

**All Things Unequal:
Female Career Continuity and the Gender and Family Gaps**

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ABSTRACT

The incorporation of women into wage labor is a central feature of global labor market trends over the past century. In most countries, women's increased labor market participation has been accompanied by a narrowing of the gender gap in earnings. The remaining gaps in both labor market participation rates and wages are generally explained by differences in human capital, differential selection in employment and context-specific characteristics of the overall wage structure. An explanation that has received much less attention is the family gap – or the difference in labor market outcomes between mothers and women without children. In recent decades the family gap has widened in several countries even as the gender gap has narrowed.

This paper explores the relationships between gender and family gaps in labor force participation rates and median wages across OECD countries, with a discussion of the role of policy approaches in effecting these. I demonstrate that countries that invest in family policy to promote career continuity exhibit higher labor force participation rates as well as narrower gender and family gaps in earnings. I conclude that countries who invest in career continuity for mothers have had greater success in achieving gender equality in the labor market and, importantly, they have done so without holding down overall growth. In doing so, I dispute the common view that social spending on family policy is a drag on growth and creates incentives that depress productivity.

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Alys Willman-Navarro

Women's movement into paid work is a defining aspect of the post-war global labor market. Between 1960 and 1990, women increased their work force participation in every OECD country; in some countries, women's participation rates doubled,ⁱ although these increases slowed during the 1990s.ⁱⁱ In most countries, women's growing labor market participation has been accompanied by a narrowing gender gap in earnings as well. In some countries this has been all the more significant given that it has occurred even while other forms of inequality were increasing.ⁱⁱⁱ

Much of the narrowing of the gap can be attributed to women's returns to increasing investment in education and job experience as well as the implementation of anti-discrimination legislation in the 1960s and 1970s across industrialized countries. The remaining gap is generally explained by three elements: persistent differences in human capital, differential selection into employment and the overall wage structure.

One explanation that has received less attention is the family gap – or the difference in labor market outcomes between mothers and women without children. Motherhood is key factor in affecting women's labor market outcomes across countries – women with children are consistently less likely to be employed,^{iv} while fathers face little to no penalty in employment^v and in some cases may earn more than men without children.^{vi} Over the past decades the family gap has widened in several countries even as the gender gap has narrowed. Some of the most notable increases have occurred in the

United States and the United Kingdom, where anti-discrimination legislation but not family support policies, have been emphasized.^{vii} In the United States, the pay disadvantage between married women (who are more likely to be mothers) compared to single women widened for all age groups up to 46 between 1960 and 1980.^{viii} In the United Kingdom, the family gap in pay also grew from 1980-91.^{ix}

Some countries, particularly the Nordic nations, have fared much better in obtaining equality of outcomes both between women and men and among women. A key factor in this has been the adoption of policies that do not encourage women to enter the workforce, but also invest in female career continuity. Paid parental leave, childcare supports and favorable tax policy all have proved to be pro-growth investments by boosting female long-term job attachment, especially when applied in combination. That is, investing in family policy here has brought gains not only to women but to overall productivity as well.

This paper explores the relationships between gender and family gaps and policy across OECD countries. I begin with an overview of traditional explanations of the gender gap in both labor force participation and earnings, highlighting the family gap (or child penalty) as a significant, though much less discussed, factor in both.

Gender and family gaps in the labor market are generally measured using two variables: labor force participation rates and median wages, although few studies examine the two together and the relationships between them. In Section II, I examine evidence from OECD countries to identify patterns and relationships in the gender and family gaps using both of these variables.

Section III then examines the role of policy in explaining these cross-national differences. Here I demonstrate that countries that invest in family policy to promote career continuity exhibit higher labor force participation rates as well as narrower gender and family gaps in earnings. I conclude by summarizing the central argument of this piece – that countries who invest in career continuity for mothers have had greater success in achieving gender equality in the labor market and, importantly, they have done so without holding down overall growth. In doing so, I dispute the common view that social spending on family policy is a drag on growth and creates incentives that depress productivity.

I. Understanding the Gender Gap and Family Gap: Competing Explanations

The gender gap generally refers to the difference in labor market outcomes between men and women, usually measured in wages or in labor force participation rates. Traditionally, the gender gap has been explained by observed *differences in human capital* between men and women. Human capital models hold that workers, as rational, utility maximizers, weigh the present costs of human capital investments such as training and education against the present value of the expected benefits, measured in market wages.^x According to this model, women invest less than men in their own human capital development with the expectation they will drop out of the labor force for child-rearing at a prime-earning age, lowering their expected returns. Thus, differential labor market outcomes can be explained by lower levels of investment in skills and training. The theory predicts that as women's role in child-rearing changes, allowing for longer work

lives, they will invest more in education and training, resulting in stronger work force attachment and higher lifetime earnings.

The empirical evidence for human capital theory differs depending on the variables used to measure skill differentials. Cross-national studies using education as a proxy for human capital have found little relationship with earnings,^{xi} while studies considering test scores find a positive relationship.^{xii} However in a skills-based economy, skills are gained most through job experience. Thus, job continuity should go much farther than either education levels or test scores in explaining long-term labor market outcomes.

Another explanation is *differential selection* in female employment – that is, that female workers tend to be concentrated in lower paying, often lower skilled jobs than men. The evidence for this as a determinant of gender and family gaps is mixed. Studies of the impacts of differential selection into lower paying jobs yield widely varying results across countries. A 2005 OECD study found large differences in the share of women working part time across countries, with the highest rates in Northern European countries (excluding most Nordic countries) and Pacific countries, and much lower rates in Central and Southern Europe, the Nordic region and the United States. The number of female part-time workers declined significantly in Scandinavian and several English-speaking countries from 1983 to 2001 as women moved to full-time work, while it increased in some European countries (Ireland, Belgium, France, Italy and the Netherlands) and Japan.^{xiii} There does not appear to be a clear relationship between part-time work and large gender gaps – in fact some of the highest gender gaps occur in countries –

particularly the US and Canada - where women's share of part-time workers is relatively low.

Studies examining differences in part-time versus full-time employment between mothers and non-mothers also fail to show clear patterns across countries. Gornick and Jacobs (1994)^{xiv} and Bardasi and Gornick (2000),^{xv} found that part-time penalties between mothers and women without children vary widely across countries even when controlled for productivity related factors, with the largest penalties found in the United States, the United Kingdom and Germany.

Overall, differential selection into part-time employment appears to be more of a factor in some countries than others. In some cases, this may reflect mothers' preferences for part-time work as a way to reconcile family and financial responsibilities (when family care burdens cannot be outsourced).^{xvi} Indeed, women's preferences for part time work do tend to correspond to their actual share of part-time employment across OECD countries, according to national surveys. In other contexts, employer discrimination or attempts to circumvent worker protection legislation by hiring part time workers with fewer benefits may be at play. In countries with highly gendered job segregation by occupation, firm, or industry, this differential selection may outweigh the competing influence of anti-discrimination legislation.^{xvii}

A third explanation for the gender gap has been *overall wage structure*. A group of studies by Blau and Kahn (1992, 1996, 1999) developed evidence that overall wage inequality can explain some of the gender gap in earnings across countries. The studies deal only with the gender gap in wages, ranking countries first by gender earnings ratios and then by their mean female percentile in the male wage distribution. They show that

the penalty for one's position in the overall wage distribution is higher in some countries than others. This explains why, for example, American and Australian women both rank at the 33rd percentile in the male wage distribution, yet Australian women earn an hourly wage that is 73 percent of the male mean, while American women's wages are only 65 percent of the male mean. Thus, Australian women pay a much higher penalty than American women, because the United States has an overall more unequal wage structure. The authors argue that it is therefore important to take overall wage structure into account when comparing countries.

Other studies have supported this hypothesis by showing a positive relationship between centralization of wage-setting and the gender earnings gap across countries,^{xviii} and corporatist policies and gender wage equality.^{xix} This analysis helps explain the experience of female workers in the United States during the 1980s, where the gender gap in wages narrowed even when overall wage inequality was increasing. If women had not increased their investments in education and job experience during this period, the gender gap in pay would have grown due simply to greater overall wage dispersion.^{xx}

However, as Waldfogel and Harkness (1999) have argued, while overall wage structure can explain some of the gap in pay of women relative to men in various countries, it is less helpful in explaining why mothers earn less than women without children. They rank mothers' pay by the respective percentile in the male wage distribution, and find that this measure changes the overall ranking of mothers in the gender earnings ratio very little. In other words, since mothers are at a lower percentile ranking than non-mothers initially, a change in the overall wage structure would not raise them to a better comparative position relative to women without children. If the United

States adopted Sweden's pay structure, for example, the position of women overall might improve, but the position of mothers relative to non-mothers would remain unchanged.

Thus, a good part of the remaining gap in many countries can be explained by the *family gap*, or the wage and labor force participation differentials between women who are mothers and those who are not. The family gap owes much to the "child penalty;" the decrease in the likelihood of female employment given the presence of a child, especially children under the age of six. This decrease is predicted by labor supply theory – having children at home increases the value of non-market work, increasing the reservation wage required to pull women into paid work. The result is a negative effect of children on women's labor supply.^{xxi} The theory predicts this effect will be more pronounced for married mothers than for single mothers, as a partner's employment makes female labor supply more elastic. The following section uses cross national data to examine the differences in labor market outcomes for both women relative to men, and mothers compared to women without children.

II. Cross country analysis

Methodology

The gender gap and family gap are typically measured through two variables, labor market participation rates and earnings differentials. Data on mean earnings are relatively accessible in industrialized countries, making cross-country comparisons possible. Data distinguishing mothers versus non mothers are harder to access, and in most cases harder to compare due to differences in measurement (i.e. some countries segregate by marital status while others record the presence or absence of children). For

this reason I analyze raw data for wages from international sources to identify patterns in the gender gap, but rely on two different studies by Waldfogel and Harkness(1999) and Gornick, Meyers and Ross (1996) to analyze differentials between mothers and non-mothers. Both studies rely on microdata from the Luxembourg Income Study, which includes data from a range of developed countries.

Previous cross-country comparisons have grouped developed countries into broad categories for analysis. The most commonly used, and appropriate here, are Esping-Andersen's welfare regimes.^{xxii} Esping-Andersen divides developed countries into three broad categories according to a defining set of welfare policies. The Liberal (English speaking countries including the US, the UK and Canada), are characterized by residual welfare states offering minimal government protection. Social Democratic (Nordic or Scandinavian countries) offer the most generous welfare policies and the Conservative regimes, mainly in Continental Europe, are classified together for their reliance on corporatist or kinship structures to provide social welfare. Southern Europe (Italy, Spain and Portugal) is at times considered separately for its particularly familialistic welfare policy.

Labor Force Participation

Gender Gap in Labor Force Participation

In recent decades female employment has increased rapidly in most developed countries, with the greatest increases occurring where women's participation rates were particularly low.^{xxiii} Overall female employment still lags male employment across

OECD countries (Europe, North America and Australia).^{xxiv} The raw data presented below show substantial variance in women’s participation rates relative to men’s across countries, from Finland, where women’s employment is just 6.2 percent lower than men’s to a 27.1 percent gap between men and women’s participation rates in Japan.

Table 1: Gender Gap in Labor Force Participation, Full-time Employees Aged 15 and older

	AL 1999	AU 1999	BG 1999	CN 2000	DN 1999	FN 2000	FR 2000	GE 2000	GR 1998	IR 1999	IT 1999	JP 00	Neth 99	NR 00	Port 99	SP 99	Swe 99	Swi 00	UK 99	US 00
All men (%)	72	69.4	61.2	72.5	71.8	69.5	74.4	68.9	64	70.1	62.2	76.4	82.6	78	70.2	63.9	73.4	77.8	71.6	74.7
All women (%)	53.2	49.5	43.2	59.5	60	63.3	61.7	48.7	38.9	46	35.3	49.3	64.4	68.9	52.7	38.4	66.6	57.6	54.5	60.2
Gender gap (line 2 - line 1)	-18.8	-19.9	-18	-13	-11.8	-6.2	-12.7	-20.2	-25.1	-24.1	-26.9	-27.1	-18.2	-9.1	-17.5	-25.5	-6.8	-20.2	-17.1	-14.5

Calculated from KILM 2001 data. Country average gender gap = -17.6.

The Nordic or Scandinavian countries demonstrate the most gender equity in labor force participation. After Finland, the smallest gaps in employment occur in Sweden (6.8 percent) and Norway (9.1 percent), followed by Denmark (11.8 percent). France, with a 12.7 percent gender gap, falls close to the Nordic countries in the distribution. The English speaking countries fall in the middle of the distribution, slightly below the average, with Canada showing a 13 percent gap, the US 14.5 percent and the UK 17.1 percent. Ireland is an exception, with a 24.1 percent gap that is closer to those found in the Southern European countries than the English-speaking group. Belgium and the Netherlands both show a roughly 18 percent gap, above the cross-country average. Southern European countries demonstrate the largest gender gaps in labor force

participation: Italy has a 26.9 percent gap, followed by Spain, with 25.5 percent and Greece with 25.1 percent.

Two exceptions to the standard groupings are Germany and Switzerland, both with a 20.2 percent gap that is closer to the Southern European country group than the Continental Europe or Nordic grouping.

Family Gap in Labor Force Participation

Given difficulties in obtaining reliable cross-national data on mothers and non-mothers, there are few studies examining the family gap in employment rates across countries. A 1999 study by Harkness and Waldfogel using data from the Luxembourg Income Study to compare Australia, Canada, UK, US, Germany, Finland and Sweden is presented below. The study controlled for differences due to human capital and demographics and considered both part-time and full-time workers.

Table 2: Family Gap in Employment Rates, all workers aged 24-44, Selected Countries

	Australia 1995	Canada 1994	UK 1995	US 1994	Germany 1994	Finland 1991	Sweden 1991
All women	0.618	0.683	0.64	0.66	0.70	0.738	0.836
Non-mothers	0.813	0.78	0.84	0.788	0.822	0.814	0.842
Mothers	0.52	0.639	0.552	0.598	0.639	0.706	0.833
Family gap (mothers – non- mothers)	-0.293	-0.141	-0.288	-0.19	-0.183	-0.108	-0.009

Source: Harkness and Waldfogel 1999.

In the selected countries, the data show that mothers are less likely to work overall, with family penalties in employment ranging from 29.3 percent in Australia to 11

percent in Finland. All countries show a family penalty to labor market participation with the exception of Sweden, where the employment rate of mothers is only one percentage point lower than for women without children. English speaking countries exhibit the highest penalties, at about 29 percent in Australia, 28.8 percent in the UK and 19 percent in the US. Canada comes out as an exception here, with a 14 percent penalty hitting about the middle of the total range across countries. Germany, the only representative of a conservative regime included in the study, falls just behind the United States at 18 percent.

A prior study by Gornick, Meyers and Ross (1996)^{xxv} estimated the child penalty to female employment using logistic regression coefficients to indicate the decrease in mothers' probability of being employed given the presence of young children in the house, all things equal. Their results were similar to that of the Harkness and Waldfogel study, with the largest child penalties reported in the United Kingdom, where mothers were 45 percent less likely to be employed than non-mothers in 1996. Significant child penalties were also noted in the English-speaking countries – Canada, the United States and Australia – as well as Germany, the Netherlands and Norway.

Both studies reported little association between overall employment rates and child penalties –that is, child penalties or family gaps are observed in both countries where women's overall employment is low (such as Germany and the Netherlands) and where women's labor force participation is high, as in the United States and United Kingdom.

Wages

The Gender Gap in Earnings

The gender gap in earnings received substantial attention during the 1980s and 1990s, when wage differentials narrowed in most OECD countries. While men out-earn women in all developed countries, the extent of the gender wage differential varies considerably in cross-national comparisons.

Table 3: Raw Gender Gap in Wages, Selected Countries

Country	Women's wages as % of men's
US	75.5
Ireland	78
UK	78
Austria	79
Netherlands	79
Finland	81
Germany	81
Sweden	83
Denmark	86
Spain	86
Greece	87
France	88
Belgium	89
Italy	91
Portugal	95

Data for Europe calculated from the "Social Situation in the European Union," 2003. Data for US calculated from the Current Population Survey 2004.

The countries selected show a 20 percent variation in the gender gap in wages: women in the United States earn just 75.5 percent of men's wages, compared to 91 percent in Italy and 95 percent in Portugal. The gender gap in earnings is relatively higher in English speaking countries, or the Liberal regimes.^{xxvi} Of the countries above, the

English speaking countries (United States, Ireland and the United Kingdom) compose the top three for largest gender gaps in earnings.

Overall, European countries yield very mixed results. The Nordic countries – Finland, Sweden and Denmark – rank near the middle of the distribution. Italy and Portugal show the smallest gaps overall, with women earning over 90 percent of men’s earnings. France ranks very close to Spain and Greece, both conservative regimes.

The Harkness and Waldfogel study found significant variation in gender gaps across countries as well. Their study found the ratio of women’s mean hourly wages to men’s mean hourly wages ranged from a high of 25.4 percent in the United Kingdom to a low of 11.8 percent in Australia.

The Family Gap in Earnings

Table 4: Family and Gender Gap in Mean Hourly Earnings, Selected Countries

Women's Wage/All Men's Wage (%)	Australia 1994	Canada 1994	UK 1995	US 1994	Germany 1994	Finland 1991	Sweden 1991
All women	88.2	81.9	74.6	78.3	86.6	81.7	83.9
Non-mothers	84.5	81.8	82.2	82.9	88.2	82	85
Mothers	91.4	82	69.6	75.6	85.5	81.6	83.4
Gender Gap	-11.8	-18.1	-25.4	-21.7	-13.3	-18.3	-16.1
Family gap	6.9	0.2	-12.6	-7.3	-2.7	-0.4	-1.6

Source: Harkness and Waldfogel 1999.

In five of the seven selected countries above, mothers are paid roughly the same (Finland, Germany, Sweden) or even more (Australia, Canada) than women without children. The United States and the United Kingdom show significant family pay penalties of 7.3 percent and 12.6 percent, respectively.

The Nordic countries shown here – Finland and Sweden, show moderate gender gaps in wages and low or no child penalties in wages. While the child penalty in Nordic countries has been much less studied than other areas, a few studies have found children have either a positive or no significant effect on female wages in Sweden, and no effect in Denmark.^{xxvii}

Summary of Cross-Country Comparisons

From the above, four general conclusions can be drawn about the relationships between gender, motherhood and labor market outcomes:

1. The data presented here show some relationship between gender and family gaps in labor force participation – where female labor force participation is lower overall, mothers are even less likely than women without children to be employed. The extent of the differences between the two varies across countries: Nordic countries show low gender gaps in female employment with low family gaps as well.

The English speaking countries show gender gaps in the middle of the range in cross-national comparisons, while their family gaps are much higher relative to other countries. Germany has both a high gender gap in employment and a large family penalty. The experiences in the English speaking countries and Germany suggest that some of the increase in labor force participation of women overall is due largely to women without children entering the workforce.

2. The gender and family gaps in wages appear positively related – where women enjoy more overall wage equality, mothers tend to be penalized less. In the Nordic countries moderate gender gaps in earnings coexist with low or no child penalties – Germany, too shows a moderate gender gap and family gap. In the English speaking countries, both gender and family gaps in wages are largest.
3. There does not appear to be a clear relationship between labor force participation and a narrowing gender gap in earnings. Put another way, the pattern predicted by the universal breadwinner model – that increased female labor force participation will automatically bring about a narrowing of the gender gap – does not hold in many contexts. A large gender gap can coexist with high labor force participation, as in the United States and United Kingdom, and vice versa – low female employment rates can coincide with greater wage equality, as in Spain and Italy.
4. The relationship between labor force participation rates and a narrower family gap in earnings varies across countries. In both Canada and Australia, mothers are much less likely to work than non-mothers, but enjoy greater wage equality when they do work. In contrast, the US and UK show lower employment rates and wages for mothers compared to women without children. In the Nordic countries, both family gaps in both wages and employment are small.

From the above it's clear that increasing labor force participation rates alone does not reduce the gender gap in pay, or alleviate the child penalty. The analysis also suggests that the women entering the labor market are more likely to not have children. Thus some of the advantage women without children enjoy could be due to labor supply effects – especially in countries like Italy and Spain where gender gaps are low but family gaps are large. How countries manage these differences through policy influences the degree of the child penalty and with it the outcomes for female workers. Countries that have had the most success in improving labor market outcomes for women overall have adopted policies to invest not just in increasing labor force participation, but in supporting female career continuity.

III. Explaining the relationships: The Role of Public Policy

Increased spending on family policy falls within an overall trend toward growing social spending since the late eighteenth century. Social spending as a share of GDP rose in the nineteenth century, accelerated after 1880 and greatly increased between World War II and 1980 before leveling off in most countries. The fact that all OECD countries by 1980 were taking over 10 percent from taxpayers to invest in social programs shows that increased social spending is a common pattern as countries acquire wealth.^{xxviii}

As the previous section demonstrated, one important and consistent trend across countries has been women's growing labor force participation overall, and it is logical that increased investment in family policy overall has contributed to this. Childcare subsidies per child as well as provisions for parental leave became more generous between 1985 and 1999 in all OECD countries. However the Scandinavian countries,

where family policy was already most generous overall, recorded much larger increases. Thus the cross-country dispersion in the level of support widened.^{xxix}

In general, countries with generous social spending also tend to invest more in family policy, as Table 5 illustrates. These policies combine in different ways in different countries to create incentives and influence outcomes. Differences in family policy –expressed in differences in maternal leave, childcare support and tax policy - play an important role in determining these outcomes.

Table 5: Spending on Family Policy and Labor Market Outcomes

Government support for Family Policy					Labor Market Outcomes			
Countries ranked by social -transfer share of GDP in 1995*	Paternal Leave in weeks	Separate Maternal Leave in weeks	Percent of wages paid during maternity leave, 1998	Gov't Payments for Formal Infant Care (% of GDP)*	Gender gap in Labor Force participation	Gender Gap in Pay	Family Gap in Labor Force Participation	Family Gap in pay
Countries with high social-transfer budgets								
Sweden	62	na	75	1.36	-6.8	-17	-1	-1.6
Finland	26 to 156	17.5	80	1.08	-6.2	-19	-10.8	-0.4
Denmark	10 to 52	18	100 (For 6wks)	1.21	-11.8	-14	na	na
Norway	52	na	100	0.91	na	na	na	na
Belgium	130	15	82 (for 30 days)	0.08	-18	-11	na	na
France	0 to 156	16	100	0.24	-12.7	-12	na	na
Countries with intermediate social-transfer budgets								
W. Germany	156	14	100	0.27	-20.2	-19	-18.3	-2.7
Italy	26	22	80	0.1	-26.9	-9	na	na
United Kingdom	none	14 to 40	90 (for 6wks)	0.35	-17.1	-22	-28.8	-12.6
Austria	112	16	100	na	-19.9	-21	na	na
Countries with low social-transfer budgets								
Switzerland (1998)	8 to 12	8 to 12	100	na	-20.2	na	na	na
New Zealand	52	na	0	0.04	na	na	na	na
Canada	10	17	55 (for 15wks)	0	-13	-18.1	-14.1	-0.2
Australia	52	52	0	0.19	-18.8	-11.8	-29.3	-6.9
United States	12 (unpaid)	na	0	0.01	-14.5	-24.5	-19	-7.3
Japan	52	14	60	0	-27.1	na		

*Adapted from Lindert 2004, Table 10.3, p. 255.

Data on maternity/parental leave are from Waldfogel 1998. Data on percentage of wages paid during maternity leave are from World Bank 2003.

Data on Gender Gaps from Tables 1 and 2 (except Canada and Australia, from table 3, both for 1994); data on Family Gaps from tables 3 and 4.

Maternity Leave

The relationship between maternity leave and women's higher lifetime earnings follows from human capital theory – maternity leave increases female labor force attachment as an incentive for women to return to work, thereby continuing to gain the skills and training to reap higher returns in the labor market. Overall, countries offering job-protected maternity leave tend to have lower gender pay gaps for women overall, and for mothers specifically,^{xxx} but few studies have tested these impacts directly. In other cases, maternity leave might encourage women to leave the labor market for a longer period who otherwise would have returned to work sooner. Pettit and Hook (2002)^{xxxii} found a negative employment effect for maternity leave.

The length of available leave is an important factor. In a 1998 study of 16 European countries, Ruhm found insignificant positive effects on wages for short leave periods (1-13 weeks) compared to no leave, but leave over 26 weeks lowered mother's wages by 3 percent compared to no leave.^{xxxiii} Longer leave periods may be a disincentive to return to work, as in Germany where the family gap is quite high relative to other European countries.

Whether leave is paid seems to play an important role in strengthening longer term job attachment. Generous family leave periods of 52 weeks and more are found across countries independent of other policies. However the lowest family and gender gaps tend to be found where leave is paid rather than where it is longest. Australia, for example, offers 52 weeks of parental leave, but the fact that the leave is unpaid may help to explain its large family gaps in labor force participation and in pay. It is telling that the

three highest family gaps in pay occur in countries where leave is unpaid (the US and Australia) or paid only for the initial period (United Kingdom).

Policies to promote shared leave can encourage men and women to share time out of the labor force, and with it, the wage penalties of children, potentially leading to greater overall wage equality. The United Kingdom, for example, offers only maternity leave (no parental leave) contributing to the highest family gaps in labor force participation and earnings of all the countries for which data are available. In Sweden, for example, wage penalties may be lower in part because parents have the option of sharing a total of 15 weeks paid leave, four weeks of which can be spread out over eight years. Swedish parents may also share claim on 120 days a year to care for sick children.^{xxxiii}

Another important factor relates to who pays for parental leave. This varies across countries, with the government (and thus, taxpayers) taking over this expense in most Nordic countries and employers paying for leave in more minimalist welfare states where, partly as a result, leave is usually unpaid or only partially paid. Where the state pays the bill, leave tends to be more generous and can help job attachment

Child Care: Subsidies, tax transfers and public care

Labor supply theory predicts that the presence of children in the home will increase the tradeoff between market and non-market work for women, raising the reservation wage required to pull them into the labor market (steepening their indifference curves). Children can also lower female income to the extent that outsourcing care involves extra costs. Policies that lower these costs, such as childcare subsidies, increase the probability that women outside the labor market will move into

paid work. Subsidies can also be effective in moving mothers from public assistance to market work.^{xxxiv}

Child benefits, for example through tax transfers, can produce an income effect for women who are already working, prompting them to decrease their work hours.^{xxxv} This occurs because the increased income is not accompanied by a greater return to market work.^{xxxvi}

Public-provided childcare is generally associated with higher female employment overall by lowering women's reservation wage,^{xxxvii} thus we see high employment rates and smaller family penalties in the Nordic countries, where affordable public childcare is common. These results suggest a positive return on government subsidization of childcare, though these results have not been quantified.^{xxxviii}

Where childcare is relegated to the market, cost is a determining factor. In the United States, loose labor regulation and the availability of informal, mostly immigrant, labor for childcare keeps costs affordable for the middle class, pulling more mothers into formal work. For the US middle class at least, the availability of low cost childcare compensates for the lack of generous government subsidies,^{xxxix} contributing to higher employment rates for women. Others have suggested childcare policies could boost female employment in Europe as well - using regression analysis, Esping-Andersen estimated that if countries without accessible childcare – such as Germany, Italy or Spain – were to increase daycare supply to French levels (20 percent of French children government day care facilities), they could generate a female employment gain of roughly 10 percentage points.^{xl}

Where childcare costs are high and government care not available, as in the UK, the price of care acts as a tax on women's hourly wages, resulting in high child penalties both to income and labor force participation.^{xli} Here, overall wage structure can be influential – where wages are compressed overall, wages for childcare workers will be correspondingly high.

Taxation Policy

Tax policy produces significant employment effects on married women, who are taxed more heavily than both single women and men across industrialized countries. A 2005 study by the OECD^{xlii} found that only a handful of countries (Mexico, Turkey, Finland, Greece, Hungary and Sweden) tax second earners equally, and in many countries lower-income second earners are taxed even more heavily. Until the implementation of joint taxation in most OECD countries in the 1970s, the tax penalty on married women was explained by the traditional pooling of household income. The OECD reports that since the 1970s, relative tax rates of second earners decreased in the Nordic countries and the United States, but increased in some Western European countries and Canada. This factor can help explain the lower female employment rates in some European countries such as Austria, the Netherlands and Germany.

Individual taxation can encourage a dual-earner, dual-caregiver household model by creating incentives to split income between spouses. Under a progressive tax system with neutral treatment of second earners, a couple would face a higher tax penalty if one spouse earned all the household income - spouses will then more likely choose to share work hours (and income). The evidence from OECD countries indicates that these

incentives do affect behavior – countries with a smaller tax wedge between second earners and single workers exhibit higher female participation rates overall.^{xliii}

Some patterns can be discerned on the effects of taxation policy on employment and the gender gap. The clearest association is between favorable taxation of second earners (a 1 to 1 ratio in tax rates of first to second earners)^{xliv} and relatively lower family and gender gaps in wages, as in the Nordic countries and France. Conservative European regimes – in particular Germany, Spain, Italy and the Netherlands - tend to be more committed to a universal breadwinner model through unfavorable tax treatment of second-earners.^{xlv} It is logical to expect countries with heavy taxation of second earners to benefit more from reforms toward more equitable tax treatment of women. Despite initial budgetary costs of tax cuts, these could eventually bring greater gains in productivity by bringing more women into the labor force.

The Policy Package

It is the composite policy package, more than individual policies, that is most helpful in explaining employment and wage outcomes. Indeed, across industrialized countries, various family policies tend to be provided together (rather than as substitutes), and the level of generosity varies substantially across countries. Nordic countries are the most generous providers, followed by Northern Europe (France, Austria, Germany), the English-speaking countries, and Southern Europe (Italy, Spain).^{xlvi}

The impacts of generous family policy packages on female employment tend to be positive across countries, particularly for mothers.^{xlvii} Policy impacts on gender gaps are much harder to discern, as they tend to result from a variety of policy interactions.

Indeed, there is no clear relationship across countries between policy generosity and wage equality. In the United States, where family policy is less generous, women earn much less than men and mothers are penalized more than women without children. Southern European countries offer the least generous policy packages, but boast some of the highest wage equality for women overall – much higher than for Continental Europe where the positive effects of family policy are offset by harsher tax penalties.^{xlvi}

IV. Conclusions: Payoffs to Investment in Female Career Continuity

The debate over the gender gap and family gap fits within a larger debate on the efficiency of social transfers in general. According to one common argument, social transfers create perverse incentives by encouraging the poor not to work and the rich not to produce. Thus social programs like unemployment benefits are best kept to a minimum in order to spur all productive workers into the labor market. Along the same lines, some argue that the gender gap in earnings simply reflects women's choices to drop out of the labor market or accept lower paying jobs. More productive women workers will find a way to manage work and family, and return to the labor market on their own, and the less productive will stay home with the kids. According to this logic, investing in family policies produces a drag on growth by subsidizing the more unproductive workers. This argument has been made both in the United States and United Kingdom, where family policy is least generous, and in larger welfare states. Sherwin Rosen has argued that in Sweden, government provision of childcare has been effective in boosting women's labor force participation and fertility rates, but the cost of these tax-financed subsidies distorts the market and encourages over-consumption of services that contribute little to overall

productivity.^{xlix} The result, he argues, is a decrease in aggregate growth and per capital welfare. Rosen admits these results are difficult to quantify, and indeed the negative effects on overall growth are not evident in Sweden's economic performance relative to other developed countries.

Further, the assumption that high tax rates are necessarily inefficient rests on the assumption of direct tax and transfer policy – that is, take from the rich and give directly to lower income groups. As Peter Lindert points out in *Growing Public* (2004)¹ the larger welfare states' policies are more complicated than this, combining progressive tax systems with pro-growth investments. The historical evidence of large welfare states demonstrates that high levels of social spending do not hold down growth – indeed the larger welfare states have maintained and even increased social investment with no net cost to GDP. In these countries, provision of universal benefits such as health care involves lower administrative costs and fewer work disincentives than the means-tested systems of minimalist welfare states. The gains from offering universal benefits pay off in a more productive work force. Family policy, as an often hidden component of overall social spending, can contribute to growth by increasing women's attachment to paid, productive labor.

Admittedly, where large gender gaps coexist with high overall wage inequality – as in the English-speaking countries – family policies such as childcare supports and paternal leave might have less impact on the gender gap in earnings than targeted interventions to address the overall wage structure. As Blau and Kahn have argued, policies that help compress wage structure will in turn narrow the earnings gap between men and women. There is no evidence, however, that they will raise the position of

mothers relative to women without children. Indeed, both the gaps and wages and labor force participation need to be addressed together – otherwise, the result can be a larger female workforce with depressed wages, as in the United States.

There is promising evidence that investing in female career continuity can bring high returns with the appropriate policy packages. Women’s labor supply tends to be more elastic, especially with the presence of children. This would indicate that a percentage incentive – as part of childcare, parental leave or tax policy - should generate higher returns than the same incentive targeted to male workers. The analysis presented here has shown that where these incentives are in place, women do respond positively, resulting in more equal outcomes in Scandinavian and some European countries than the United States or United Kingdom.

There is some comparative research showing that family friendly policies can result in greater discrimination against women, as the group perceived to benefit most from them. Job segregation is another potential effect: Mandel and Semyonov 2003 explore the relationships between family welfare policy and occupational segregation, reporting “support to the hypothesis that gender occupational inequality is more pronounced where family policy is more prevalent.”^{li} Shifting some of the burden of financing paid leave and child-friendly policies from employers to the state, through for example social insurance funds, could help hedge against this discrimination. In the long term, as pro-growth family policy encourages greater female job attachment, employer perceptions of a gender difference in commitment to work should decrease overall. This should decrease the incidence of ‘statistical discrimination’ toward women, at present a significant entry barrier for women in the labor market.

Policy packages that not only create incentives for women to enter the labor market but also support them in staying there are key in achieving greater equality both between men and women and among women in the labor market. Women who stay in the labor market develop skills and experience that raise productivity per person and contribute to aggregate long-term growth. Thus, the returns to investing in family policy to promote female career continuity promise to be cumulative over generations.

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