking broadly about fairness in families, it would also be important to consider children's rights and their enforcement. Fairness in families might also include information on the effects of social environments and policies on single parents versus couples and on single fathers versus single mothers. Future editions should aim to include more countries, especially from the Global South. In addition, including the correlation between egalitarian parenting and other desirable social outcomes could foster more support among policymakers and the media, pushing this issue to the forefront.

The experience of countries at the top of the scale should be explored in depth, but with caution, to assess whether blueprinting their solutions for gender equal policies can work in different contexts such as the United Kingdom or Portugal. The levels of taxation in the Nordic countries are very high in comparison to the United Kingdom, which can fund much of the Nordic countries' welfare policies, whereas the UK electorate may not be willing implement higher taxation. The policy decisions to be made by the governments will be based on their ability to fund such measures. With the intent to increase fairness within families, countries can explore which policies work best within their own contexts and do not have to replicate all measures being utilised by the top ranked countries. Ultimately, we hope the 2016 FiFI will encourage and influence discussions among researchers and policymakers regarding the best approaches for increased gender equality in parenting and earning across the world, ultimately leading to increased fairness in families.

APPENDIX

TOR

Key Changes to TOR as of 19 February 2016

- 1. Data analysis to be carried out on 9 indicators of gender equality
- 2. The parental leave indicator only needs to include the new calculations and a detailed description of the calculations with the rankings outcomes as the final product.

Objectives

The project seeks to update and revise the 2010-11 Fairness in Families (FiFi) Index. The index contains indicators for measuring egalitarian parenting in high income countries. There are two objectives associated with this.

First, the revised repot will use the most up-to-date data in order to depict the current situation in high income countries across 10 FiFi indicators. There have been important policy developments in many countries since the publication of the 2010-11 index and it is important to capture them in the revised index.

Secondly, the new report will provide greater contextualisation of the index in selected countries. In particular, it will develop 1-3 case studies that would allow more in-depth discussion of the results in individual countries. These countries will be selected based onn the strength of overall or particular indicators to represent different policy circumstanes and/or outcomes. For example, Sweden has achieved remrakbel success in egalitatian parenting, whislt the UK is lagging behind in terms of most indicators. The precise number of these case studies is to be determined during the course of the project in consultation with the Fatherhood Institute.

Why is it important?

The FiFi Index has been established to measure the extent of egalitarian parenting in 21 industrialised countries. It ranks these countries in terms of 10 indicators of gender equality which affects fairness in families. The index provides an important tool for policy makers. First, if offers individual indicators, which highlight successes and gaps in different areas of gender equality in particular countries. Second, it derives an aggregate index for each country summarising important information in one number. Both individual indicators and the aggregate index allow monitoring fairness in families across time as well as comparing the extent of fairness across countries. Thirdly, the index draws together various dimensions of fairness in families and thus highlights the importance of tackling multiple dimensions affecting inequality in families. Finally, the index can be used to advocate the importance of policy initiatives to promote greater equality in families.

Project output and key activities

The main output of the project is a policy report not exceeding 15,000 words. To produce the report, students are expected to perform the following tasks:

- Compile up-to-date data and carry out data analysis on 10 indicators of gender equality
- 2. Evaluate and present the results
- 3. Rank countries in terms of fairness in families
- 4. Identify suitable 1-3 case studies for more in-depth analysis
- Develop brief case studies (up to 3 pages each) to explore in more depth the situation in selected countries.
- Document the analytical framework, data sources and methodological limitations of the analysis.

Data sources and availability

The report will be mainly based on the OECD survey sources, which enables comparative analysis. The Fatherhood Institute will support students in accessing relevant data and information. It will ensure that students become familiar with the methodology used in the 2010-11 report (e.g. by facilitating a meeting with the expert who designed the 2010-11 index).

INTERVIEWS

Interviews		
Name	Expertise // Organisation	
Tracey Warren	Penalties of Part -time Work Across Europe	
Peter Moss	Can speak about all countries' leave arrangements	
Gary Barker	Engaging men and boys in achieving gender equality and ending violence against women	
Wendy Sigle	LSE Gender and Social Policy professor	
Helene Dearing	Can speak to Austria's policies and her EGDL Indicator	
Sonja Blum	Can speak to Germany's policies	
Evi Hatzivarnava Kazassi	Can speak to Greece's policies	
Heather McDonald	Can speak to New Zealand's policies	
Karin Wall	Can speak to Portugal's policies	
Alison Koslowski	Can speak to UK and EU parental leave polices	
Ryan Shorthouse	Director of Bright Blue; Mid-right wing think tank	
Sam Smethers	Fawcett Society; can talk about women's empowerment	
Sarah Jackson	CEO Working Families (NGO)	

Michael Kaufman	Engaging men and boys in achieving gender equality and
	ending violence against women
Rebecca Asher	Wrote book: Shattered
Hiromi Tanaka	Can speak to Japan's policies

METHODOLOGY

Indicator One: Parenting Leave Design

To derive the first sub-index, **the total duration of leave**, we first add up the amount of statutory time off work offered to parents during paternity leave, maternity leave, and parental leave⁶⁸. If parents can take the leave together, we only count that time once. For example, a country may offer two months of maternity leave, two months of paternity leave, and two months per parent of parental leave (post maternity and paternity leave periods). However, all of these leave opportunities can be taken by both parents simultaneously. Therefore, the total duration of leave in this example would be four months (two months of maternity or paternity leave plus two months of parental leave)⁶⁹.

Once the various types of leave are added together, we compare the total amount of leave to Dearing's ideal leave model, which – as outlined above - consists of 14 months or a "moderate" duration of leave for the family. Since too little or too much leave can increase the mother's caring responsibilities in relation to the father's caring responsibilities, the sub-index assumes a non-linear, inverted V-shaped relationship between total duration of leave and the gender division of labour⁷⁰. Dearing's Figure 1 below outlines the relationship computed in the sub-index "total duration of leave".

⁶⁸ We do not consider leave offered post parental leave, in a period often classified as childcare leave.

⁶⁹ If we were to consider leave that can be taken simultaneously by parents, the total duration of leave in the example would be eight (two months of maternity leave plus two months of parental leave for the mother plus two months of parental leave for the father.

⁷⁰ Dearing, H. (forthcoming) "How to assess European leave policies regarding their compliance with an ideal leave model." The Journal of European Social Policy.

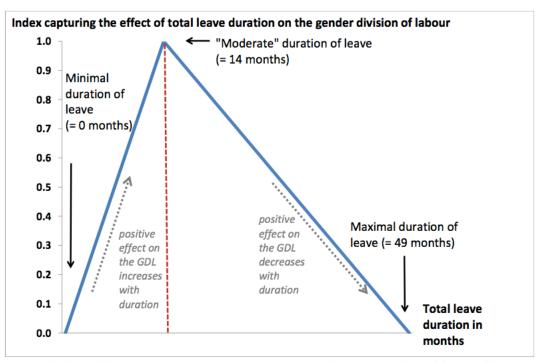


Figure 1: The design of the index assumes a non-linear, inverted V-shaped relation between the total duration of leave and the gender division of labour (GDL). The index assigns a value of 0 to countries with a minimum duration of 0 months of leave. With that point of reference, those countries with longer durations of total leave receive higher index values, up to the point of "moderate duration" at which leave amounts to 14 months and the index value assigned is 1. After this point, the index values for countries with longer durations of leave decrease, down to a value of 0 for countries with a very long duration of 49 months.

To derive the second sub-index, the total duration of well-paid leave, we first add up the amount of statutory time off work offered to parents during paternity leave, maternity leave, and parental leave that is paid at 66 percent or higher of the parent's salary. If the policy imposes a payment ceiling below the country's average annual wage, we calculate the wage replacement rate based on the payment ceiling. For example, a country's leave policy may offer to pay 100 percent of the parent's salary with a ceiling of \$1,000 per month. If the country's average monthly wage is \$2,000 per month, the wage replacement rate is 50 percent of the parent's earnings. Therefore, this falls below the 66 percent benchmark and does not constitute well-paid leave. Unlike the first sub-index, we add the total amount of well-paid leave offered even if the parents can take the leave simultaneously. To revisit the original hypothetical example, a country may offer 2 months of maternity leave, 2 months of paternity leave, and 2 months per parent of parental leave (post maternity and paternity leave). All of the leave is paid at 66 percent of the parent's salaries and all the leave can be taken by both parents simultaneously. The total duration of well-paid leave is eight months (two months of

maternity leave plus two months of parental leave for the mother plus two months of parental leave for the father).

The total duration of well-paid leave sub-index again assumes an inverted, v-shaped relationship between the duration of well-paid leave and the gender division of labour. As outlined above, the ideal duration of well-paid leave outlined by Dearing's model is 14 months.

To derive the third sub-index, the share of well-paid leave reserved for fathers, we divide the amount of well-paid, non-transferable leave reserved for fathers by the total duration of well-paid leave. Revisiting the previous example - for a country that offers two months of well-paid maternity leave, two months of well-paid paternity leave, and two months per parent of well-paid parental leave (post maternity and paternity leave) - the share of well-paid leave for fathers would be .5 (four months for fathers of an eight months total). Again, the share of well-paid leave reserved for fathers sub-index assumes an inverted v-shaped relationship between the share of well-paid leave reserved for fathers and the gender division of labour. The ideal share of well-paid leave reserved for fathers outlined by Dearing's model is .5.

It is important to note that Dearing cautions that the EGDL Indicator is sensitive to the maximum and minimum values assumed in each sub-index of the indicator. We remind that, in each sub-index, we compare a country's policy to the ideal policy model outlined by Dearing. To create the sub-index, we need minimum and maximum values, as seen in Dearing's Figure 1. For example, the sub-index total duration of leave assumes a minimum value of zero months of leave for families, a maximum value of 49 months of leave for families, and an ideal value of 14 months of leave for families. The sub-index total duration of well-paid leave assumes a minimum value of zero months of leave for families, a maximum value of 25 months of leave for families, and an ideal value of 14 months of leave for families. The sub-index share of well-paid leave reserved for fathers (or mothers) assumes a minimum value of zero, a maximum value of one, and an ideal value of .5. The EGDL indicator being sensitive to the maximum and minimum values assumed in each sub-index of the indicator means that if we increase or decrease the maximum and minimum values used to calculate each sub-index, the indicator's results per country can change significantly. In her paper, Dearing stresses that no index is perfect. Nevertheless, in our opinion her Indicator is an intelligent approach to the important task of comparing vastly different leave policies across countries. Likewise, although there is a lack of empirical evidence showing that 14 months is the ideal

amount of leave, we agree with Dearing's approach that a moderate duration of leave promotes egalitarian parenting. Dearing notes that the indicator is not sensitive to changing the assumption that the ideal leave is 14 months. Additionally, counting leave that can or cannot be taken by each parent in the total summation of total duration of leave and total duration of well-paid leave may affect the indicator.

EGDL Calculations

As mentioned earlier, each version of the EGDL weights the various sub-indices differently. Below are the equations for each version of the indicator and each country's corresponding EGDL score and rank. The version used in the 2015-2016 FiFI is the Father Cantered EGDL which places an emphasis on the opportunities a country provides to fathers to increase their caring responsibilities within the family.

Baseline EGDL indicator_i

 $= \frac{(index\ of\ total\ leave_i + index\ of\ wellpaid\ leave_i + index\ of\ father\ leave_i)}{2}$

Equal Gender	Division of Labour Calculation	ons
Country	Baseline Centred EGDL Score	Rank
Japan	0.733	1
Norway	0.699	2
Sweden	0.676	3
Canada (Quebec)	0.495	4
Iceland	0.468	5
Italy	0.441	6
Finland	0.385	7
Ireland	0.330	8
Netherlands	0.326	9
Portugal	0.323	10
United Kingdom	0.313	11
Australia	0.286	12
New Zealand	0.286	13
Greece	0.282	14

Denmark	0.275	15
Spain	0.263	16
Belgium	0.260	17
France	0.260	18
Austria	0.234	19
Germany	0.201	20
Switzerland	0.165	21
United States	0.000	22

${\it Mother centred EGDL indicator}_i$

 $= \frac{2 (index \ of \ total \ leave_i * index \ of \ wellpaid \ leave_i) + index \ of \ father \ leave_i}{2}$

Equal Gender Division of Labor Calculations

Country	Mother Centred EGDL Score	Rank
Norway	1.342	1
Japan	1.300	2
Sweden	1.295	3
Canada (Quebec)	0.934	4
Italy	0.879	5
Iceland	0.825	6
Finland	0.717	7
Ireland	0.659	8
Netherlands	0.640	9
United Kingdom	0.626	10
Portugal	0.598	11
Australia	0.571	12
New Zealand	0.571	12
Greece	0.564	13
Denmark	0.549	14
Belgium	0.520	15

France	0.482	16
Austria	0.467	17
Spain	0.447	18
Germany	0.401	19
Switzerland	0.330	20
United States	0.000	21

Father centred EGDL indicator,

$$= \frac{[index \ of \ total \ leave_i + index \ of \ well \ paid \ leave_i + \mathbf{2} \ (index \ of \ father \ leave_i)]}{4}$$

Data Issues, Limitations, and Assumptions

There are three main issues and limitations with our calculations for the various versions of the EGDL. First, the Mother Cantered EGDL score is greater than one for the top four countries. Presumably, the fact we did not consider childcare leave (i.e. leave offered post parental leave) as Dearing does caused the score to be greater than one since additional time off from work would typically be taken or offered to the mother. Increased duration of leave for the family would likely cause the score of the first two sub-indices to go down.

Second, Peter Moss compiles an annual International Review of Leave Policies⁷¹. In Moss' calculations regarding duration of and payment of leave for families, he includes childcare leave benefits (i.e. benefits post maternity, paternity, and parental leave periods) and bonus months of leave offered to families (which occurs when both parents take a specified amount of leave to be eligible for extra leave or extra pay in addition to the basic leave offered). However, we excluded these previous elements to focus specifically on the base levels of leave offered in the periods closest to the child's birth, during which care patterns are established. In theory, all of Moss' calculations should be greater or the same as ours for leave reserved for fathers, total duration of leave, and total duration of well-paid leave. However, some of Moss's calculations were slightly less

⁷¹ Moss, P. (2015) International Review of Leave Policies and Research 2015. Available at: http://www.leavenetwork.org/lp and r reports/

than ours. Therefore, a thorough examination is recommended regarding the differences between Moss' assumptions and our assumptions.

Third, Japan continues to be at the top of the Baseline EGDL and the Father Cantered EGDL because Japan has a good amount of well-paid leave per parent and individually reserved well-paid leave for fathers. However, since research shows that fathers' uptake of leave is low in Japan, we believe that the high ranking of Japan may point to a weakness in the indicator.

It is important to reiterate the assumptions we made that differ slightly from Dearing's and Moss' calculations. First, as mentioned before, we excluded childcare leave and bonus months from our calculations. Second, for total duration of leave, we only summed the total length of time offered (i.e. if leave could be taken by both parents simultaneously, we only summed the leave for one of the parents during that simultaneous period). Third, for total duration of well-paid leave, we added together the well-paid leave for the father and for the mother even if it could be taken together. Fourth, if the ceiling on the payment to the parent is lower than the country's average wage, we calculate how well-paid the leave is based on the payment ceiling. If the country state it pays the parent at 66 percent or above but imposes a ceiling below the national average that causes the payment to be below the well-paid threshold, we no longer consider the leave to be well-paid. For example, Denmark pays a mother based on former earnings but imposes a payment ceiling of DKK 4,135 a week. The country's average weekly wage is DKK 7,977.75 (calculated by using the average annual wage found in the OECD database⁷²: DKK 414843 / 52 weeks = DKK 7,977.75 per week). This means Denmark pays the mother approximately 51.8 percent of her wages, which is below the 66 percent threshold for being well paid.

Other assumptions include the fact that for the countries with a ratio of 0/0 for share of leave reserved for father, we assumed the value for those countries to be zero. Although 0/0 is undefined, the assumption was necessary to compute the overall indicator score. Additionally, for Canada, we chose to look at Quebec as their leave policies are thought to be the most progressive in all of Canada. Quebec offers parents a basic leave plan and a special leave plan. We based the calculations on the basic leave plan. Had we used the special leave plan, the total duration of well-paid leave would have increased. Lastly, when leave was given in days or weeks instead of months and did not specify the

⁷² https://stats.oecd.org/Index.aspx?DataSetCode=AV_AN_WAGE

conversion into months, we assumed 4.33 weeks per month (i.e. 52 weeks / 12 months) and 30.42 days per month (i.e. 365 days / 12 months).

In an attempt to examine the sensitivity of the Father centred EGDL scores, we used Moss' leave calculations to re-analyse the top five ranked countries (see table below). As a reminder, Moss' assumptions are different than ours in the facts that he considers bonus months and childcare benefits in his summation of each leave period, and for total duration of leave for families, he adds together all the leave offered to parents even if that leave can be taken together. Thus, Moss' total duration of leave is often much higher than the total duration of leave we calculated. Consequently, too much leave can have a similarly negative impact on the EGDL score as too little leave. Using these calculations, Iceland was the only of the previously top five ranked countries for which the Father Cantered EGDL score increased. Japan still remains at the top of the ranking. For future research, we suggest a more in depth analysis of the different assumptions that can be made in the summation of the leave periods and the strengths and weaknesses of the EGDL Indicator.

Equal Gender Division of Labour Calculations			
Country	Father centred EGDL Score (using Moss' calculations)	Rank	
Japan	0.63	1	
Iceland	0.56	2	
Canada (Quebec)	0.48	3	
Sweden	0.42	4	
Norway	0.40	5	

Leave policies greatly differ across countries in duration, remuneration, and incentives, making it extremely difficult for researchers to make precise comparisons and accurately represent what is happening within each country. Moss has done a phenomenal job of outlining the different leave policies in each country, but his review does not allow for easy comparisons on what constitutes ideal leave policies. Leave Indicators, similar to the EGDL, attempt to make the comparison easier for policymakers to understand which policies best promote egalitarian parenting, thus having a potentially greater impact on affecting policy change. However, policymakers must understand that all indicators have their weaknesses and researchers should continue to search for the best possible

options. Unfortunately, there are too many gaps in the data for up-take of leave by parents to be able to compare this data across countries. Improved data on up-take would be extremely beneficial to understand what type of leave and how long parents actually take leave. However, there are many barriers to collecting this data. First, many parents may take annual leave right after the birth of a child because it is typically paid at 100% of the parent's salary with no ceiling (i.e. it is often better paid than the statutory leave). Thus, fathers who respond to surveys saying that they took leave after a child was born may be referring to annual leave and not parental leave. Additionally, the provision of payment during leave differs across countries and, sometimes, even within the country's different leave periods. For instance, the state may pay for part of the leave or may have the parent's employer pay for part or all of the leave. If the employer does not find it beneficial to submit for reimbursement, then the state will not be able to accurately determine who is taking leave. Therefore, an important avenue for future research would be improving and standardizing data on up-take of leave.

EGDL Calculations

Sub-Indices Min/Max/Ideal Values:

Total Duration of Leave Sub-Index

Min Value: 0 months Max Value: 49 months Ideal Value: 14 months

Total Duration of Well-Paid Leave Sub-Index

Min Value: 0 months Max Value: 25 months Ideal Value: 14 months

Share of Well-Paid Leave Reserved for Fathers Sub-Index

Min Value: 0 Max Value: 1 Ideal Value: .5

y = mx + b

Total Duration of Leave Sub-Index Calculations:

upward slope: y = 0, x = 0 y = 1, x = 14 $m = \Delta y / \Delta x = 1/14$ y = x/14

downward slope:

y = 1, x = 14

```
y = 0, x = 49

m = \Delta y / \Delta x = -1/35

y = -x/35 + b

0 = -49/35 + b

b = 49/35 = 1.4

y = -x/35 + 1.4
```

Total Duration of Well-Paid Leave Sub-Index Calculations:

upward slope: y = 0, x = 0 y = 1, x = 14 $m = \Delta y / \Delta x = 1/14$ y = x/14

y = mx + b

downward slope:

y = 1, x = 14 y = 0, x = 25 $m = \Delta y / \Delta x = -1/11$ y = -x/11 + b 0 = -25/11 + b b = 25/11 = 2.27y = -x/11 + 2.27

Share of Well-Paid Leave Reserved for Fathers Sub-Index Calculations:

y = mx + b

upward slope:

y = 0, x = 0 y = 1, x = .5 $m = \Delta y / \Delta x = 1/.5$ y = 2x

downward slope: y = 1, x = .5 y = 0, x = 1 $m = \Delta y / \Delta x = -1/.5$ y = -2x

Australia

52 weeks of parental leave, individual entitlement, paid for mothers for 18 weeks based on national min wage (\$640.90 per week) and 2 weeks of Dad and Partner pay at the same rate

Avg Annual Wage: 77433

Avg per week wage: 77433/52 = 1,489.09

Total duration of leave (in months:

12 months

Duration of well-paid leave (in months: 0 months 640.90/1,489.09 = .43, less than 2/3 of salary

Duration of well-paid leave reserved for fathers (in months): 0 months

Share of well-paid leave reserved for fathers (in fractions): 0/0

Austria

Maternity leave: 16 weeks of maternity leave (8 pre and post birth), obligatory to take leave, paid 100% of average income for the last 3 months, no ceiling

Paternity leave: none (public workers can take one month unpaid)

Parental leave: 5 schemes available, 4 flat rate and 1 income related – highest take-up rate: €436 a month for 30 months or for 36 months if both parents apply for the payment

Can be taken by either parent or by both parents on an alternating basis, divided into a maximum of three parts. Parents cannot take leave at the same time except from one month the first time they alternate leave. If taken together, the leave becomes one month shorter.

Avg annual wage 2014: 39,988

Avg monthly wage: 39,988/12 = 3332.33

Total duration of leave (in months): 33.69 months

16 weeks + 30 months

16/(52/12) + 30 months = 33.69 months

Duration of well-paid leave (in months): 3.69 months

436/3332.33 = .13116/(52/12) = 3.69

Duration of well-paid leave reserved for fathers (in months): 0 months

Share of well-paid leave reserved for fathers (in fractions): 0

Belgium

Maternity: 15 weeks (1 week before birth and 9 weeks after birth are obligatory), paid at 82% of salary for the first 30 days and then 75% of salary with ceiling of €133 per day

Paternity: 10 days (3 days are obligatory), 3 days paid at 100%, 7 days at 82%

Parental: 4 months per parent, individual entitlement, paid at €707.08 per month

Avg Annual Wage: 42727

Avg monthly wage: 42727/12 = 3560 Avg weekly wage: 42727/52 =821.673 Avg daily: 42727/365 = 117.06

Total duration of leave (in months): 7.46 months

15 weeks + 4 months 15/(52/12) + 4 = 7.46

Duration of well-paid leave (in months): 3.46 months

117.06/133 = .88 707.08/3560 = .19 15/(52/12)

Duration of well-paid leave reserved for fathers (in months): 0 months

Share of well-paid leave reserved for fathers (in fractions): 0

Canada (Quebec only)

Assumption: Used basic plan in calculations, not the "special plan" – if we used the special plan, the duration of well-paid leave would increase.

Maternity: 15-18 weeks, paid at 70% for 18 weeks or the "special plan" is paid at 75% for 15 weeks with ceiling of C\$70,000 per year

Paternity: 3-5 weeks, paid at 70% for 5 weeks or the "special plan" is paid at 75% for 3 weeks with ceiling of C\$70,000 per year

Parental: 25-32 weeks, paid at 70% for 7 weeks and 55% for 25 weeks or the "special plan" is paid at 75% for 25 weeks http://www.rqap.gouv.qc.ca/travailleur_salarie/types/maternite_en.asp

Total duration of leave (in months): 11.538 months

(18+32)/(52/12) = 11.538 months

Duration of well-paid leave (in months): 6.919 months (18+7)/(52/12) = 5.769 months

Duration of well-paid leave reserved for fathers (in months): 1.15 months 5/(52/12)=1.15

Share of well-paid leave reserved for fathers (in fractions): .166 1.15/6.919 = .166

Denmark

Maternity: 18 weeks (4 before birth, 14 after, the first 2 weeks are compulsory), paid based on former earnings up to a ceiling of DKK 4,135 a week

Paternity: 2 weeks, paid based on former earnings up to a ceiling of DKK 4,135 a week

Parental: each parent can take 32 weeks of leave but each family can only claim 32 weeks of paid leave, paid based on former earnings up to a ceiling of DKK 4,135 a week

Avg annual wage = 414843

Avg weekly wage = 414843/52 = 7,977.75

Total duration of leave (in months): 11.538 months

(18+32)/(52/12) = 11.538 months

Duration of well-paid leave (in months): 0 months

4135/7977.75 = .518

Duration of well-paid leave reserved for fathers (in months): 0 months

Share of well-paid leave reserved for fathers (in fractions): 0/0

Finland

Maternity: 105 working days (17.5 weeks, 30-50 days before birth, obligatory to take 2 weeks before birth and 2 weeks after birth), paid at 90% for 56 days and 70% for 49 days (one calendar week consists of 6 working days)

Paternity*: 44 workings days (7.33 weeks, 1 to 18 days can be taken while mother is on maternity or parental leave), paid at 75% for the first 30 days if annual earnings are between €9,610 and €56,302; paid at 70% for the last 14 days or for the 1 to 18 days taken while the mother is on leave if the annual earnings between €10,297 and €36,420*. The pay is lower for earnings above the specified levels.

*The last 14 days are paid at 70% if the wage falls between €10297 and €36420. If the income is above that level, the person is paid a lower percentage, which is not given. Therefore, we use the wage replacement rate of 65%, which is the average OECD pay rate for fathers**, similar to Ray et al. 2009 strategy***.

**http://www.oecd.org/els/soc/PF2_1_Parental_leave_systems.pdf
***In Ray et al. they state: Finland's sliding-scale benefits offer between roughly
30 and 70 percent wage replacement, depending on the parent's usual wage level.
Figure 1 shows a 65 percent rate, reflecting the OECD (2005) assessment of
average worker benefits.

Parental: 158 working days (26.33 weeks), family entitlement, paid at 75% for the first 30 days if annual earnings are between €9,610 and €56,302; paid at 70% for the last 128 if the annual earnings between €10,297 and €36,420. The pay is lower for earnings above the specified levels.

NOTE: The duration of well-paid for fathers is calculated assuming the fathers take a maximum of 18 days of paternity leave with the mother since that would constitute the lowest amount they would be paid. The leave offers 65% pay for 14 days or for 18 days if they take that leave with the mother.

Avg annual wage = 40560

Total duration of leave (in months): 8.65 months (105 + 158)/(365/12)= 8.65

Duration of well-paid leave (in months): 5.29 months (105+30)/(365/12) = 4.44

Duration of well-paid leave reserved for fathers (in months): .85 months

 $44-18 = 26 \quad 26/(365/12) = .85$

Share of well-paid leave reserved for fathers (in fractions): .16

.85/5.29 = .16

France

Maternity: 16 weeks (2 before birth, 14 after), obligatory to take leave, paid at 100% up to a ceiling of €3,170 a month (no ceiling for public sector employees)

Paternity: 2 weeks (11 working days), paid at 100% up to a ceiling* of €3,170 a month (no ceiling for public sector employees)

Parental: until the child is 3 years old, individual entitlement, paid at approx. €391 per month (income related), the max one parent can receive payment is 24 months, thus the other parent must receive the other 12 months and must stop working or reduce hours worked

*Parental leave is a family entitlement (moss, 2015).

Avg annual wage = 36066 Avg monthly wage = 36066/12 = 3005.5 Avg weekly wage = 36066/52 = 693.57

Total duration of leave (in months): 36 months

12*3 = 36

Duration of well-paid leave (in months): 4.16 months

391/3005.5 = .1316/(52/12) + .46

Duration of well-paid leave reserved for fathers (in months): .46 months

2/(52/12) = .46

Share of well-paid leave reserved for fathers (in fractions): .11

.46/4.16 = .11

Maternity: 14 weeks (6 before birth, 8 after), obligatory to take the 8 weeks after birth, paid at 100%, no ceiling

Paternity: none

Parental: until the child is 3 years old, individual entitlement, paid at 67% up to a ceiling of €1,800 a month for 10 months + 2 bonus months of paid leave if both parents take at least 2 months of leave

*Parental leave is a family entitlement (Moss, 2015).

Avg annual wage = 36514 Avg monthly wage = 36514/12 = 3,042.833 Total duration of leave (in months): 36 months

3*12 = 36

Duration of well-paid leave (in months): 3.23 months

1800/3,042.833 = .5914/(52/12) = 3.23

Duration of well-paid leave reserved for fathers (in months): 0 months

Share of well-paid leave reserved for fathers (in fractions): 0

Greece

Maternity: 17 weeks (8 before birth, 9 after), obligatory to take leave, paid at 100%

Paternity: 2 days, paid at 100%

Parental: 4 months, individual entitlement, unpaid

Total duration of leave (in months): 7.92 months

17/(52/12)+4= 7.92

Duration of well-paid leave (in months): 3.92 months

17/(52/12) = 3.92

Duration of well-paid leave reserved for fathers (in months): 0

Share of well-paid leave reserved for fathers (in fractions): 0

Iceland

Maternity: 3 months, obligatory to take 2 weeks, paid at 80% up to a ceiling of ISK 370,000 per month

Paternity: 3 months, paid at 80% up to a ceiling of ISK 370,000 per month.

Parental: 3 months to be divided between parents as they choose, obligatory to take 2 weeks, paid at 80% up to a ceiling of ISK 370,000 per month

Avg monthly wage = ISK 511,000 ISK http://www.tradingeconomics.com/iceland/wages

Total duration of leave (in months): 6 months

Duration of well-paid leave (in months): 9 months 370000/511000 = .72

Duration of well-paid leave reserved for fathers (in months): 3 months

Share of well-paid leave reserved for fathers (in fractions): .33

3/9 = .33

Ireland

Maternity: 42 weeks (2 before birth, 40 after), paid at €230 per week for 26 weeks, unpaid for 16 weeks

Paternity: none

Parental: 18 weeks, individual entitlement, unpaid

Avg annual wage = 51158 Avg weekly wage = 51158/52 = 983.81

Total duration of leave (in months): 13.846 months (42+18)/(52/12) = 13.846

Duration of well-paid leave (in months): 0 months 230/983.81=.23

Duration of well-paid leave reserved for fathers (in months): 0 months

Share of well-paid leave reserved for fathers (in fractions): 0/0

Italy

Maternity: 20 weeks (4 before birth, 16 after), obligatory to take leave, paid at 80%, no ceiling

Paternity: 1 day, obligatory, paid at 100%, no ceiling, additional 2 days can be taken if the mother agrees to transfer these days from her maternity leave)

Parental: up to 6 months per parent, individual entitlement, family can take total 10 months + 1 bonus month if father takes at least 3 months and father can extend his leave to 7 months, paid at 30%, no ceiling

Total duration of leave (in months): 14.615 months 20/(52/12) + 10 = 14.615

Duration of well-paid leave (in months): 4.648 months 20/(52/12) + .033 = 4.648

Duration of well-paid leave reserved for fathers (in months): $.033 \ 1/(365/12) = .033$

Share of well-paid leave reserved for fathers (in fractions): .007 .033/4.648 = .007

Japan

Maternity: 14 weeks (6 before birth, 8 after), obligatory to take 6 weeks, paid at 2/3 of salary

Paternity: none

Parental: until the child is 12 months old, per parent, individual entitlement, can be extended up to when the child is 14 months old if both parents take some leave but each parent is only entitled to 12 months including maternity leave, paid at 67% for the first 180 days with a ceiling of JPY426,000 per month, and at 50% after with a ceiling of JPY343,200 per month

*If we had the father's annual wage, the father's FTE may be negatively affected by the pay ceiling.

Avg annual wage = 3999790 Avg monthly wage = 3999790/12 = 333,315.83

Total duration of leave (in months): 12 months

Duration of well-paid leave (in months): 11.8 months 180/(365/12) + 180/(365/12)

Netherlands

Maternity: 16 weeks (4 before birth, 12 after), paid at 100% salary with a ceiling of €197 per day

Paternity: 2 days, paid at 100%, no ceiling

Parental: Twenty-six times the number of working hours per week per parent per child, individual entitlement, unpaid but all parents taking parental leave are entitled to a tax reduction of €4.24 an

hour for each hour of leave, has to be taken part time unless employee agrees leave to be full time (Duration calculation ex.: a full-time job of 38 hours a week gives a leave entitlement of 988 hours, i.e.

26 weeks.)

tax reduction: €4.24*38 = €161.12 per week €161.12/878.05769 = .18349 >> 18.349% pay increase (?)

Avg annual wage = 45659 Avg weekly wage = 45659/52 = 878.05769 Avg daily wage = 45659/365 = 125.09

Total duration of leave (in months): 9.69 months (16+26)/(52/12) = 9.69Duration of well-paid leave (in months): 3.76 months 161.12/878.06 = .18 16/(52/12) + .066 = 3.76

Duration of well-paid leave reserved for fathers (in months): .066 months 2/(365/12) = .066

Share of well-paid leave reserved for fathers (in fractions): .018 .066/3.76 = .018

New Zealand

Maternity: 16 weeks, paid at 100% with a ceiling of NZ\$504.10 per week (18 weeks from 1 April 2016)

Paternity: 1 or 2 weeks depending on eligibility, unpaid but mother can transfer pay entitlement

Parental: up to 52 weeks minus any maternity leave that was taken but paternity leave is additional, family entitlement, unpaid

Avg weekly wage = \$1,112

- The average weekly earnings for a full-time NZ public sector employee is \$1379 in ordinary earnings, rising to \$1402 including overtime.
- The average weekly earnings for a full-time NZ private sector employee is \$1010 in ordinary earnings, rising to \$1112 including overtime.

http://www.enz.org/new-zealand-salaries.html

Since the private sector makes less, we will use their average salary.

Total duration of leave (in months): 12 months

Duration of well-paid leave (in months): 0 months 504.1/1112 = .45

Duration of well-paid leave reserved for fathers (in months): 0 months

Share of well-paid leave reserved for fathers (in fractions): 0/0

Norway

Maternity: 13 weeks (3 before birth, 10 after), obligatory to take 6 weeks after birth, paid at 100% with a ceiling of NOK\$530,222 a year

Paternity: 2 weeks of "daddy days", unpaid

Parental: 46 or 56 weeks depending on payment level + 3 weeks before birth; of postnatal leave, 10 weeks are for mothers, 10 weeks are for fathers as "father quota", remaining 26-36 weeks for either parent, paid at 100% for 49 weeks or 80% at 59 weeks with a ceiling of NOK\$530,222 a year

Avg annual wage = 510371

Total duration of leave (in months): 13.38 months (12+46)/(52/12)

Duration of well-paid leave (in months): 13.38 months

Duration of well-paid leave reserved for fathers (in months): 2.31 months 10/(52/12)

Share of well-paid leave reserved for fathers (in fractions): .17 2.31/13.38

Portugal

"Initial Parental Leave": 120 days paid at 100% or 150 days paid at 80%, obligatory for mother to take 42 days (6 weeks) post birth and remaining days can be divided between parents. Additional 30 if father takes 30 consecutive days or two 15 consecutive days, in which case 150 days paid at 100% or 180 days paid at 83%, no ceiling

Paternity: 20 days, 10 days are obligatory and must be taken first month after birth, paid at 100%, no ceiling

Parental: 3 months per parent, individual entitlement, paid at 25%

Total duration of leave (in months): 6.945 months 120/(365/12) + 3 = 6.945

Duration of well-paid leave (in months): 4.605 months 120/(365/12) + .66 = 4.605

Duration of well-paid leave reserved for fathers (in months): .6620/(365/12)

Share of well-paid leave reserved for fathers (in fractions): .167 .66/4.065 = .16

Spain

Maternity: 16 weeks, 6 weeks after birth are obligatory, paid at 100% with a ceiling of €3,606 a month

Paternity: 15 days paid at 100% with a ceiling of €3,606 a month

Parental: until the child is 3 years old, per parent, individual entitlement, unpaid - during the first year, return to the same job position is protected; after the first year, job protection is restricted to a job of the same category - unpaid

Avg annual wage = 26884 Avg monthly wage = 26884/12 = 2,240.33

Total duration of leave (in months): 36 months 3*12 = 36

Duration of well-paid leave (in months): 0 months 2240.33/3606 = .62

Duration of well-paid leave reserved for fathers (in months): 0 months

Share of well-paid leave reserved for fathers (in fractions): 0/0

Sweden

Maternity: 2 weeks, obligatory, paid at 77.6% with a ceiling of SEK\$333,750 per year

Paternity: 10 days, paid at at 77.6% with a ceiling of SEK\$333,750 per year

Parental: until the child is 18 months old, per parent, 480 days total of paid leave with sixty days reserved for each parent and cannot be transferred -- 390 days paid at 77.6%; last 90 days paid at €20 per day. Parents who take the shareable leave allowance equally get a SEK50 daily bonus for a maximum of 270 days.

Avg annual wage = 377617

Total duration of leave (in months): 18 months

Duration of well-paid leave (in months): 13.61 months 333750/377617 = .88 20*365 = 7300 2/(52/12) + 390/(365/12) + 10/(365/12) = 13.61

Duration of well-paid leave reserved for fathers (in months): 2.3 months (10 + 60)/(365/12)

Share of well-paid leave reserved for fathers (in fractions): .17

2.3/13.61 = .17

Switzerland

Maternity: 16 weeks, obligatory to take 8 weeks after birth, paid at 80% for 14 weeks with a ceiling of CHF7,350 per month

Paternity: none

Parental: none

Avg annual wage = 86812 Avg monthly wage = 86812/12 = 7234

Total duration of leave (in months): 3.69 months 16/(52/12) =

Duration of well-paid leave (in months): 3.23 months 14(52/12) = 3.23

Duration of well-paid leave reserved for fathers (in months): 0 months

Share of well-paid leave reserved for fathers (in fractions): 0

United Kingdom

Maternity: 52 weeks, obligatory to take 2 weeks after birth, paid at 90% for 6 weeks and £139.58 per week or 90% (whichever is lower) for 33 weeks

Paternity: 2 weeks, paid at £139.58 per week or 90% (whichever is lower)

Parental: 18 weeks, per parent, individual entitlement, unpaid

Avg annual wage = 32936 Avg weekly wage = 32936/52 = 633.38

Total duration of leave (in months): 16.15 months (52+18)/(52/12) = 16.15

Duration of well-paid leave (in months): 0 months 139.58/633.38 = .22

Duration of well-paid leave reserved for fathers (in months): 0 months

Share of well-paid leave reserved for fathers (in fractions): 0/0

United States

Maternity: none

Paternity: none

Parental: No statutory rights to any type of leave but federal Family and Medical Leave Act (FMLA) leave offers 12 weeks unpaid, individual entitlement

Total duration of leave (in months): 0 months

Duration of well-paid leave (in months): 0 months

Duration of well-paid leave reserved for fathers (in months): 0 months

Share of well-paid leave reserved for fathers (in fractions): 0/0

Parental Leave Policies

Country	Leave Reserved for Mothers	Leave Reserved for Fathers	Shared Leave
Australia (Whitehouse, et al., 2015)			52 weeks of parental leave, individual entitlement, paid for mothers for 18 weeks basd on national min wage (\$640.90 per week) and 2 weeks of Dad and Partner Pay paid at the same rate
Austria (Rille-Pfeiffer and Dearing, 2015)	16 weeks (8 pre and post birth, obligatory to take leave), paid at 100% of average income for the last 3 months, no ceiling	none (public workers may take 1 month unpaid)	until the child is 2 years old, family entitlement (may not be taken at same time, except for one month), (5 payment options available) option with highest take-up rate: €436 a month for 30 months or for 36 months if both parents apply for the payment
Belgium (Merla and Deven, 2015)	15 weeks (1 before birth and 9 after birth are obligatory), paid at 82% of salary for the first 30 days and then 75% of salary with celing of €133 per day	10 days, 3 days are obligatory, 3 days paid at 100%, 7 days at 82%	4 months per parent, individual entitlement, paid at €707.08 per month
Canada (Quebec only) (Doucet, et al., 2015)	18 weeks, paid at 70% for 18 weeks or 75% for 15 weeks with ceiling of C\$70,000 or	up to 5 weeks, paid at 75% for 3 weeks or 70% for 5 weeks	35 weeks, 7 weeks paid at 70% and 25 weeks paid at 55% with a ceiling of C\$524 per week
Denmark (Bloksgaard and Rostgaard, 2015)	18 weeks (4 before birth, 14 after, the first 2 weeks are compulsory), paid based on former earnings up to a ceiling of DKK 4,135 a week	2 weeks, paid based on former earnings up to a ceiling of DKK 4,135 a week	32 weeks of leave per parent, individual entitlement, but each family can only claim 32 weeks of paid leave, paid based on former earnings up to a ceiling of DKK 4,135 a week
Finland (Salmi and Lammi- Taskula, 2015)	105 working days (17.5 weeks, 30-50 days before birth, obligatory to take 2 weeks before birth and 2 weeks after birth), paid at 90% for 56 days and 70% for 49 days	44 workings days (7.33 weeks, 1 to 18 days can be taken while mother is on maternity or parental leave), paid at 75% for the first 30 days if annual earnings are between €9,610 and €56,302; paid at 70% for the last 14 days or for the 1 to 18 days taken while the mother is on leave if the annual earnings between €10,297 and €36,420. The pay is lower for earnings above the specified levels.	158 working days (26.33 weeks), family entitlement, paid at 75% for the first 30 days if annual earnings are between €9,610 and €56,302; paid at 70% for the last 128 days if the annual earnings between €10,297 and €36,420. The pay is lower for earnings above the specified levels.
France (Fagnani, Boyer, and Thévenon, 2015)	16 weeks (2 before birth, 14 after), obligatory to take leave, paid at 100% up to a ceiling of €3,170 a month (no ceiling for public sector employees)	2 weeks (11 working days), paid at 100% up to a ceiling of €3,170 a month (no ceiling for public sector employees)	until the child is 3 years old, per parent, individual intitlement, paid at approx. €391 per month (income related), the max one parent can receive payment is 24 months, thus the other parent must receive the other 12 months and must stop working or reduce hours worked
Germany (Blum and Erler, 2015)	14 weeks (6 before birth, 8 after), obligatory to take the 8 weeks after birth, paid at 100%, no ceiling	none	until the child is 3 years old, per parent, individual entitlement, paid at 67% with a ceiling of €1,800 a month for 10 months + 2 bonus months of paid leave if both parents take at least 2 months

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Country	Leave Reserved for Mothers	Leave Reserved for Fathers	Shared Leave
Germany Blum and Erler, 2015)	14 weeks (6 before birth, 8 after), obligatory to take the 8 weeks after birth, paid at 100%, no ceiling	none	until the child is 3 years old, per parent, individual entitlement, paid at 67% with a ceiling of €1,800 a month for 10 months + 2 bonus months of paid leave if both parents take at least 2 months
Greece Kazassi and (aramessini 2015)	17 weeks (8 before birth, 9 after), obligatory to take leave, paid at 100%	2 days, paid at 100%	4 months per parent, individual entitlement, unpaid
celand Eydal and Gíslason, (015)	3 months, obligatory to take 2 weeks, paid at 80% up to a ceiling of ISK 370,000 per month	3 months, obligatory to take 2 weeks, paid at 80% up to a ceiling of ISK 370,000 per month	3 months to be divided between parents as they choose, obligatory to take 2 weeks, paid at 80% up to a ceiling of ISK 370,000 per month
reland Drew, 2015)	42 weeks (2 before birth, 40 after), paid at €230 per week for 26 weeks, unpaid for 16 weeks	none	18 weeks per parent, individual entitlement, unpaid
taly Addabbo, et al., 2015)	20 weeks (4 before birth, 16 after), obligatory to take leave, paid at 80%, no ceiling	1 day, obligatory, paid at 100%, no ceiling, (additional 2 days can be taken if the mother agrees to transfer these days from her maternity leave)	up to 6 months per parent, individual entitlement, family can take total 10 months + 1 bonus month if father takes at least 3 months and father can extend his leave to 7 months, paid at 30%
lapan Nakazato and Iishimura, 2015)	14 weeks (6 before birth, 8 after), obligatory to take 6 weeks, paid at 2/3 of salary	none	until the child is 12 months old, per parent, individual entitlement, can be extended up to when the child is 14 months if both parents take some leave but each parent is only entitled to 12 months including maternity leave, paid at 67% for the first 180 days with a ceiling of JPY426,000 per month, and at 50% after with a ceiling of JPY343,200 per month
Netherlands (den Dulk, 2015)	16 weeks (4 before birth, 12 after), paid at 100% salary with a ceiling of €197 per day	2 days, paid at 100%, no ceiling	Twenty-six times the number of working hours per week per parent per child, individual entitlement, unpaid but all parents taking parental leave are entitled to a tax reduction of €4.24 an hour for each hour of leave, has to be taken part time unless employee agrees leave to be full time - (Duration example, a full-time job of 38 hours a week gives a leave entitlement of 988 hours (i.e. 26 weeks).
New Zealand (McDonald, 2015)	16 weeks, paid at 100% with a ceiling of NZ\$504.10 (18 weeks from 1 April 2016)	1 or 2 weeks depending on eligibility, unpaid but mother can transfer pay entitlement	up to 52 weeks minus any maternity leave that was taken but paternity leave is additional, family entitlement, unpaid

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Country	Leave Reserved for Mothers	Leave Reserved for Fathers	Shared Leave
Norway (Brandth and Kvande, 2015)	13 weeks (3 before birth, 10 after), obligatory to take 6 weeks after birth, paid at 100% with a ceiling of NOK\$530,222 a year	2 weeks of "daddy days", unpaid	46 or 56 weeks depending on payment level + 3 weeks before birth; of postnatal leave, 10 weeks are for mothers, 10 weeks are for fathers as "father quota", remaining 26-36 weeks for either parent, paid at 100% for 49 weeks or 80% at 59 weeks with a ceiling of NOK\$530,222 a year
Portugal (Wall and Leitão, 2015)	"Initial Parental Leave": 120 days paid at 100% or 150 days paid at 80%, obligatory for mother to take 42 days (6 weeks) post birth and remaining days can be divided between parents. Additional 30 if father takes 30 consecutive days or two 15 consecutive days, in which case 150 days paid at 100% or 180 days paid at 83%, no ceiling	20 days, 10 days are obligatory and must be taken first month after birth, paid at 100%, no ceiling	3 months per parent, individual entitlement, paid at 25%
Spain (Escobedo, Meil, and Lapuerta, 2015)	16 weeks, 6 weeks after birth are obligatory, paid at 100% with a ceiling of €3,606 a month	15 days paid at 100% with a ceiling of €3,606 a month	until the child is 3 years old, per parent, individual entitlement, unpaid
Sweden (Duvander and Haas, 2015)	2 weeks, obligatory, paid at 77.6% with a ceiling of SEK\$333,750 per year	10 days, paid at at 77.6% with a ceiling of SEK\$333,750 per year	until the child is 18 months old, per parent, 480 days total of paid leave with sixty days reserved for each parent and cannot be transferred — 390 days paid at 77.6%; last 90 days paid at SEK20 per day. Parents who take the shareable leave allowance equally get a SEK50 daily bonus for a maximum of 270 days.
Switzerland (Valarino, 2015)	16 weeks, obligatory to take 8 weeks after birth, paid at 80% for 14 weeks with a ceiling of CHF7,350 per month	none	none
United Kingdom (O'Brien, Koslowski, and Daly, 2015)	52 weeks, obligatory to take 2 weeks after birth, paid at 90% for 6 weeks and £139.58 per week or 90% (whichever is lower) for 33 weeks	2 weeks, paid at £139.58 per week or 90% (whichever is lower)	18 weeks, per parent, individual entitlement, unpaid
United States (Gatenio Gabel, Waldfogel, and Haas, 2015)			no statutory rights to any type of leave but federal Family and Medical Leave Act (FMLA) leave offers 12 weeks unpaid, individual entitlement

Indicator Three: Men's percentage share of the part-time workforce

This indicator was constructed using OECD data on the incidence of full-time and part-time employment. In order to better understand part-time employment and trends over the past few years, we widened our scope to examine employment rates, 73 part-time employment, and the percentage of people in part-time versus full-time employment (see appendix for further details about methodology). It is important to understand a broader picture of employment rates across the population to interpret the gender wage gap data. In this indicator, countries are ranked from highest to lowest by men's share of the part-time workforce. The argument here is that if men are participating in part-time work, they have more time available to share the responsibilities of work and care.

Total annual incidence of part-time employment 2009 and 2014.

Country	Part-Time Employment 2009	Part-Time Employment 2014	Difference	Trend
Netherlands	36.7	38.5	1.80	(+)
Switzerland	26.5	26.9	0.40	(+)
Australia	24.6	25.2	0.60	(+)
United Kingdom	23.9	24.1	0.20	(+)
Ireland	23.8	23.4	-0.40	(-)
Japan	20.3	22.7	2.40	(+)
Germany	21.9	22.3	0.40	(+)
New Zealand	22.4	21.5	-0.90	(-)
Austria	18.7	20.9	2.20	(+)
Denmark	18.8	19.7	0.90	(+)
Canada	19.3	19.3	0.00	0
Italy	15.9	18.8	2.90	(+)
Norway	20.4	18.8	-1.60	(-)
Belgium	18.2	18.1	-0.10	(-)
Iceland	17.5	16.7	-0.80	(-)

⁷³ https://data.oecd.org/emp/employment-rate.htm#indicator-chart =Total, Percent of working age population (2014) Data last extracted 5 March 2016 06:30 GMT from OECD Extracts.

⁷⁴ http://stats.oecd.org/index.aspx?Datasetcode=ftptc_i = FTPTC_I Incidence of PT employment – common definition (2014) Data extracted 3 November 2015 15:55 GMT from OECD.Stat Extracts.

Spain	11.6	14.7	3.10	(+)
France	13.3	14.2	0.90	(+)
Sweden	14.6	14.2	-0.40	(-)
Finland	12.2	13.3	1.10	(+)
Greece	8.5	11.2	2.70	(+)
Portugal	9.8	11	1.20	(+)

Employment Rate	es		
Country	2009	2014	Difference
AUSTRALIA	72.1	71.6	-0.47
AUSTRIA	70.3	71.1	0.75
BELGIUM	61.6	61.9	0.30
CANADA	71.4	72.3	0.92
DENMARK	75.4	72.8	-2.58
FINLAND	68.7	68.7	0.00
FRANCE	64.1	63.8	-0.28
GERMANY	70.3	73.8	3.45
GREECE	60.9	49.4	-11.43
ICELAND	78.3	81.6	3.30
IRELAND	61.9	61.7	-0.20
ITALY	57.4	55.7	-1.65
JAPAN	70.5	72.7	2.25
NEW ZEALAND	72.8	74.2	1.44
NORWAY	76.4	75.2	-1.20
NTHERLANDS	77.0	73.1	-3.85
PORTUGAL	66.1	62.6	-3.48
SPAIN	60.0	56.0	-3.95
SWEDEN	72.2	74.9	2.65
SWITZERLAND	79.0	79.8	0.80
UNITED KINGDOM	69.9	71.9	2.03
USA	67.6	68.1	0.55

Indicators Seven to Nine: Using the EQLS

Indicators Seven, Eight and Nine use the original databases from the three European Quality of Life Surveys (EQLS) available when producing this report. The survey from 2012 examines 27 European countries and seven non-European countries and has a sample of 18,788 males and 24,848 females; the survey from 2007 has 31 participating countries and has a sample of 15,362 males and 20,272 females; the survey from 2003 covers 28 countries and has a sample of 11,251 males and 9,272 females. These databases were chosen because they allow for robust comparability across countries and over years. Other options, such as information from UN Women and OECD were not updated, presented less precise information (no disaggregation of unpaid work) or presented comparability issues across countries and/or over years.

The variables used from the 2012 and 2007 surveys captures hours per week dedicated to the corresponding activities, although the wording of the question varied slightly. In the case of the 2003 survey, the variable was captured in hours per day rather than hours per week. In order to allow a comparison with the other surveys, the variable was multiplied by seven so it could represent hours per week, such as the other surveys. The linear transformation did not show any changes in the distribution. The variables used were:

For 2012:

- Q37a Caring for your children, grandchildren / How many hours per week?
- Q37b Cooking and/or housework / How many hours per week?
- Q36c Caring for elderly or disabled relatives / How often are you involved in activity outside of work?

For 2007:

- Q37a: On average, how many hours in a week do you spend on caring for and educating children?
- Q37b: On average, how many hours in a week do you spend on cooking and housework?
- Q36. How often are you involved in any of the following activities outside of paid work? / Q36_3
 Caring for elderly/disabled relatives

For 2003:

Q38a: How many hours a day: caring for and educating children?

- Q38b: How many hours a day: housework?
- Q37c: How often: Caring for elderly/disabled relatives

The choice for using averages rather than other measures, such as median or proportions between deciles of the distribution, is justified by the type of information that we intend to capture. Averages give equal weight to every observation, representing equally all the distribution, while other measures are more representative of some groups of observations (proportion) or the centre of the distribution (median). Another reason for this choice was that the three variables are extremely skewed to the right, with the highest concentration on zeroes (persons that do not perform these activities) and low number of hours. For this reason, medians or proportions would not adequately capture the differences between men and women. Averages, on the other hand, are sensitive to the extremes, capturing relevant information about people that have extenuating journeys.

Cleaning the databases

The values from answers such as "I don't know" or refusals were not dropped from the sample, but rather excluded by conditionality commands in Stata.

In order to reduce the number of missing values and capture more information from the available samples, whenever the person answered that never did an activity, the corresponding missing value in the interest variables was substituted for a zero. It is reasonable to assume that whenever a person say that she or he never engage in the cited activities, this person dedicates zero hours per week to each of them. These changes were relevant because missing values were a significant, if not most part of the observations, reducing too much the sample, which highly affected the results.

- For example, the following replacements were made in the 2012 survey database:
- Whenever the answer for the question "Q36a Caring for your children, grandchildren / How often are you involved in activity outside of work?" was "never" (5), the missing value in Q37a was replaced by zero. In total, 17,689 missing values in Q37a were replaced by zero.
- Whenever the answer for the question "Q36c Caring for elderly or disabled relatives / How often are you involved in activity outside of work?" was "never" (5), the missing value in Q37c was replaced by zero. In total, 29,692 missing values in Q37c were replaced by zero.

• Whenever the answer for the question "Q36b Cooking and/or housework / How often are you involved in activity outside of work?" was "never" (5), the missing value in Q37b was replaced by zero. In total, 4,154 missing values in Q37b were replaced by zero.

Similar replacements were done in the equivalent variables for the 2003 and 2007 surveys.

Since the information used in the report is mainly expressed by national averages, the presence of outliers could mislead the results. In addition, it is reasonable to assume that it is unlikely that any person sleep less than four hours per day every day of the week. For this reason, observations over 140 hours per week were replaced by 140 hours. Changes below 140 hours per week had a disproportionate impact on women's hours, which implies that the information that would be lost with a lower cut was relevant in terms of gender comparisons. Although extreme outliers can mislead the interpretation, is important to maintain information on extenuating activities, because they may be correlated with the unfair distribution of unpaid work within households.

A t-test indicates that the replacement generates differences between the original and the new means that are statistically significant at the 1 percent level for childcare and caring for elderly and persons with disabilities; and at the 5 percent level for housework and cooking:

Two sample test for childcare:

. ttest ca	arechi==car	echi2				
Paired t t	test					
Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
carechi carechi2		52.34388 52.23112	1.006803 1.006504	195.5972 195.5392	50.37052 50.25834	
diff	37743	.1127626	.0087199	1.694065	.0956714	.1298539
	(diff) = mea	an(carechi -	carechi2)	degrees	t of freedom	= 12.9316 = 37742
	(diff) < 0 = 1.0000	Ha Pr(: mean(diff) [> t) =			(diff) > 0) = 0.0000

Two sample test for caring for elderly and persons with disabilities:

. ttest ca	aredis==car	edis2				
Paired t t	test					
Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
caredis	37399	19.9246	.6874298	132.9408	18.57722	21.27198
caredis2	37399	19.90834	.6873459	132.9246	18.56112	21.25556
diff	37399	.0162571	.0033077	.6396635	.009774	.0227402
	(diff) = me (diff) = 0	an(caredis -	caredis2)	degrees	t = of freedom =	= 4.9150 = 37398
	(diff) < 0 = 1.0000		: mean(diff) T > t) =			(diff) > 0 = 0.0000

Two sample test for housework and cooking:

. ttest housework==housework2						
Paired t t	test					
Variable	0bs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
housew~k	39589	54.21635	.9948156	197.9383	52.26649	56.16621
housew~2	39589	54.21357	.9948087	197.9369	52.26372	56.16342
diff	39589	.0027785	.001283	.2552715	.0002639	.0052932
mean	(diff) = mea	n(housework	- housework	2)	t	= 2.1657
Ho: mean	(diff) = 0			degrees	of freedom	= 39588
Ha: mean(diff) < 0 Ha: mean(diff) != 0 Ha: mean(diff) > 0					. ,	
Pr(T < t)	= 0.9848	Pr(1	' > t) =	0.0303	Fr(T > t) = 0.0152

Weighting

The EQLS for all three years include weights regarding gender, age, urbanization level, region and household size and country population. As the EQLS are random probability surveys of people over 18 years old living in private households, weights are required to increase the representativeness of the sample. For the country comparisons presented in this report, we used final national weights, which are the product of the selection probability weight and the post-stratification weight. The first corrects the probability of being selected for an interview by considering the number of adults in the households. Post-stratification weights corrects the undersampling of groups of people that are less

likely to participate in the survey. Using the Eurostat as reference, the EQLS considers differences on gender, age, urbanization and region. To correct for differences across households and household size, the EQLS use data from EU-SILC.

For the general mean that included information from all countries in the sample for each indicator, we used cross-national population weights to correct for the size of the adult population of each country relative to the EU adult population. These weights include the previous ones.

More information regarding weights and the surveys' methodology can be found at the respective methodology or weighting reports of the surveys.

Choosing Indicator 8: why not using ratio of men's to women's time caring for elderly and persons with disabilities

The first attempt to build indicator 8 followed the same logic of indicators 9 and 11: capturing the mean of minutes spent by men per every women's hour caring for elderly and persons with disabilities. Nevertheless, the results lacked consistency over time and across countries, which questions the quality of the measurement. A closer look at the observations showed that number of people engaging with these activities varies largely across countries and over the years, which explains the lack of a trend. On the other hand, the averages for hours spent by men and women show more consistency over time than the ratio between both (Table 7). The current indicator, which captures the ratio of the percentage of men to the percentage of women that care for elderly or persons with disabilities at least once a week, is more robust because it is less affected by the size of the sample. For this reason, it shows more consistency over years and across countries. In order to allow a comparison with the current indicator, the results for the original one can be found below.

Using the original indicator, the average for all countries that are part of the European Quality of Life Survey 2012 was 34.58 minutes per every women's hour, an increase compared to 2007 (29.61 minutes) and 2003 (31.48 minutes). Seven countries are above the mean, and in two of them men spend more time caring for elderly and persons with disabilities than women – Sweden and Belgium.

Minutes spent by men per every women's hour caring for
elderly and persons with disabilities for 2012, 2007 and
2003, with respective rankings.

Country	2012		200	7	200	3
NORWAY	-	-	19.64	12		-
SWEDEN	97.89	1	12.73	13	53.53	2
BELGIUM	69.18	2	32.78	6	38.88	6
FRANCE	56.82	3	49.25	3	20.69	11
UK	39.96	4	42.44	5	39.66	5
IRELAND	39.82	5	72.38	1	40.15	3
DENMARK	37.5	6	57.66	2	33.59	8
GERMANY	36.5	7	19.8	11	39.8	4
FINLAND	33.04	8	45.68	4	61.38	1
PORTUGAL	29.16	9	21.21	10	19.7	12
SPAIN	27.47	10	10.07	14	-	ı
NETHERLANDS	27.36	11	31.59	7	34.22	7
ITALY	27.3	12	26.34	9	22.93	9
GREECE	16.05	13	9.94	15	22.84	10
AUSTRIA	15.11	14	27.93	8	11.14	13

On average, men spent 1.29 hours per week caring for elderly and persons with disabilities, while women spent 2.24 hours. There is no clear trend over the years or across nations, which indicates that data should be interpreted with caution. The reason for these differences is that there is a small number of persons that actually engage with this kind of activity - in 2012, only 14.02 percent of the sample is involved in it once per week or more often, and only 6.36 percent does it daily (Table 2), and in the previous years it was even less (13.21 and 5.62 percent for 2007, and 13.43 and 5.95 percent for 2003).

Frequency of caring for elderly and persons with disabilities in 2012						
"How often are you involved in caring for elderly or disabled relatives?"	Frequency	Percentage	Cumulative percentage			
Every day	2,777	6.36	6.36			
Several days a week	1,576	3.61	9.98			
Once or twice a week	1,766	4.05	14.02			
Less often	4,821	11.05	25.07			
Never	31,280	71.68	96.75			
Do not know	916	2.1	98.85			
Did not answer	500	2.1	100			
Total	43,636	100	-			

Despite these caveats, the results of this measure confirms that, in general, men spend much less time than women spend caring for elderly and persons with disabilities. Even in countries where, in some year, men in the sample have spent more time than women in this activity, the comparison with other years show that this result probably derives from changes in the sample rather than a solid diagnostic of equality. The increasing mean in the ratio over the years show that European countries are slowly advancing towards a more equal division in care work for elderly and persons with disabilities.

FULL TABLES

This section include more detailed information for some indicators, including other countries that were not available for most of the indicators (i.e. could not be included in the index).

Sub-index 1: Pol	icies		
Countries	Indicator 1	Indicator 4	Subindex 1
Canada (Quebec)	0.612	-	_
Greece	0.313	-	_
Switzerland	0.184	-	-
Sweden	0.813	0.750	0.782
Iceland	0.644	0.750	0.697
Norway	0.840	0.500	0.670
Denmark	0.305	1.000	0.653
Japan	1.000	0.000	0.500
Finland	0.487	0.438	0.462
United Kingdom	0.348	0.438	0.393
New Zealand	0.317	0.438	0.377
France	0.247	0.500	0.374
Netherlands	0.369	0.313	0.341
Italy	0.492	0.125	0.308
Belgium	0.289	0.188	0.238
Australia	0.317	0.125	0.221
Ireland	0.366	0.063	0.214
Portugal	0.412	0.000	0.206
Spain	0.249	0.125	0.187
Austria	0.259	0.063	0.161
Germany	0.224	0.063	0.143
United States	0.000	0.000	0.000

Sub-index 2: Social environment												
Countries	Indicator 2	Indicator 3	Indicator 5	Indicator 6	Subindex 2							
Sweden	0.548	0.849	1.000	0.814	0.803							
Denmark	0.943	0.854	0.829	0.466	0.773							
Norway	0.967	0.439	0.886	0.686	0.744							
Iceland	0.576	0.608	0.914	0.835	0.734							
Finland	0.305	0.835	0.943	0.717	0.700							
Portugal	0.471	1.000	0.629	0.640	0.685							
Spain	0.857	0.241	0.914	0.565	0.644							
Greece	0.729	0.863	0.400	0.516	0.627							
Belgium	0.986	0.000	0.857	0.624	0.617							
United States	0.433	-	0.286	1.000	0.573							
New Zealand	1.000	0.335	0.629	0.242	0.551							
Canada	0.352	0.590	0.457	0.764	0.541							
Australia	0.410	0.434	0.514	0.764	0.530							
Italy	0.738	0.269	0.629	0.332	0.492							
Germany	0.629	0.047	0.771	0.516	0.491							
United Kingdom	0.438	0.231	0.571	0.674	0.479							
France	0.614	0.160	0.486	0.643	0.476							
Netherlands	0.290	0.311	0.800	0.407	0.452							
Ireland	0.657	0.325	0.200	0.609	0.448							
Switzerland	0.481	0.028	0.629	0.624	0.441							
Austria	0.405	0.024	0.629	0.516	0.393							
Japan	0.000	0.439	0.000	0.000	0.110							

Sub-index 3	Sub-index 3: Practices											
Countries	Indicator 7	Indicator 8	Indicator 9	Subindex 3								
Finland	0.951	0.754	0.831	0.845								
Denmark	0.903	0.410	1.000	0.771								
Iceland	0.603	0.738	0.813	0.718								
Sweden	0.072	1.000	0.891	0.655								
Belgium	0.594	0.475	0.598	0.556								
France	0.412	0.662	0.497	0.524								
Portugal	1.000	0.295	0.251	0.515								
Ireland	0.342	0.525	0.565	0.477								
Italy	0.669	0.525	0.219	0.471								
UK	0.000	0.652	0.601	0.418								
Netherlands	0.351	0.197	0.579	0.376								
Germany	0.079	0.459	0.572	0.370								
Spain	0.161	0.393	0.347	0.300								
Austria	0.187	0.033	0.358	0.193								

Standardize	Standardized scores for all indicators and final aggregation												
	Indica	tors							FiFI 2016	Ra	nking 2016		
Countries	1	4	2	3	5	6	7	8	9				
Sweden	0.813	0.750	0.548	0.849	1.000	0.814	0.072	1.000	0.891	0.749	1		
Denmark	0.305	1.000	0.943	0.854	0.829	0.466	0.903	0.410	1.000	0.745	2		
Iceland	0.644	0.750	0.576	0.608	0.914	0.835	0.603	0.738	0.813	0.720	3		
Norway	0.840	0.500	0.967	0.439	0.886	0.686	_	-	_	0.720	4		
Finland	0.487	0.438	0.305	0.835	0.943	0.717	0.951	0.754	0.831	0.696	5		
Canada	0.612	-	0.352	0.590	0.457	0.764	_	-	_	0.555	7		
Portugal	0.412	0.000	0.471	1.000	0.629	0.640	1.000	0.295	0.251	0.522	8		
Belgium	0.289	0.188	0.986	0.000	0.857	0.624	0.594	0.475	0.598	0.512	6		
New Zealand	0.317	0.438	1.000	0.335	0.629	0.242	_	-	_	0.493	9		
France	0.247	0.500	0.614	0.160	0.486	0.643	0.412	0.662	0.497	0.469	10		
Italy	0.492	0.125	0.738	0.269	0.629	0.332	0.669	0.525	0.219	0.444	11		
United Kingdom	0.348	0.438	0.438	0.231	0.571	0.674	0.000	0.652	0.601	0.439	12		
Australia	0.317	0.125	0.410	0.434	0.514	0.764	_	-	_	0.427	13		
Spain	0.249	0.125	0.857	0.241	0.914	0.565	0.161	0.393	0.347	0.416	14		
Ireland	0.366	0.063	0.657	0.325	0.200	0.609	0.342	0.525	0.565	0.406	15		
Netherlands	0.369	0.313	0.290	0.311	0.800	0.407	0.351	0.197	0.579	0.402	16		
Switzerland	0.184	-	0.481	0.028	0.629	0.624	_	-	-	0.389	17		
Greece	0.313	-	0.729	0.863	0.400	0.516	0.258	0.000	0.000	0.385	18		
Germany	0.224	0.063	0.629	0.047	0.771	0.516	0.079	0.459	0.572	0.373	19		
United States	0.000	0.000	0.433	-	0.286	1.000	_	-	_	0.344	20		
Austria	0.259	0.063	0.405	0.024	0.629	0.516	0.187	0.033	0.358	0.275	21		
Japan	1.000	0.000	0.000	0.439	0.000	0.000	_	-	_	0.240	22		

Indicator Seven: Ratio of men's to women's time spent caring for children

Average of minutes spent by men per every women's hour spent caring for children for 2012, 2007 and 2003.

		2003			2007		2012				
	М	F	Ratio	M	F	Ratio	М	F	Ratio	Std. scores	Ranking
Serbia	141	-	Itatio	-	_	-	14.69	20.78	42.42	1.000	1
Portugal	5.53	17.36	19.10	16.00	23.00	41.74	6.45	9.96	38.87	0.848	2
Finland	10.90	26.86	24.35	15.00	17.00	52.94	8.68	13.66	38.13	0.816	3
Denmark	6.49	15.47	25.18	19.00	23.00	49.57	6.77	10.87	37.40	0.785	4
Italy	7.65	18.39	24.96	15.00	20.00	45.00	6.27	11.12	33.86	0.633	5
Croatia	-	_	-	15.00	26.00	34.62	5.26	9.57	32.96	0.594	6
Iceland	_	-	_	-	-	-	11.63	21.23	32.87	0.590	7
Belgium	6.96	16.39	25.49	15.00	23.00	39.13	5.77	10.58	32.72	0.584	8
Cyprus	4.39	17.82	14.79	17.00	27.00	37.78	7.65	14.70	31.24	0.520	9
Romania	9.36	23.21	24.21	13.00	19.00	41.05	8.08	15.59	31.10	0.514	10
Macedonia	_	-	_	14.00	24.00	35.00	6.02	11.87	30.43	0.486	11
Hungary	7.30	23.38	18.74	16.00	22.00	43.64	5.97	11.76	30.42	0.485	12
Lithuania	8.97	19.01	28.33	18.00	29.00	37.24	8.55	16.99	30.20	0.476	13
France	12.89	21.64	35.73	17.00	29.00	35.17	7.90	15.82	29.98	0.466	14
Luxembourg	19.60	43.30	27.16	20.00	32.00	37.50	7.87	15.98	29.56	0.448	15
Slovenia	12.78	19.28	39.79	19.00	26.00	43.85	5.46	11.16	29.37	0.440	16
Netherlands	8.31	25.94	19.22	22.00	48.00	27.50	7.16	14.78	29.05	0.426	17
Ireland	7.17	27.43	15.69	20.00	32.00	37.50	11.89	24.67	28.92	0.421	18
Greece	3.96	13.20	17.99	14.00	25.00	33.60	6.54	14.20	27.65	0.366	19
Latvia	9.99	20.29	29.55	16.00	22.00	43.64	7.39	16.47	26.94	0.336	20
Austria	4.34	23.25	11.19	11.00	29.00	22.76	4.06	9.18	26.57	0.320	21
Spain	-	-	-	16.00	28.00	34.29	6.31	14.47	26.17	0.303	22
Germany	4.35	16.08	16.22	19.00	35.00	32.57	3.94	9.48	24.93	0.250	23
Sweden	10.18	17.25	35.40	26.00	33.00	47.27	6.56	15.85	24.83	0.245	24
Bulgaria	3.89	13.33	17.48	13.00	20.00		4.68	11.40	24.64	0.237	25
UK	6.07	29.52	12.34	19.00	35.00	32.57	9.44	23.86	23.74	0.199	26
Estonia	9.07	18.16	29.95		44.00	31.36	5.87	15.19	23.19	0.175	27
Czech		-		17.00	25.00	29.14	E 07	13.89	00.74	0.156	20
Republic Kosovo	-	_	-	_	35.00	_	5.27 2.66	7.11	22.74 22.43	0.142	28
Poland	_	_	_	23.00	37.00	37.30	5.62	15.31		0.125	
	-		-		31.00	200	0.02		22.03	1	30

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Montenegro	-	-	-	1	-	-	5.82	16.53	21.14	0.087	31
Slovakia	10.91	26.38	24.82	11.00	22.00	30.00	5.89	16.91	20.89	0.076	32
Turkey	4.44	29.36	9.07	10.00	21.00	28.57	6.74	20.61	19.62	0.022	33
Malta	6.27	14.11	26.67	12.00	23.00	31.30	4.98	15.64	19.11	0.000	34
Norway	-	-	-	23.00	40.00	34.50	-	-	-	-	-

Indicator Eight: Ratio of percentage of men to women in families caring for elderly people and persons with disabilities

Ratio of the percentage of men to women that care for elderly or persons with disability at least once a week

Country		2003.00			2007.00		2012							
	Male	Female	Potio	Mala	 Female	Potio	Molo	Famala	Potio	Std.	Ranking			
Sweden		11.59	0.74	6.18		0.52	8.34	8.02	1.04	1.000				
Czech	8.52	_	0.74	12.70	11.82	0.86	8.34	12.33	1.04	0.875	1			
Republic	_		-	12.1.0	14.83	0.00	11.84	12.00	0.96	0.010	2			
Bulgaria	15.42	17.60	0.88	11.99	13.09	0.92	11.97	13.01	0.92	0.812	3			
Luxembourg	6.83	11.74	0.58	10.09	15.25	0.66	10.81	12.03	0.90	0.779	4			
Finland	18.04	22.43	0.80	14.69	18.95	0.78	14.11	15.90	0.89	0.761	5			
Serbia	_	-	-	-	_	-	10.47	11.89	0.88	0.750	6			
Iceland	-	-	-	-	_	-	14.19	16.18	0.88	0.745	7			
Latvia	21.82	24.13	0.90	24.59	21.88	1.12	12.73	14.86	0.86	0.713	8			
Montenegro	-	-	-	-	-	-	8.84	10.43	0.85	0.699	9			
Slovenia	9.77	16.66	0.59	10.71	17.43	0.61	11.14	13.23	0.84	0.690	10			
France	6.89	11.78	0.58	10.83	11.87	0.91	14.99	17.98	0.83	0.677	11			
Uk	10.98	14.00	0.78	16.24	17.55	0.93	14.42	17.41	0.83	0.668	12			
Italy	13.65	18.15	0.75	16.17	25.63	0.63	15.39	20.45	0.75	0.550	13			
Ireland	10.94	15.42	0.71	13.69	17.36	0.79	13.82	18.53	0.75	0.539	14			
Poland	-	-	-	12.45	15.39	0.81	11.50	15.55	0.74	0.529	15			
Belgium	11.82	20.40	0.58	15.44	21.64	0.71	11.77	16.42	0.72	0.494	16			
Germany	7.42	11.47	0.65	7.41	12.13	0.61	6.18	8.73	0.71	0.480	17			
Lithuania	7.93	9.18	0.86	18.41	19.87	0.93	16.33	23.09	0.71	0.479	18			
Croatia	-	-	-	16.62	16.11	1.03	15.02	21.70	0.69	0.455	19			
Denmark	7.03	8.85	0.79	8.04	12.93	0.62	5.15	7.59	0.68	0.434	20			
Estonia	9.75	14.68	0.66	11.64	12.29	0.95	9.29	13.86	0.67	0.421	21			
Spain	-	-	-	6.51	18.52	0.35	11.54	17.25	0.67	0.419	22			
Hungary	8.81	13.50	0.65	13.36	17.28	0.77	11.89	17.90	0.66	0.412	23			
Romania	14.57	14.11	1.03	8.00	11.27	0.71	10.22	15.51	0.66	0.403	24			
Slovakia	21.81	22.04	0.99	14.52	17.20	0.84	9.36	14.21	0.66	0.403	25			
Portugal	7.15	9.94	0.72	5.95	13.15	0.45	8.59	14.12	0.61	0.324	26			
Turkey	14.02	17.89	0.78	8.91	11.34	0.79	12.88	22.90	0.56	0.252	27			
Netherlands	11.52	14.51	0.79	11.10	18.20	0.61	9.33	16.83	0.55	0.239	28			
Macedonia	-	-	-	19.55	20.26	0.96	6.64	12.25	0.54	0.220	29			

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Malta	12.71	18.09	0.70	8.91	17.89	0.50	9.01	17.43	0.52	0.181	30
Austria	5.30	9.91	0.53	7.65	12.75	0.60	5.30	11.84	0.45	0.072	31
Greece	7.57	12.30	0.62	5.67	19.18	0.30	6.90	15.89	0.43	0.051	32
Cyprus	3.48	12.39	0.28	4.47	10.16	0.44	4.16	10.36	0.40	0.000	33
Norway	-	-	-	7.53	15.06	0.50	-	-	-	-	34

Indicator Nine: Ratio of men's to women's time spent on housework

Average of minutes spent by men per every woman's hour spent on
housework and cooking for 2012, 2007 and 2003.

	2003			2007			2012				
Country	N.A	F	Datia		_	Datia		_	Datia	Std.	Danking
Country Estonia	M	25.83	Ratio	M 11.98	F	Ratio 44.36	M	F 15.84	Ratio	scores 1.000	Ranking
Romania	26.49	41.01	61.54	10.14	16.20	35.46	12.70	19.80	48.11	0.997	1
Denmark	37.06	15.66	54.22	7.92	17.16	37.83	15.84	11.03	47.99	0.909	3
Sweden	11.42	17.47	43.76	7.81	12.56	36.10	8.13	11.49	44.24	0.842	4
Latvia	13.48	27.01	46.30 53.35	9.50	12.98	36.71	7.93	16.08	41.40 40.45	0.819	5
Finland	24.02	16.91	48.58	7.95	15.52 13.21	36.11		11.34	39.82	0.804	6
Iceland	13.70	-	48.58	-	13.21	_	7.53	10.80		0.793	
Slovenia	10.00	25.92	-	7.15	10.70	22.86	7.08	14.59	39.34	0.670	7
UK	10.93	19.51	25.29	8.83	18.76	32.62	8.31	15.85	34.15	0.662	9
Belgium	11.74	23.90	36.10 30.62	7.73	16.24	26.14	8.93	13.85	33.80	0.660	
Lithuania	12.20	26.62	48.64	7.96	17.75	31.34	7.78	15.73	33.72	0.659	10
Hungary	21.58	28.39		7.86	15.24	26.30	8.82	15.46	33.66	0.658	11
Netherlands	18.57	21.61	39.26	7.07	17.94	29.90	8.66	13.59	33.61	0.649	12
Germany	13.23	23.50	36.74	7.64	14.19	25.91	7.53	15.24	33.23	0.644	13
Ireland	11.75	27.20	29.99	8.47	17.68	24.85	8.39	20.07	33.04	0.640	14
France	11.85	15.66	26.15 33.48	6.83	20.45 14.85	27.59	10.99 6.75	13.02	32.85 31.08	0.598	15 16
Czech	8.74	_	33.46	8.09	14.85	28.86	6.75	14.40	31.08	0.563	10
Republic	-		-	0.00	16.83		7.10		29.60		17
Slovakia	25.10	30.64	49.16	8.89	17.29	30.84	9.96	20.19	29.59	0.563	18
Poland	-	-	ı	7.96	18.94	25.22	7.80	16.02	29.21	0.554	19
Bulgaria	22.27	28.28	47.24	5.05	17.39	17.43	6.35	13.33	28.58	0.539	20
Luxembourg	15.92	28.11	33.99	7.46	19.25	23.24	7.18	15.53	27.75	0.519	21
Austria	10.44	23.38	26.78	4.57	18.15	15.11	7.57	16.55	27.44	0.512	22
Spain	_	-	_	6.15	20.00	18.46	8.11	17.93	27.15	0.505	23
Croatia	_	-	_	5.13	21.45	14.34	7.32	16.87	26.02	0.479	24
Portugal	8.32	28.67	17.42	3.32	17.22	11.58	7.65	18.64	24.63		25
Serbia	_	-	_	-	-	-	7.03	17.22	24.51	0.443	26
Italy	8.63	25.86	20.03	3.54	18.40	11.55	5.53	13.95	23.80	0.426	27
Macedonia	_	-	_	4.24	22.74	11.19	4.93	14.61	20.25	0.342	28
Cyprus	9.69	28.37	20.50	5.25	23.56	13.37	6.39	20.45	18.75	0.307	29
Greece	7.15	27.16	15.80	3.12	21.21	8.82	5.68	18.85	18.07	0.291	30

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Malta	10.50	33.56	18.77	3.86	23.18	9.98	7.25	24.59	17.69	0.282	31
Montenegro	-	-	-	ı	-	-	2.84	15.28	11.17	0.128	32
Kosovo	-	-	-	-	-	-	0.81	6.33	7.67	0.045	33
Turkey	5.06	24.15	12.57	3.67	20.71	10.62	1.65	17.24	5.75	0.000	34
Norway	-	-	-	7.23	13.44	32.28	-	1	ı	-	_

CASE STUDIES

CASE STUDY: ICELAND

Between 1993 and 1998, fewer than eighteen Icelandic fathers received State Social Security Institute payments each year⁷⁵ for parental leave, through a system that was nearly non-existent and provided minimal, if any, coverage for fathers. In 2000⁷⁶, based on a strong government commitment to children's welfare and gender equality in the labour market and in the home, Iceland embarked on the world's most ambitious attempt to promote fathers' participation in early childcare⁷⁷. They granted fathers the statutory right to the longest non-transferable family leave offered to fathers in the world and despite severe economic setbacks, this program has become embedded in Icelandic culture and society. In 2011, 83.7 percent of Icelandic fathers took a period of leave for every 100 mothers that took leave, an average of 91 days leave compared to 176 for mothers⁷⁸.

The Icelandic experience is different from other Nordic countries, and the success it has experienced is due in part to its state administration with coalition governments and the strong influence of politicians and political parties⁷⁹. Ongoing discourse on gender equality in the Nordic context from the 1980s and a 1998 Supreme Court ruling stating that the exclusion of men from

⁷⁵ Gislason, I. V. (2007). Parental Leave in Iceland: Bringing the Fathers In. Developments in the Wake of New Legislation in 2000. Reykjavik: Ministry of Social Affairs.

⁷⁶ Eydal, G.B. and Rostgaard, T. (2011). Gender equality re-visited: Changes in Nordic child-care policies in the 2000s. Regional issue, Social Policy & Administration, 45, 2, pp. 161-179. Available at http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9515.2010.00762.x/full

⁷⁷ Alþingi. (n.d.) Þingskjöl [Parliamentary documents]. Retrieved from hppt://www.althingi.is.

⁷⁸ Moss, P. (2015) International Review of Leave Policies and Research 2015. Available at: http://www.leavenetwork.org/lp and r reports/

⁷⁹ Farstad, G., & Stefansen, K. (2015). Involved fatherhood in the Nordic context: Dominant narratives, divergent approaches. NORMA: International Journal for Masculinity Studies, 10(1), 55-70.

parental leave was a violation of the law and the Constitution also created momentum for the implementation of new system⁸⁰.

The passage of an Act on maternity, paternity, and parental leave in 2000, dramatically changed the landscape of leave rights in Iceland⁸¹. The Bill, which was originally framed as a response to external pressure from the UN to eliminate the gender pay gap, sought to implement changes to parental leave in three phases between 2001 and 2003, eventually extending parental leave to nine-months with parent-specific allocation⁸²s.

Fathers' current statutory rights to paid leave

Family leave is financed by the Iceland government and by an insurance levy on employer payrolls. Iceland does not have separate allocations for maternity, paternity, and parental leaves. The "3+3+3 birth leave" scheme allocates three non-transferrable months of leave to each parent and an additional three months to each family to be divided at their discretion⁸³. All biological and adoptive fathers are entitled to this leave regardless of sexuality or marital status. Unlike many other countries, this new system added to the allocations for parents without taking away from mothers' existing entitlements⁸⁴. Parental leave is paid at 80 percent of average total earnings to a ceiling of ISK 370,000 per month⁸⁵.

⁸⁰ Einarsdottir, T. and G.M. Petursdottir (2009). 'Iceland: from reluctance to fast track engineering', S. Kamerman and P. Moss (eds) (2009) The Politics of Parental Leave Policies – Children, Parenting, Gender and the Labour Market, op. cit.

⁸¹ Eydal, G.B. and Gíslason, I.V (Eds.) (2008). Equal rights to earn and care, the case of Iceland. Reykjavík: Félagsvísindastofnun.

⁸² Gíslason, I.V. & Eydal, G.B. (Eds.) (2011). Parental leave, childcare and gender equality in the Nordic countries. Copenhagen: Nordic Council of Ministers.

⁸³ Einarsdottir, T. and G.M. Petursdottir (2009). 'Iceland: from reluctance to fast track engineering', S. Kamerman and P. Moss (eds) (2009) The Politics of Parental Leave Policies – Children, Parenting, Gender and the Labour Market, op. cit.

⁸⁴ Ibid

⁸⁵ Ibid

Implementation

One of the most crucial aspects to highlight in regards to the Icelandic case is the effect that non-transferrable leave rights can have on the uptake of parental leave, and the ways that this can contribute to the sharing of earning and caring within a household. The greatest share of paid leave taken by men is in Iceland, with most parents opting to take leave together for the first month after childbirth. Fathers in Iceland take about one-third of all days of birth leave, an average of 91 days compared to the 176 taken by mothers⁸⁶. Anecdotes from Rebecca Asher's book detail the change in cultural attitudes that have been realised in Iceland and the ways in which non-transferrable can push mothers and fathers towards the dual earner / dual carer model⁸⁷. Changes in parental leave in Iceland have also been accompanied by the provision of after-school services and childcare for young children, including the extension of the school day for younger children, allowing for parents to work throughout the day without worrying about having to collect their children.

Implications for egalitarian parenting and earning

Iceland provides an example of the way that public policy can shape the social construction of fatherhood and on gender relations, and provides a very clear example of the positive effects that non-transferrable parental leave can have on fathers' uptake⁸⁸. Iceland has made positive strides towards

⁸⁶ Moss, P. (2015) International Review of Leave Policies and Research 2015. Available at: http://www.leavenetwork.org/lp and r reports/

⁸⁷ Gornick, Janet, and Marcia Meyers (2001). "Support for Working Families." The American Prospect 12.1 (2001): A3-A7.

⁸⁸ Eddy, Samantha, Brad Herrington, Fred Van Deusen, Jennifer Sabatini Fraone, and Linda Haas (2014) "The New Dad: Take your Leave – Perspectives on paternity leave from fathers, leading organisations, and global policies." Boston College Center for Work & Family.

gender equality from non-transferrable parental leave policy to instituting voluntary political party quotas as an incentive for women to enter politics⁸⁹.

While fathers' uptake of leave is quite positive in Iceland when compared to international figures, its current rate is a dip from 2006⁹⁰, when 88 percent of Icelandic fathers took a period of leave for every 100 mothers that took leave, a decrease which is likely to be due to the economic crisis and the severe cuts in economic compensation⁹¹. Iceland was hard-hit by the 2008 economic crisis, which had ramifications on social spending and led to reductions in the income ceilings for wages received on parental leave⁹². Men responded to the lower ceilings by taking less leave and taking leave sporadically or part-time over a longer period⁹³, suggesting that a gender-differentiated pattern remains that men are still more closely to their work lives than women⁹⁴.

In December 2012, policy changes were adopted to increase the parental leave scheme to a system where parents individual, on-transferrable allocation was increased to five months each, a shift from the current system to a "5+5+2" leave scheme⁹⁵. Owing to budgetary constraints and the prioritisation of the state finances, the new coalition government revoked the law in 2013⁹⁶.

⁸⁹ World Economic Forum (2015). The Global Gender Gap Report 2015. Available at: http://www3.weforum.org/docs/GGGR2015/cover.pdf

⁹⁰ Einarsdottir, T. and G.M. Petursdottir (2009). 'Iceland: from reluctance to fast track engineering', S. Kamerman and P. Moss (eds) (2009) The Politics of Parental Leave Policies – Children, Parenting, Gender and the Labour Market, op. cit.

⁹¹ Moss, P. (2015) International Review of Leave Policies and Research 2015. Available at: http://www.leavenetwork.org/lp_and_r_reports/
⁹² Ibid

⁹³ Sigurðardóttir, Guðrún Helga (2014). "Iceland: Fewer take paternity leave." Nordic Labour Journal.

⁹⁴ Farstad, G. (2015). Difference and equality: Icelandic parents' division of parental leave within the context of a childcare gap. Community, Work & Family, 18(3), 351-367.

⁹⁶ Ibid

CASE STUDY: JAPAN

Despite shifts in perceptions and the recognition of some of the barriers to shared work and care in the household, the segregation of gender roles in relation to the provision of 'cash and care' in families persists in Japanese culture. Gender inequality is a well-known feature of the Japanese labour market⁹⁷. The notion of selfless commitment to one's job is still prevalent and widely expected across Japan. This is reflected in the dominant gendered family structure and the long hours that men work to support their wife and children.

In the past few decades, the number of women with a high educational attainment in Japan has surpassed that of men, and increasing numbers of women have joined the paid workforce⁹⁸. Coinciding with the increase in the proportion of women attending four-year universities, the Japanese Diet passed the Equal Employment Opportunity Law in 1985, which focused on improving women's access to careers in paid employment⁹⁹. Women's labour market position, however, is still unfavourable, with a gender pay gap that is one of the highest amongst OECD countries¹⁰⁰ and Japan continues to have one of the lowest levels of employment among women with pre-school children. The 2015 Global Gender Gap Report reports an increase in women in

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⁹⁷ Kawaguchi, Akira (2015). "Internal labor markets and gender inequality: Evidence from Japanese micro data, 1990–2009." Journal of the Japanese and International Economies, 38 (2015) 193–213.

⁹⁸ Nishioka-Rice, Y. (2001). The maternal role in Japan: Cultural values and socioeconomic conditions. In H. Shimizu & R.A. Levine (Eds.), Japanese frames of mind: Cultural perspectives on human development (pp. 85-110). Cambridge, UK: Cambridge University Press.

⁹⁹ Linda N. Edwards, Margaret K. Pasquale (2003). Women's higher education in Japan: Family background, economic factors, and the Equal Employment Opportunity Law, Journal of the Japanese and International Economies, 17(1), 1-32.

¹⁰⁰ OECD 2015. http://stats.oecd.org/Index.aspx?DatasetCode = Earnings and Wages: Gender Wage Gap (2006-2014) Data extracted 5 November 2015 07:43 GMT from OECD.Stat Extracts.

ministerial positions, almost doubling from 11 to 22 percent. Nevertheless, Japan records a substantial gender pay gap in the wages paid to women working as legislators, senior officials, and managers¹⁰¹.

Parental leave does not have a long history in Japan. It was instituted as an unpaid parental entitlement in 1992, which became an entitlement compensated at 25 percent in 1995¹⁰². The uptake of this leave was restricted to situations where the mother was at work. This is an important feature which theoretically encourages women to return to paid work and allows men to share in the childcare responsibilities.

In 2003, the Act on the Advancement of Measures to Support Raising the Next Generation of Children was passed to encourage employers to take a proactive role in supporting the employment environment for families by developing annual action plans to help families balance the responsibilities of work and care¹⁰³. Japan's fertility rate dipped to a historic low in 2005, prompting policy makers to recognise the problem of an aging population and the need to identify and address potential hurdles for having and raising children¹⁰⁴. As a response to the plummeting birth rate, the government approved the Third Basic Plan for Gender Equity in 2010 to promote gender equality and set goals to encourage the uptake of parental leave and discourage long working hours for men by prohibiting overtime above 150 hours per year¹⁰⁵. The plan marked significant policy emphasis on the move

¹⁰¹ World Economic Forum (2015). The Global Gender Gap Report 2015. Available at: http://www3.weforum.org/docs/GGGR2015/cover.pdf

Eddy, Samantha, Brad Herrington, Fred Van Deusen, Jennifer Sabatini Fraone, and Linda Haas (2014) "The New Dad: Take your Leave" Boston College Center for Work & Family.
 Ibid

¹⁰⁴ Chiang, Hui-Yu and Fumio Ohtake (2014). "Performance-pay and the gender wage gap in Japan." Journal of the Japanese and international economies 25.1: 39-55.

¹⁰⁵ Cabinet Office, Government of Japan (2010). Summary of Third Basic Plan for Gender Equality: Approved by the Cabinet in December 2010. Available to download at http://www.gender.go.jp/english_contents/about_danjo/whitepaper/pdf/3rd_bpg.pdf

towards sharing work and care and in encouraging employers to be more responsive to the needs of working fathers. Childcare became an individual entitlement for both parents and could be taken simultaneously. The Ministry of Health, Labour, and Welfare also launched a campaign called the "Ikumen Project" to enhance men's motivation to participate in childcare ¹⁰⁶. The government is continuing to push for policies which allow for fathers to work fewer hours and mothers, even of young children, to take part in the labour market. The government is eager to expand gender equality and has set a number of ambitious goals under the "30% by 2020" targets, whose performance objectives include an increase in female government and management positions, including membership in the House of Representatives and Councillors and an increase in the percentage of male national public employees who take child care leave ¹⁰⁷.

Fathers' current statutory rights to paid leave

Parental leave is allocated as childcare leave in Japan through the Ministry of Health, Labour and Welfare and is financed by the Employment Insurance system, with contributions from employers, employees and the state¹⁰⁸. Fathers have an individual entitlement to parental leave which begins the day after maternity leave ends, and is paid at sixty-seven percent of earnings for 180 days and fifty percent afterwards. Leave is paid to an income minimum of JPY46,230 and a ceiling of JPY426,000. Government benefits are reduced if employer benefits exceed 80 percent of earnings¹⁰⁹.

¹⁰⁶ Ministry of Health, Labour & Welfare (2010). Outline of Ikumen Project. Available at: http://www.mhlw.go.jp/english/policy/children/work-family/dl/psbbwfl.pdf

¹⁰⁷ http://www.gender.go.jp/english_contents/about_danjo/whitepaper/pdf/3rd_bpg.pdf

¹⁰⁸ Ibid

¹⁰⁹ Nakazato, Hideki and Junko Nishimura (2015). "Japan", Moss, P. (ed) International Review of Leave Policies and Research 2015. Available at: http://www.leavenetwork.org/lp_and_r_reports/

Fathers have two options in taking their leave. They can either use their leave during the eight weeks of the mother's maternity leave and the remainder in one block until the child becomes 12 months old or they can also use this leave to care for a sick child under 18 months of age or one who lacks childcare; they can be home at the same time as mothers. Families are given two extra months of bonus leave paid at 67 percent if the father has taken at least some leave, allowing for families to take leave until the child is 14 months old. However, each parent is only allowed to take up to a full year of leave. Thus, if the mother has already taken a year of leave, then only the father may take the bonus months. A family care leave allocation of up to 93 days paid at 40 percent is also available for the extended care of sick or injured children¹¹⁰.

Implementation

At two percent in the private sector and four percent in the public sector, the uptake of parental leave by fathers is still very low¹¹¹. Fathers also tend to limit the amount of time away from work. Even though formal parental leave policies exist, uptake is dependent on the extent to which fathers feel supported by their colleagues and employers in taking child care leave¹¹². Leave is taken more often when fathers feel that they are informally supported by their employer. Fathers' participation in childcare is greater in small and medium sized companies tend to offer more flexibility to employees in regards to their needs for family caregiving, while fathers in larger firms still face considerable work pressure that reduces their involvement in family life.

¹¹⁰ Ibid

¹¹¹ Cabinet Office, Government of Japan (2014). Males' Work and Life in Transition. White Paper on Gender Equality 2014. Available to download at

http://www.gender.go.jp/english_contents/about_danjo/whitepaper/pdf/ewp2014.pdf

¹¹² Karu, Marre, and Kairi Kasearu (2011). "Slow Steps towards Dual Earner/ Dual Carer Family Model: Why Do Fathers Not Take Parental Leave." Studies of Transition States and Societies 3.1 (2011): 24-38.

A study analysing panel data on over 500 large Japanese companies between 2001 and 2009 found that parental leave more likely to be used when a firm had a higher representation of women in managerial positions¹¹³. According to the Ministry of International Affairs and Communications, the average time spent taking care of the home per day, calculated by the sum of housework, caring or nursing, child care, and shopping has increased to 358 minutes for men¹¹⁴.

Implications for Egalitarian Parenting and Earning

Japan has combined government benefits and legislation that encourages employers to be more family sensitive and provide additional benefits. Despite changing attitudes, increases in educational attainment, increases in female participation in the workforce and family targeted policies, cultural and gendered norms continue to exist in Japan. The country has engineered one of the most generous parental leave entitlements amongst developed countries, yet egalitarianism in the ways in which fathers' and mothers' balance their work and family priorities is still a distant dream The Nery few fathers take advantage of any of their parental leave allocation and this may in part result from the fact that families are not much penalised if fathers do not take leave. There are no disincentives in place to discourage mothers from taking the bulk of the leave and taking on the primary carer role. The government is continuing to take steps to encourage fathers to take their leave entitlements, focusing first on supporting men who work in government jobs The January 2016, Kensuke Miyazaki sparked national debate when he

¹¹³ Mun, Eunmi, & Brinton, M. (2015). Workplace Matters: The Use of Parental Leave Policy in Japan. Work and Occupations. 42(3), 335-369.

¹¹⁴ Ibid

¹¹⁵ Onozuka, Yuki (2016). "The gender wage gap and sample selection in Japan," Journal of the Japanese and International Economies, Volume 39, March 2016, Pages 53-72.

OECD (2007). "Babies and Bosses Japan: Policies towards reconciling work and family life." Social Policy Division, OECD Publications. Available to download at http://www.oecd.org/japan/39696303.pdf
 Ibid

became the first ever male Japanese MP to request paternity leave¹¹⁸. The MP, who was quoted saying that he wanted to set an example, was soon the subject of accusations that he was shirking his responsibilities to the people. The incident brought attention to the issue, but underscored the fact that deeply rooted cultural barriers still exist in embracing the idea of leave in the workplace. An inability to address the inherent barriers to shared roles of earning and caring between men and women will continue to perpetuate lower levels of female unemployment and a low fertility rate in Japan, and further redesign of the parental leave regime, among other things, may be necessary if the government is to achieve its goals.

¹¹⁸ McCurry, Justin (2016). "Kensuke Miyazaki to become first ever Japanese MP to take paternity leave." The Guardian. Available at http://www.theguardian.com/world/2016/jan/07/kensuke-miyazaki-to-become-first-ever-japanese-mp-to-take-paternity-leave

CASE STUDY: UNITED STATES

The United States is a standout in the developed world as the only country whose federal government does not provide a period of paid statutory leave. The federal Family and Medical Leave Act (FMLA) provides a more general allocation of leave that can be taken for a variety of reasons including childbirth, care of an adopted or foster child or a newborn for up to twelve months, extended illness, and other major life events¹¹⁹. Under this provision, parents are allowed to take unpaid leave for up to twelve weeks within a twelve month period.

The Pregnancy Discrimination Act of 1978 was enacted to prevent employer discrimination or retaliation on the basis of pregnancy¹²⁰. This prevents employers of businesses exceeding 15 employees from making job related decisions, i.e., hiring, firing, seniority, benefits and sick leave dispensation based on a woman's pregnancy status. While this does provide some protection for expecting mothers, filing a claim to the Equal Employment Opportunity Commission requires proof of differential treatment from non-pregnant employees in similar situations, and can be a taxing process¹²¹.

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¹¹⁹ US Wage and Hour Division (2015). "Fact Sheet #28B: FMLA leave for birth, placement, bonding, or to care for a child with a serious health condition on the basis of an 'in loco parentis' Relationship". U.S. Department of Labor: WHD.

¹²¹ Levs, J. (2015). All in: How our work-first culture fails Dads, families, and businesses--and how we can fix it together (First ed.).

In the absence of federal statutory leave, some states have developed their own paid parental leave policies by way of Temporary Disability Insurance, including California, Hawaii, New Jersey, New York, Rhode Island and Puerto Rico¹²². Other states such as Minnesota, Montana, and New Mexico provide support to low-income working parents (mainly mothers) though policies providing a cash benefit to offset a portion of lost wages for parents who opt to stay at home for the first year after their child's birth¹²³.

Implications for egalitarian parenting and earning

Public policies and the absence of nationally mandated parental leave can make it difficult for parents looking to balance the responsibilities of work and childcare¹²⁴. Parental leave stipulations under national legislation further exclude about 40% of employees, who are ineligible because they either work for small businesses or have been with their company for less than twelve months. Unpaid leave makes it unlikely that families can afford for both, or even one parent to take time off and necessarily restricts the amount of time that parents can afford to be away from the paid workforce. There are, however, lessons to be learned from the American system. It can be argued that the absence of paid statutory leave allocations means that policy takes a neutral

¹²² Eddy, Samantha, Brad Herrington, Fred Van Deusen, Jennifer Sabatini Fraone, and Linda Haas (2014) "The New Dad: Take your Leave – Perspectives on paternity leave from fathers, leading organisations, and global policies." Boston College Center for Work & Family.

Moss, P. (2015) International Review of Leave Policies and Research 2015. Available at: http://www.leavenetwork.org/lp_and_r_reports/

Ruhm, C. (2011). Policies to Assist Parents with Young Children. The Future of Children, 21(2), 37-68.

stance towards mothers' and fathers' roles in childcare. Even if mothers take unpaid parental leave, it is usually for a limited period, and they are often back at work much more quickly than mothers in countries with mandated leave allocations, resulting in a lower amount of time that working women are away from the labour market¹²⁵. This can facilitate equality of opportunity and more equal attitudes towards men and women in the workforce. However, even if there is parity between the sexes in parenting leave rights, the gender pay gap and differential rates of employment make it likely that mothers in the US are taking leave for parenting more often than fathers.

¹²⁵ Asher, Rebecca (2011) Shattered: Modern Motherhood and the Illusion of Equality. London, United Kingdom: Random House.

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