

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Posey, John

Working Paper

Family gap structures in Western nations

LIS Working Paper Series, No. 490

Provided in Cooperation with:

Luxembourg Income Study (LIS)

Suggested Citation: Posey, John (2008): Family gap structures in Western nations, LIS Working Paper Series, No. 490, Luxembourg Income Study (LIS), Luxembourg

This Version is available at: https://hdl.handle.net/10419/95498

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Luxembourg Income Study Working Paper Series

Working Paper No. 490

Family Gap Structures in Western Nations

John Posey

August 2008



Luxembourg Income Study (LIS), asbl

Family Gap Structures in Western Nations John Posey East-West Gateway Council of Governments

I gratefully acknowledge the assistance of William M. Rodgers III in the preparation of this paper.

Abstract: The term "family gap" refers to differences in income between households with children and households without children. Previous work has used the welfare state typology proposed by Esping-Andersen to explain differences in family gaps among western nations. This paper contributes to family gap literature by analyzing the structure of the family gap in seven countries. Using quantile regression models, family gaps are decomposed into male and female hours, male and female hourly pay, transfer payments and taxes. Using Esping-Andersen's typology, mothers in Continental nations participate in the labor market far less than their counterparts in other nations. Parents in Anglophone nations receive less income from social transfer payments. However, variations within each group of nations is considerable. Policies that explain the differing structure of the family gap in the seven nations include maternal leave, social transfers and the presence of "tax-splitting."

Family Gap Structure in Western Nations

I. Introduction

Over the last decade, several works have shown that households with children tend to receive less income than households without children. The difference in income has come to be known as the "family gap." Most discussion of the family gap has focused on the effect that children have on aggregate income. It is common to look for differences between different types of welfare states using a typology developed by Esping-Andersen (1990).

Less attention has been devoted to the effect that children have on the structure of family gaps in disposable household income. By structure, I refer to individual components of the family gap, including male and female wages and hours, social transfers and taxes.

This paper adds to family gap literature by examining the structure of family gap in seven western countries. The central question is as follows: Is there a significant difference between types of welfare states with respect to the structure of the family gap?

Principle findings are as follows: When countries representing a regime type are aggregated together, the Esping-Andersen typology has significant explanatory power.

However, when countries are analyzed individually, some discrepancies with the typology emerge.

The outline of this paper is as follows: First, I describe related work in both comparative welfare states and family gap literatures. Next, I present the methods and data used in this paper. A presentation of results follows. First, results are presented for groups of countries aggregated together by welfare state regime type. Next, I present results for each of the seven

countries individually. Finally, I outline some of the policies that may account for differences among countries, and differences with Esping-Andersen's typology.

II. Literature Review

A. Comparative Welfare State Literature

For the last fifteen years, comparative discussions of welfare states have been dominated by the work of Gosta Esping-Andersen. *In The Three Worlds of Welfare Capitalism* (1990), Esping-Andersen argues that welfare states in the Western world may be divided into three broad groups. "Liberal" welfare states, prevolent in the English-speaking world, are characterized by minimal governmental provisions for social welfare. "Conservative" welfare states, common on the European continent, link strong systems of government-funded social welfare programs with rigid stratification and traditional views on women and the family. Social Democratic welfare states, common in Nordic countries provide generous welfare benefits and a large array of state-sponsored programs to promote full-employment and egalitarianism.

The notion of decommodification is central in the thought of Esping-Andersen. Esping-Andersen observes that there are three sources of livelihood: Market, Family and Government. The term decommodification refers to the extent to which individuals in a society can find means of living outside of the market. Anglophone states, for Esping-Andersen, offer little hope for sustenance outside of the marketplace, and thus rank low on a decommodification scale. By contrast, Continental and Nordic states provide more support to individuals and families who are unable to compete in the market, and are thus considered decommodified to a higher degree.

Stratification is a second category by which Esping-Andersen assesses welfare states. Stratification refers to the degree to which power and resources are evenly distributed in society. Social democratic states have, as a central goal, the promotion of an egalitarian society. To this end, social democratic systems provide generous universal services and benefits to all members of society.

Continental welfare states were historically formed with conservative goals. Leaders such as Bismarck in Germany, Napolean III in France and von Toffe in Austria formed cradle to grave welfare systems in order to solidify the loyalty of individuals to the state. The systems were designed to not interfere with existing social stratification. Rather, benefits were tied to individuals' places in society. Building on the guild system, different types of workers were given different benefits. Thus, social programs were not universal.

In addition, the Continental countries were heavily influenced by Catholic social teaching on the role of women. As articulated in the 1891 encyclical Rerum Novarum, "women, again, are not suited for certain occupations; a woman is by nature fitted for home-work, and it is that which is best adapted at once to preserve her modesty and to promote the good bringing up of children and the well-being of the family" (Leo XIII, 1891). Thus, continental welfare systems were also designed to preserve existing gender stratification.

In classical liberal thought the market was considered to be an emancipatory institution. A premium was therefore placed on maximizing opportunities for individuals by minimizing the role of the state. As a result, the poor laws became the most common system for providing for the destitute in the Anglophone world. British poor laws were designed in a way that stigmatized recipients, and provided the most minimal assistance possible to avoid starvation. Means tested programs of today are the offshoot of the poor law tradition. Unlike the

universal systems in Nordic countries, then, Anglophone social programs tend to avoid interfering with existing social stratification.

Hicks and Kenworthy (2003) analyzes Esping-Andersen's typology through cluster analysis. Approximately 30 indicators of welfare regime type were subjected to principal components analysis. Measures included indicators such as government pensions as a share of GDP, means-tested poor relief as a share of public social expenditures, government employment as a percent of working age population, and the ratio of basic benefits to maximum benefits. The sources for this data were Esping-Andersen (1990), and OECD expenditure data from several unspecified years. Hicks and Kenworthy observe that:

If an SPSS K-means cluster analysis with a three-world target is applied ... the three worlds that emerge are a seemingly "social democratic" one composed of Denmark, Norway and Sweden, a seemingly "liberal" one composed of Australia, Canada, Ireland, Japan, New Zealand, Switzerland, the UK and the US, and a seemingly "conservative" one composed of Austria, Belgium, France, Germany, Italy and the Netherlands.

Hicks and Kenworthy further suggest that the model may be represented more parsimoniously along two dimensions, one representing social democratic policy (with laissez-faire liberalism at one pole, and social democracy at the other), and a conservative dimension.

B. Family Gap Literature

The term "family gap" was introduced in Waldfogel (1995). The term originally applied to differences in pay observed between women with children and women without children. Over the last ten years, Waldfogel and others have documented the existence of family gaps in several western countries. Originally the term was used to describe differences in women's hourly wages. Recently, the term has been broadened to include differences in household income between families with children and families without children.

Two recent papers have applied Esping-Andersen's typology to the study of family gaps in household income. Sigle-Rushton and Waldfogel (2004) use a simulation method to estimate the effect of children on household income over the course of a woman's lifetime. Using data from the Luxembourg Income Study covering the years 1994-2000, Sigle-Rushton and Waldfogel estimate household income as a function of the age of the woman, the number of children, and the age of the children for nine countries. They then create a set of idealized life courses, and use the estimated regression coefficients to compute total household earnings for a period in which the woman is between 19 and 45.

The major finding is that the household family gap is smallest in Nordic countries and largest in Germany and France. The gap in the English-speaking world is in between. These findings apply whether the dependent variable used is gross income or disposable income (i.e., after taxes and transfers). Thus, Nordic families with one child receive between 81 and 87% of the gross income received by their childless counterparts. For Continental states, the family gap is between 72-73%. In Anglophone countries the gap is between 75% and 81%.

Todd and Sullivan (2002) find similar results. Todd and Sullivan explore the effect of children on several income variables: male earnings, female earnings, self-employment income, government taxes and transfers, other income, and final disposable household income. Two OLS models are estimated: First, a dummy variable is used to show the effect associated with the presence of one or more children. The second model estimates a coefficient for a variable representing the number of children in a household. Separate models are estimated for married couple households and single parent households.

Like Sigle-Rushton and Waldfogel, Todd and Sullivan find that Nordic countries have the smallest family gaps, continental states have the largest gaps, and anglophone states are in the

middle. Todd and Sullivan observe that countries that offer the most generous benefits to families, in the form of transfers net of taxes, tend to show the largest family gaps in both earned income and disposable income.

This paper builds on the Todd and Sullivan and the Sigle-Rushton and Waldfogel papers in the following ways. First, I aggregate countries belonging to each regime type, and test to see whether differences between regime types are statistically significant. Second, unlike Todd and Sullivan, I add controls for age and education. Third, unlike Todd and Sullivan I separate the wages and hours of men and women in order to show their separate contributions to household disposable income.

The presentation of results is structured around four sets of predictions flowing from Esping-Andersen's typology:

<u>Labor Force Participation:</u> The first prediction based on Esping-Andersen is that the gap between mothers and childless women will be greatest in Continental countries. In countries influenced by Catholic teaching on the role of women, mothers would be expected to leave the labor force after the birth of a child, whether because of personal choice or because of incentives created by policy.

It is not clear from Esping-Andersen's typology whether labor force participation for mothers would be greater in Nordic or Anglophone states. The Nordic countries offer more child care services to enable women to enter the labor force. These services are virtually absent in Anglophone states. Nordic countries also offer more public employment opportunities for women, a buffer against the vicissitudes of the market. These factors would appear to encourage greater rates of labor force participation in Nordic countries.

However, Nordic states also offer families with children additional cash resources through taxes and transfers. In standard labor supply models (e.g., Killingworth, 1983), lump sum payments are considered an example of a pure income effect. Such payments reduce hours of labor force participation because they allow the household to essentially buy more leisure. This factor would appear to encourage lower rates of labor force participation for mothers in Nordic states, compared to their counterparts in Anglophone states. Thus, Esping-Andersen does not lead to a theory to describe how labor force participation rates for mothers in Nordic countries will compare to labor force participation among their Anglophone counterparts.

Esping-Andersen's typology, with help from Waldfogel's (1998) "family conflict hypothesis," also yields predictions related to the number of children in a household. Waldfogel posits that mothers face a conflict between work and family. According to Waldfogel, even though men and women ideally would evenly divide family obligations, more children in a household usually mean that the mother must devote more of her time and energy to household management. The conflict would be expected to be smallest in Nordic countries, which provide support services to working women. To the extent that the state assumes some child care obligations, the mother will find it easier to remain employed. Thus, it should take more children to discourage female labor force participation in Sweden than in other countries.

Additional children would be expected to have a smaller effect in Continental countries.

These countries provide minimal services for working mothers, instead offering cash supports for families with children. These social insurance payments mitigate the dependence of households on market income, and allow reductions in mothers' labor force participation.

Thus, it is logical to expect a single child to have a large effect on labor force participation,

with additional children making less of an impact. We would therefore expect less of a difference between women with one child and women with additional children.

Anglophone states do not provide additional cash support for families with children. Thus, households with children remain dependent on market income, a force that would be expected to keep labor force participation high. However, Anglophone states also offer minimal support services for working mothers, a fact that would be expected to depress mothers' labor force participation. This leads to the expectation that women will keep levels of labor force attachment as high as possible, but that more children in a household will depress female labor force participation at an increasing rate.

Household Earnings: Because of the effects of national policy on mothers' labor force participation, we would expect that the family gap in household earnings would be greatest in Continental countries. Esping-Andersen offers little guidance on the relative size of the family gap in household earnings in Nordic and Anglophone states.

<u>Net Transfers:</u> Esping-Andersen's theory suggests that net social transfers, after taxes, will be lowest in Anglophone states. In Anglophone states, the market is the principle source of economic well-being, and government does not interfere with the dependence of working-age families on the market.

In each country, we would expect social transfer payments to increase in a monotonic fashion as more children become part of the household, with Anglophone states offering the least assistance at each number of children.

Both Continental and Nordic countries offer families with children high levels of social support. It is not clear from Esping-Andersen which type of country would offer higher payments to families with children.

<u>Disposable Household Income:</u> Esping-Andersen's typology suggests that Nordic countries will see the greatest income advantage for families with children. In Nordic countries, families with children will enjoy high social transfer benefits, without dramatic reductions in mothers' labor force participation. It is not clear from Esping-Andersen whether Anglophone or Continental states will be more advantageous for families with children, as Continental families with children on average will see both lower female earnings and higher social transfer payments.

These predictions will guide the presentation of data in the following section.

III. Methods

To test the predictions outlined in the previous section, I use microdata to analyze the structure of the family gap in seven western nations. The nations, by regime type, are as follows:

- The Nordic model is represented by Sweden.
- The Continental model is represented by Germany, Belgium and the Netherlands.
- Anglophone states are represented by the US, Canada and the UK.

I begin by pooling data from each of the seven countries into a combined data set. All monetary values are converted to equivalent year 2000 US dollars.

To analyze the structure of the family gap, disposable income is broken down into its component parts. The components of disposable income are shown in Table 1. To arrive at disposable income, I start with household wages and salaries. To this is added self-employment income, property income, and pensions. These components may be thought of collectively as market income. To market income, social insurance payments, means-tested

benefits, private transfer income and other cash income is added to form gross income. Social insurance payments and means-tested benefits may be combined to form a social transfers category. Finally, payroll taxes and income taxes are subtracted from gross income to arrive at disposable income.

Earned income may further be broken down into male and female earnings. Male and female earnings may further be broken down into male and female hours, and male and female hourly wages.

I begin by presenting median values for each component of disposable income, by regime type. Next, median regression is used to control for some observable characteristics. Median regression is an appropriate method to use for several reasons. First, it has been used in related literature (Sigle-Rushton and Waldfogel, 2004). Second, it is more robust to outliers than OLS. Third, unlike log-linear models, it allows zero values to be incorporated into the regression.

A separate regression is estimated for each component of disposable income. Each regression takes the following form:

$$y_i^{med} = \alpha_0 + \alpha_1 AGE_i + \alpha_2 Age_i^2 + \alpha_3 k_i + \alpha_4 ANG_i + \alpha_5 CON_i + \alpha_6 k_i Ang_i + \alpha_7 k_i CON_i + \epsilon_1$$

where

y_i^{med}: median income for household i.

AGE_i: Age of the woman in household i.

Age²_i: Age squared of woman in household i.

k_i: dummy which equals 1 if there is a child in the household.

Ang_i: dummy which equals 1 if the household lives in an Anglophone state.

CON_i: dummy which equals 1 if the household lives in a Continental state.

12

 k_i *ANG_i: this interaction term is the product of k_i * ANG_i.

 k_i*CON_i : this interaction term is the product of k_i*CON_i .

In this form, residence in Sweden is the omitted variable. Thus, the family gap in Sweden will be denoted by α_3 . The family gap in Anglophone countries will be the sum of $\alpha_3 + \alpha_6$. The family gap in Continental countries will be the sum of $\alpha_3 + \alpha_7$. Two panels are presented for this series of regressions. The first panel shows statistical tests indicating whether the family gap in each country is significantly different from zero. The second panel shows whether the three regime types are significantly different from each other.

To determine whether findings from the first set of regressions are robust across households with different numbers of children, a second regression model is estimated for selected components of disposable income. Each regression takes the following form:

$$\begin{aligned} y_i^{med} &= \alpha_0 + \alpha_1 AGE_i + \alpha_2 Age^2_i + \alpha_3 k1_i + \alpha_4 k2_i + \alpha_5 k3_i + \alpha_6 k4_i + \alpha_7 ANG_i + \alpha_8 CON_i + \alpha_9 k2_i *Ang_i + \alpha_{10} k2_i *Ang_i + \alpha_{11} k3_i *Ang_i + \alpha_{12} k4_i *Ang_i + \alpha_{13} k1_i *CON_i + \alpha_{14} k2_i *CON_i + \alpha_{15} k3_i *CON_i + \alpha_{16} k4_i *CON_i + \epsilon_i + \alpha_{16} k4_i *CON_i + \alpha_{16} k4_i *CO$$

where

kj_i is a dummy which equals 1 if woman i has j children, j=1,2,3 or 4 (top coded).

kji*ANG is an interaction term, the product of kji * ANGi.

kj_i*CON is an interaction term, the product of kj_i * CON_i.

After analyzing groups of countries pooled together, I next direct attention to the individual countries that comprise the national groups. I begin by reporting median values of each component of disposable income for each of the seven countries. Next, I repeat the two

13

regression models outlined above, showing separate results for each of the seven countries.

This analysis is conducted in order to detect possible discrepancies with the Esping-Anderson model that may not be noticeable when countries are pooled together.

IV. Data

A. Data Set

To compare national differences in income by household type, I use survey data from the Luxembourg Income Study (LIS). LIS compiles data by time periods known as "waves." Wave V includes data from the years 1999-2000. Wave IV contains data from the period 1994-95. This paper uses Wave V data from the following countries: US, UK, Germany, Netherlands, Belgium and Canada. Wave IV data is used for Sweden. There is a Wave V dataset for Sweden, but it does not contain information on hours spent in the labor force. Thus, data for all countries is taken from the period 1995-2000. For each of the eight countries selected, LIS contains data on the components of household income shown in Table 1. (Luxembourg Income Study Database, http://www.lisproject.org/techdoc.htm, multiple countries. Data were accessed between October and December, 2005.)

B. Sample and Definitions

Following Sigle-Rushton and Waldfogel, the sample used in this paper includes married couple households in which the woman is between the ages of 25 and 45. I also follow Sigle-Rushton and Waldfogel in the definition of education categories: High education refers to at least the presence of a college degree. Medium education means a high school diploma, but less than a college degree. Individuals with low levels of education are those who have not

graduated from high school. Like Sigle-Rushton and Waldfogel, I focus this analysis on medium education households.

I differ from Sigle-Rushton and Waldfogel in the use of income figures that are not adjusted for household size. Following standard practice, the authors use the OECD equivalence scale, in which household income is divided 1 for a household with one adult and by 1.7 for households with 2 adults. In this scale, 0.5 is added to the denominator for each child under the age of 18. While the use of equivalency scales is useful for some purposes, the questions addressed in this paper are more closely related to actual income figures. I am investigating whether households with children have greater or smaller total incomes than households without children. Thus, income numbers unadjusted for household size are the most appropriate figures for this exercise.

V. Results

I begin by presenting differences in each component of disposable income by regime type. Table 2 shows the median values of each component for each of the three regime types. The family gap in women's hours of participation is far higher in Continental states. The median number of hours worked by childless women is 2,080, compared to 450 for mothers. In both Anglophone states and Sweden, the median hours of participation for childless women is approximately 2000, compared to approximately 1500 for mothers.

As a result, the family gap in earned income is larger in Continenal states than in other countries. Median household earnings for families with children is just 88% of the earnings for their childless counterparts. In both Anglophone states and Sweden, median household earnings for parents are over 90% of the earnings of childless couples.

Sweden provides the highest level of social transfer payments to families with children. Converted into US dollars, Sweden provided \$1,470 to families without children, compared to \$8,855 to families with children. Continental states provided no social insurance payments at the median to families without children, compared to \$3,161 for families with children. Anglophone states provided, at median, no social insurance payments to families with or without children.

The tax advantage to families with children is greatest in Continental countries. Families with children pay, at the median, more than \$5000 more in taxes than families without children. In Anglophone states, the family advantage is less than \$3000, while the difference in Sweden is less than \$1000. Continental states and Sweden offer about the same level of net transfers, approximately \$8,000.

In terms of disposable income, the difference in Anglophone countries between families with children and families without children amounts to less than \$1,000 (\$43,084 vs. 44,210). There is a significant family premium in disposable income in Continental states and Sweden, \$1,947 and \$3,007, respectively. Table 2, then, largely conforms to expectations concerning women's hours, household earnings, net transfers and disposable income.

Table 3 shows differences between regime types with respect to key components of disposable income. Median regression models are used to adjust for the age of the woman, and age-squared. Panel A tests to determine whether values are significantly different from zero, while Panel B tests whether regime types are significantly different from each other. In Panel A, the family gap in female hours is greatest in Continental countries, as the presence of a child reduces median hours by more than 1000 hours per year. This gap is more than twice as large as the family gap in Sweden, and 30% larger than in Anglophone states.

As a result, the family gap in earned income is greatest in Continental countries. The family gap in Continental countries is \$9,726, compared to \$4,851 in Anglophone states and \$3,111 in Sweden.

Sweden and the Continental Countries each have family premia in net transfers in excess of \$5,700, almost twice the amount in Anglophone states. As a result of these components, a family premium in disposable income exists for Swedish families. The adjusted gap in disposable income for Continental countries is \$2,274, compared to \$1,858 for Anglophone countries.

Panel B tests for differences between regime types. Regarding female hours, the median family gap in women's labor force participation is 389 hours greater in Continental states than in Anglophone states, a statistically significant result. Swedish mothers at the median spend 257 more hours in the labor force each year than do their Anglophone counterparts, also statistically significant. The difference between Swedish and Continental mothers, 646 hours, is also significant.

There is not a statistically significant difference between Anglophone states and Sweden in earned income. The median family gap in earned income in Continental countries is \$4,825 greater than that in Anglophone states, and more than \$6,600 greater than in Sweden, both statistically significant.

The family advantage in net transfers is not significantly different between Sweden and the Continentals, but Anglophone states transfer more than \$2,700 less than either of the other regime types.

As a result of these components, the disposable income family advantage in Sweden is significantly greater than in the other countries, while there is not a statistically significant

difference between Continental and Anglophone states. The median family gap in Sweden is \$4400 less than in Anglophone states, and \$4800 less than in Continental states.

The predictions are largely supported by Table 4. Regarding women's hours, continental states show far lower levels of labor force participation than do the other states, and the difference between Sweden and Anglophone states is comparatively small. Household earnings in Sweden and Anglophone states are not significantly different, but the family gap in earnings is significantly lower in Continental states. Net transfers do not differ significantly between Continental states and Sweden, though support for parents in Anglophone states is significantly lower. Disposable income in Sweden is significantly higher than disposable income in other states, while there is no significant difference between Continental and Anglophone states.

The foregoing analysis deals only with the presence or absence of a child. It may be asked whether these findings still apply when the number of children is taken into account. Tables 4 and 5 address this question.

Table 4 shows the effect of having one additional child by regime type. Regarding female hours, it appears that having one child does not have a significant effect in Sweden, although having additional children takes its toll on female labor force participation. A Swedish mother of two works, at the median, 86 fewer hours than a woman with one child. A woman with three children spends 352 fewer hours in the labor force than does a woman with two children.

In Continental countries, the presence of the first child has the largest impact. There is not a statistically significant difference between having one child and having two children, and the marginal effect drops at three children. Thus, a woman with one child spends 855 fewer

hours in the labor force than a childless woman, at the median. Although the coefficient for two children is negative, it is not significant at p<.10. Women with three children spend an average of 563 fewer hours in the labor force than women with two children.

In Anglophone countries, each additional child has an increasing marginal effect. Thus, a woman with one child spends 338 fewer hours in the labor force than a childless woman, a mother of two reduces her hours by an additional 356, a mother of three spends 421 fewer hours in the labor force, and a mother with more than three children spends 916 fewer hours in the labor force compared to a mother of three.

These findings are consistent with Esping-Andersen. In Continental states, the presence of a single child has the greatest effect on female labor force participation. This is consistent with the theory that Catholic-inspired teachings about the role of mothers applies regardless of the number of children. By contrast, the presence of a single child in Sweden makes no significant difference, consistent with the theory that services for working mothers are conducive to high labor force participation. At greater numbers of children, the conflict between work and family may be expected to grow, reducing participation. In Anglophone states, each additional child exerts an increasing toll on hours of participation. This is consistent with the prediction that mothers in Anglophone states face the starkest conflict between work and family, working as many hours as possible, but having fewer resources to devote to labor force participation as each additional child comes along.

Table 5 tests to see whether regime types vary significantly by presence of children. As expected, Continental mothers spend the fewest hours in the labor force regardless of the number of children, and the difference between Swedish and Anglophone mothers is not great. Compared to Anglophone mothers, Continental mothers of one spend 517 fewer hours

in the labor force. Continental mothers of two spend 438 fewer hours in the labor force. Continental mothers of three spend 581 fewer hours, and mothers with more than three children spend 210 fewer hours in the labor force, at the median. The difference between Continental states and Sweden is also great. Continental mothers of 1 spend 491 fewer hours in the labor force, and mothers with three children spend 894 fewer hours. The difference between mothers with more than three children does not test as statistically significant, probably because there are fewer mothers with four or more children in the sample.

The difference between Anglophone states and Sweden is not as significant. There is no significant difference for mothers with one child. For two and three children, the difference between Swedish and Anglophonic mothers is 245 and 314 hours. The differences between Anglophone mothers and Sweden are far smaller than their differences with Continental countries.

Also as expected, Anglophone states offer far less cash support to families with children, but the difference between Sweden and Continental states is relatively slight. The difference between Anglophone states and Sweden is greatest. Anglophone families with one child receive, at median, \$1,781 less than their Swedish counterparts. The differences are \$2,460, \$4,524 and \$9,291 for families with two, three and four children, respectively.

The difference between Continental states and Sweden is not significant at one through three children, although the median transfers received by Swedish parents amounts to over \$5000 more than their Continental counterparts.

Thus, Esping-Andersen's theory appears to have some explanatory power when regime types are viewed as a group. In the next set of tables, I will look at each country individually.

This will allow an examination of potential conflicts with Esping-Andersen's theory that would not be detectable at the group level.

I begin with a description in family gap structure in each country. Table 6 shows median unadjusted family gaps for each component of disposable income.

All countries have a family gap in earned income. The largest family gaps are in the Netherlands and Germany, where households with children earn less than 90% of what their childless counterparts earn. In all the other countries, families with children earn more than 90% as much as their childless counterparts.

Countries vary significantly regarding the extent to which social transfers are used to offset family gaps in earned income. In the US, social insurance payments to families with children do not vary significantly from payments to childless families. Canada's social insurance policies are somewhat larger for families with children. Payments received by parents are six times higher than those received by non-parents, enough to offset the small family gap in earned income.

The UK, Germany and the Netherlands all make significant use of social insurance to offset their large family gaps in earned income. In the UK, families with children receive \$6,385 more in social transfers than do childless families. This is more than twice the size of the family gap in earnings in the UK. In Germany, the family premium in social insurance amounts to \$3161, which erases more than half of family gap in wages. Parents in the Netherlands receive an additional \$1,991 from social insurance, enough to erase about a quarter of the family gap in wages.

Belgium and Sweden also advantage families with children through social insurance programs. In each case, the family premium in social insurance payments exceeds the family

gap in earned income. These countries, then, more than offset the family gap in earned income through social insurance payments.

Nations also differ with regards to the effect of taxes on the family gap. In the Netherlands and in the Anglophone states, taxes play a fairly minor role in changing the size of the family gap. Of these countries, taxes play the most significant role in the US, where the family gap in taxes is enough to erase the small family gap in gross income. In the US, the family gap in gross income was \$4,010, compared to a family gap in taxes amounting to \$3,290. In Canada, there is not a significant difference between the taxes of parents and those of non-parents. Taxes are also of lesser important in the Netherlands, erasing just two percentage points from the family gap in gross income. Dutch families with children receive an average gross income equal to 92% of their childless counterparts; after taxes, the disparity is reduced to 94%. Similarly, in the UK, there is less than \$1000 difference between parents and childles couples, an amount far les than the family advantage is social transfers.

Taxes play a more significant role in Germany, Belgium and Sweden. In Germany, taxes transform a family gap in gross income into a family premium in disposable income. The German gross income family gap of \$7,460 becomes a family premium of \$1,948 after taxes. Expressed in percents, the German family gap in gross income was 87%, while the family premium after taxes was 5%. In Belgium and Sweden, taxes increase the size of the family premium created by transfer policies. The Belgian family premium of 5% in gross income becomes a family premium of 13% after taxes are added. Similarly, the family advantage in Sweden rises from 4% to 9%.

Three groups of countries emerge from Table 6, though the groups are not precisely what Esping-Andersen's model would predict. The US and Canada resemble each other in having small family gaps in earned income which are erased through taxes or transfers. Canada offsets the family gap in earnings through modest social transfers, while the US does so through tax advantages for families with children. Sweden, Belgium and the UK have small family gaps in earned income, which are transformed into significant family premia in disposable income through the use of taxes and transfers. Germany, and the Netherlands are countries with sizable family gaps in earned income which are largely or fully offset through the use of taxes and transfers.

The unadjusted medians presented in Table 6 suggest that Esping-Andersen's typology has some predictive value. Compared to Continental countries, Sweden and the Anglophone nations have far higher rates of labor force participation for mothers. Belgium, however, was more similar to Sweden than to the other Continental countries.

Regarding household earnings, Esping-Andersen's theory correctly suggested that the US, UK, Canada andSweden would have smaller family gaps than Germany and the Netherlands. The exception to this prediction was Belgium, which was again closer to Sweden.

The data regarding social transfers largely conforms to expectations. Sweden's social transfers reduced the family gap by the greatest amount, and transfers in the Anglophone states had the least effect on family gaps. The Continental states were all between these extremes. However, the UK is more like Sweden than it is like its former colonies.

As expected, the Continental countries ended up with the largest family gaps in disposable income. The US and Canada did not show a significant difference in disposable income

between families with children and childless families. Sweden, Belgium and the UK all ended up with family premia in disposable income.

Table 7 details the regression adjusted components of earned income. Hours of labor force participation for women is the single most important driver of the family gap in earned income. This gap is greatest in the UK and the Continental countries. In each of these countries, childless women spend 880 more hours in the labor force than mothers do. By contrast, in the US, Sweden and Canada, mothers the difference between mothers and childless women is less than 600 hours.

Table 8 shows results of median regressions incorporating the number of children.

Dummies were added to the previous model to indicate the presence of one, two, three or more than three children.

Table 8 shows that the number of children in a household is associated with variations in income. Two principal observations emerge from this table.

First, female hours decline everywhere as the number of children increase. However, the rate of decrease varies greatly. In Germany, one child is sufficient to drive most women out of the labor force, as witnessed by the decline of 1927 hours per year with the birth of one child. At the other extreme, mothers of one in the US spend just 158 fewer hours in the labor force

Having just one child in the household is associated with a steep drop in female hours in the nations of Germany, the UK and the Netherlands. In each of these countries, mothers of one spend at least 600 fewer hours in the labor force than do their childless counterparts. In all of the other countries, the presence of a single child is associated with a drop of just 400 hours per year.

Second, in all countries, net transfers tend to increase as the number of children increase. However, the increase in transfers associated with additional children varies greatly. In Germany, the difference between childless women and mothers with one child is greater than the difference between having one child and having four children. The presence of one child in Germany is associated with an increase of more than \$12,000 in net transfers, but additional children do not add transfers that are statistically significant. (It should be noted that all signs associated with additional children are positive.)

In Belgium, increasing children are associated with net transfers that increase at an increasing rate. While the difference between no children and one child in Belgium is a statistically insignificant \$2,387, the third child brings in an additional \$6885, while having an additional child over three results in an additional \$7480 at the median.

Overall, the US and Canada offer far less social support for families with children for all household sizes. The UK most resembles the Netherlands in its use of net transfers for families with children.

To summarize the results presented: Data from seven countries was pooled into a single dataset, with dummies attached to each record indicating the regime type in which individuals resided. With the data pooled together, statistically significant differences between regime types were found. Most significantly, Continental countries had far lower levels of labor force participation with mothers than did other countries, and Anglophone states offered far lower levels of social support for families with children.

When individual results were reported for each of the seven countries, however, there were some exceptions to the pooled findings. First, the UK appeared more like the Continenal

states with respect to both social transfers and the labor force participation of mothers.

Second, Belgium appeared more like Sweden than like the other Continental countries.

These discrepancies with Esping-Andersen's model raise questions about the mix of policies found in each country that contribute to family gaps. A closer look at some of these policies appears in the next section.

V. Taxes, Transfers and Family Policy

At least three types of policy have the ability to affect household income packages and labor supply decisions. First, family policies such as maternity leave and child care affect the ability of women to remain in the labor force following the birth of a child. Second, social insurance programs give extra cash to families with children, and can make possible a decision to reduce hours of labor force participation. Third, income tax structures can have a negative effect on labor supply, particularly if second earners are penalized through a tax-splitting system. Each of these policy variables will be addressed in turn.

A. Family Policy

As discussed in the literature review, Waldfogel has suggested that maternity leave and child care policy may play a role in labor force attachment for women, with generous family policies serving to empower higher rates of labor force participation for mothers. Gornick and Meyers (2003) have compiled a summary of family policies in several western nations. For the countries included in this paper, the relevant policies are as follows:

Sweden: Parents may share up to 65 weeks of paid parental leave. About half of all children age 1 and 2 are in government funded childcare, and over 80% of children age 3-5 are in

public childcare facilities. Parental leave benefits amounted to \$607 per working woman in 1998.

Belgium: Mothers receive paid maternity leave for 15 weeks following the birth of a child. Thereafter, parents may share up to 13 weeks of paid parental leave. 85% of children over 30 months are in child care, while 99% of children age 3-5 are in child care. Belgium spends \$233 per working woman on parental leave benefits.

Netherlands: Mothers are entitled to paid maternity leave for 16 weeks following the birth of a child. After this period, each parent is allowed to take up to 13 weeks of unpaid leave per child, until the child's 8th birthday. 99% of 4 and 5 year olds are in child care, but less than 20% of younger children are in government funded slots. The Netherlands spend \$66 per working woman on parental leave benefits.

Germany: Mothers are given 14 weeks of paid maternity leave following the birth of a child. Thereafter, parents may share a total of three years of paid leave at standard rates. Two years of paid leave must be taken before the child's third birthday, while the remaining year must be used before age 8. Germany spends \$465 per working woman on parental leave benefits. In Germany, 77% of children age 3-5 are in child care slots, but less than 10% of younger children receive government funded child care.

UK: Mothers receive between 18 and 26 weeks of paid leave following the birth of a child. Thereafter, each parent is entitled to up to 13 weeks of unpaid leave. Britain spends \$75 per working woman on parental leave benefits. 77% of children age 3-5 are in government funded childcare, but less than 10% of younger children are in childcare.

Canada: Mothers receive 15 weeks of paid leave. After this, parents may share up to 35 weeks of paid leave. About half of children age 3-5 are in government funded childcare, but

few younger children receive childcare. Canada spends \$152 per employed woman on parental leave benefits.

US: There is no national policy of paid maternity leave, but each parent is entitled to up to 12 weeks of unpaid leave. Just 6% of US children are in subsidized childcare.

Based on these policy combinations, Gornick and Meyers compute an index to show the relative support given by governments to families with children. Scores are based on levels of support in the year 2000, and range from zero to 1, with 1 reflecting the maximum level of support. Scores are shown in Table 9.

The Anglophone nations offer the lowest level of support for working families, Sweden offers the most, and the continental countries are in the middle. The non-trivial level of support given to working mothers in Continental countries is somewhat at odds with Esping-Andersen's theory. In particular, the highly advanced system of maternity leave in Germany seems at odds with the goal of encouraging mothers to stay at home with their children.

B. Net Transfers

All countries give advantages to families with children through taxes and transfers. As summarized by Atkinson (1993), the standard textbook model of labor supply teaches that a lump sum payment given to a household with children would have the effect of reducing labor supply. Such a lump sum payment would be a pure example of the income effect, which essentially would allow households to consume more leisure. Thus, generous cash benefits for families with children would be expected to depress labor supply for those households.

Table 10 shows the percentage by which the presence of children increases mean household disposable income in each country. The most generous country is Germany, where transfer payments flowing to families with children, combined with tax advantages to families with children, result in an addition of more than DM16,000. Dividing this figure by the mean income for childless households yields .167, indicating that adding a child to a household can be expected to increase family disposable income by 16.7%.

Canada and the US are the least generous countries by this measure. In the US, families with children receive an average of just \$69 more in means-tested and social insurance payments. Families with children pay an average of \$2,760 less in taxes, resulting in a total advantage of \$2,829 for these households. This amounts to just 4.5% of average income for households without children. In the US, adding a child to a household will, all else being equal, increase household income by 4.5% through transfers and tax advantages.

Sweden and Germany are clearly the most generous with cash benefits for families with children, while the US and Canada offer the lowest advantage for parents. Belgium, the Netherlands and the UK are all in the middle. This table confirms that Sweden and the Continental countries all offer families with children far higher levels of cash support, but the UK is closer to its European neighbors than to its North American cousins.

C. Tax Splitting

Zimmerman (1993), Dingeldey (2001) and Steiner and Wrohlich (2004) have argued that the German system of split taxation deters female labor force participation in that country. Under this system, the household is the tax-paying unit. Couples are allowed to add their incomes together, then divide the total amount by 2, and use the resulting tax rate for the

household income tax. For example, if a wife earns DM80,000 and a husband earns DM20,000, the total household income is DM100,000. This amount is divided in half, to reach DM50,000. The tax rate for an income of DM50,000 is then applied to the total household income. Since Germany's tax code is highly progressive, this results in lower taxes than would exist if each individual were taxed separately.

By contrast, Sweden and Great Britain have fully individualized systems, in which each partner is taxed separately. Belgium, the Netherlands, the US and Canada have partially individualized systems, in which the household is the basic tax unit but tax rates are not based upon income splitting. The Dutch system is nearly individualized, although low-income families with single earners obtain generous tax relief. Belgium offers an individualized system, but offers significant tax relief for sole-earner families. In the US and Canada, the household is the unit of taxation, but income splitting is not practiced.

The German system of tax-splitting is widely thought to have a negative effect on female labor force participation because it penalizes secondary earners. To give an example from the 1990 German tax code, a husband sole earner who earned DM100,000 would face a marginal tax rate of over 46%, and an effective tax rate of 30%, for a tax burden of DM30,038. If his wife took a job earning DM20,000, the couple's marginal tax rate would increase to 52.3%, for a tax burden of DM39,928 on their income of DM120,000. Thus, an increase of DM20,000 in income would lead to an increase of DM10,000 in taxes, creating an effective marginal tax rate of 50% for the second earner. By contrast, if her earnings were taxed separately, she would face a marginal tax rate of 22.3%, and a tax load of DM2,478, for an effective tax rate of less than 25%. Thus, income splitting would have the effect of doubling

the effective tax rate for secondary earners. This is considered to be a strong deterrent to labor force participation for secondary earners.

Steiner and Wrohlich (2004) have conducted simulations to determine the effect of switching to a Swedish system of individualized taxation. Assuming revenue neutrality, they conclude that individualized taxation would increase female labor supply by approximately 10%. For this reason, the OECD has pressed Germany to reform its tax code. The German tax reform of 2001 is phasing in reforms to increase incentives for female labor force participation.

In summary, there are at least three types of policies that have an effect on household income packages:

- Generous maternity leave and childcare policies should increase household income packages by increasing female labor force participation.
- Social transfers to families with children have both direct and indirect effects.
 Transfers increase income for families with children directly, but this increase in income may be partially offset by declines in female labor force participation.
- Split taxation systems depress female labor force participation, while individualized systems increase women's hours in the labor force. Partially individualized systems have an indeterminate effect.

Sweden stands as a classic example of the social democratic model, and the US is a near perfect example of a laissez-faire state. Other countries, though, are not fully consistent with any model.

Germany is close to the model of a Christian Democratic state. However, Germany has one of the strongest maternity leave systems in the western world, a policy that is at odds with other programs that would be expected to depress female labor force participation.

Canada is closer to the US than it is to any other country, but the Canadian government shows a far greater willingness to use social transfers and family policy to benefit families with children. Notably, social insurance payments to families with children increase as the number of children in a household increases.

The UK, with its lack of maternity leave and childcare programs and a somewhat high level of benefits for families with children appears more like a Christian Democratic nation that a laissez-faire one. However, fully individualized taxation stands as an incentive for female labor force participation.

Belgium has social transfers and family policies that are generous compared to other Anglophone and continental states, but it is far less generous than Sweden.

The Netherlands resemble Sweden in both its use of social transfers to benefit families with children, and in the use of individualized taxes. In terms of family policy, the Netherlands more closely resembles other continental states.

When details of policies are examined, the ideal types articulated by Esping-Andersen become more fuzzy. Nations resemble one type of model with respect to one type of policy, but may resemble another model for another policy variable.

The Family Gap and the Three Worlds

An analysis of the structure of the family gap in seven nations revealed differences between those nations that could not be fully explained by the "Three Worlds of Welfare Capitalism" ideal types articulated by Esping-Andersen. Additional detail concerning policies that affect the family gap in these nations showed inconsistencies between nations that are classified together in Esping-Andersen's schema.

Bambra (2005) outlines some criticisms of Esping-Andersen's general schema that may shed light on these inconsistencies. Critics have argued that the ideal types posited by Esping-Andersen are illusory. These critics argue that national policies are rarely consistent. Different policies are established at different times and for different reasons; deducing the nature of a welfare system from a general account of political ideology, in this viewpoint, will be misleading.

Using ideal types to classify nations may work best when only one or two types of policy are under consideration. As more policies are added to the discussion, it becomes more difficult to sustain a clear distinction between groups of countries. Rather than classify countries through the use of ideal types, it may be more useful to consider each category of policy as a dimension along which each country will fall. A country's position on one dimension will not necessarily determine its position on other dimensions.

To explain a complex phenomenon such as the family gap, it is necessary to consider several different types of policy variables. These policy dimensions may not consistently adhere to a single ideology. Additional research on the family gap should attempt to decompose the effects of taxes, transfers, maternity leave and child care.

References

Bambra, C. 2005. Cash Versus Services: "Worlds of Welfare" and the Decommodification of Cash Benefits and Health Care Services. Journal of Social Policy, 34(2), pp. 195-213.

Buchinsky, M. 1998. Recent Advances in Quantile Regression Models: A Practical Guideline for Empirical Research. Journal of Human Resources, 33 (1), pp. 88-126.

Datta Gupta, N., Smith, N. 2002. Children and Career Interruptions: The **Family Gap** in Denmark.. Economica. Vol. 69 (276). p 609-29.

Dingeldey, I. 2001. European Tax Systems and their Impact on Family Employment Patterns. Journal of Social Policy, 30(4), pp. 653-72.

Esping-Andersen, G. 1990. The Three Worlds of Welfare Capitalism. Princeton: Princeton University Press.

Esping-Andersen, G. 1996. Welfare States in Transition: National Adaptations in Global Economies. Thousand Oaks, CA: Sage.

Gornick, J. and Meyers, M. 2003. <u>Families That Work: Policies for Reconciling Parenthood</u> and Employment. New York: Russell Sage Foundation.

Harkness, S. and Waldfogel, J. 1999. The Family Gap in Pay: Evidence from Seven Industrialised Countries. Centre for Analysis of Social Exclusion, LSE, CASE Papers.

Joshi, H., Paci, P. and Waldfogel, J. 1999. The Wages of Motherhood: Better or Worse? Cambridge Journal of Economics, 23(5), pp. 543-64.

Leo XIII. 1891. Rerum Novarum: Encyclical Letter on the Condition of Labor. Available on Vatican Web Site:

http://www.vatican.va/holy_father/leo_xiii/encyclicals/documents/hf_l-xiii_enc_15051891_rerum-novarum_en.html

Nielsen, H., Simonsen, M. and Verner, M. 2004. Does the Gap in Family-Friendly Policies Drive the Family Gap?. Scandinavian Journal of Economics, 106 (4), p 721-44.

Phipps, S.; Burton, P. and Lethbridge, L. In and Out of the Labour Market: Long-Term Income Consequences of Child-Related Interruptions to Women's Paid Work.. Canadian Journal of Economics. Vol. 34 (2). p 411-29.

Sigle-Rushton, W. and Waldfogel, J. 2004. Family Gaps in Income: A Cross-national Comparison. Luxembourg Income Study Working Paper # 382. http://www.lisproject.org/publications/liswps/382.pdf Steiner, V. and Wrohlich, K. 2004. Household Taxation, Income Splitting and labor Supply Incentives—A Microsimulation Study for Germany. Deutsches Institut für Wirtschaftsforschung Discussion Paper # 421.

www.diw-

berlin.de/deutsch/produkte/publikationen/diskussionspapiere/docs/papers/dp421.pdf

Todd, E. and Sullivan, D. 2001. The Effects of Children on Household Income Packages: A Cross-National Analysis. Luxembourg Income Study Working Paper # 257. http://www.lisproject.org/publications/liswps/257.pdf

Waldfogel, J. 1995. The Price of Motherhood: Family Status and Women's Pay in a Young British Cohort. Oxford Economic Papers, 47(4), pp. 584-610.

Waldfogel, J. 1997. The Effects of Children on Women's Wages. American Journal of Sociology 62 pp. 209-217.

Waldfogel, J. 1998a. Understanding the "Family Gap in Pay for Women with Children. Journal of Economic Perspectives, 12(1), pp. 137-56.

Waldfogel, J. 1998b. The **Family Gap** for Young Women in the United States and Britain: Can Maternity Leave Make a Difference?. Journal of Labor Economics. Vol. 16 (3). p 505-45.

Zimmermann, K. 1993. Labour Responses to Taxes and Benefits in Germany. In A.B. Atkinson and G.V. Mogensen, eds: Welfare and Work Incentives: A North European Perspective. Oxford University Press.

Table 1: Components of Disposable Income

Wages and Salaries

- + Self Employment Income
- = Earned Income
- + Property Income
- = Factor Income
- + Pensions
- = Market Income
- + Social Insurance
- + Means-Tested Benefits
- + Private Transfer Income
- + Other Cash Income
- = Gross Income
- Payroll Taxes
- Income Taxes
- = Disposable Income

Source: LIS

Table 2: Components of Disposable Income by Regime Type

	Households with No Children	Households With Children	Parent/ Childless Ratio					
one States								
Wages & Salaries	52500	47235	0.89971	**				
Social Transfers	0	0						
Gross Income	56658	53000		**				
Taxes	12226	9354	0.76509	**				
Disposable Income	44210	43084	0.97453	**				
Male Wage	11.84	10.37	0.87584	**				
Female Wage	10.53	9.13	0.86705	**				
Male Hours	2080	2080	1					
Female Hours	2080	1456	0.7	**				
Sample Size: 15397								
ntal States								
Wages & Salaries	47073	41219	0.87564					
Social Transfers	0	3161		**				
Gross Income	59264	51804	0.87412					
Taxes	19764	14756	0.74661					
Disposable Income	36466	38413	1.05339	**				
Male Wage	10.42	15.33	1.47121	*				
Female Wage	12.51	0		**				
Male Hours	2080	2184	1.05	**				
Female Hours	2080	450	0.21635	**				
	2080	0		**				
	Wages & Salaries Social Transfers Gross Income Taxes Disposable Income Male Wage Female Wage Male Hours Female Hours Size: 15397 Intal States Wages & Salaries Social Transfers Gross Income Taxes Disposable Income Male Wage Female Wage Male Hours	with No Children none States Wages & Salaries Social Transfers Gross Income Taxes Disposable Income Male Wage Female Wage Female Hours Size: 15397 Intal States Wages & Salaries Social Transfers Gross Income Taxes Uages & Salaries Social Transfers Gross Income Taxes Disposable Income Taxes Uages & Salaries Social Transfers Gross Income Taxes Disposable Income Male Wage Temale Wage Male Wage Male Hours Social Transfers Coccord Taxes Disposable Income Male Wage Total States Uages Social Transfers Coccord Taxes Disposable Income Male Wage Total States Uages Social Transfers Coccord Social	with No Children With Children none States Wages & Salaries 52500 47235 Social Transfers 0 0 Gross Income 56658 53000 Taxes 12226 9354 Disposable Income 44210 43084 Male Wage 11.84 10.37 Female Wage 10.53 9.13 Male Hours 2080 2080 Female Hours 2080 1456 Size: 15397 3161 3161 Gross Income 59264 51804 Taxes 19764 14756 Disposable Income 36466 38413 Male Wage 10.42 15.33 Female Wage 10.42 15.33 Female Wage 12.51 0 Male Hours 2080 2184 Female Hours 2080 2184 Female Hours 2080 450	with No Children With Children Childless Ratio none States Children Ratio wages & Salaries 52500 47235 0.89971 Social Transfers 0 0 0 Gross Income 56658 53000 53000 0 Taxes 12226 9354 0.76509 0 Disposable Income 44210 43084 0.97453 0.87584 Female Wage 11.84 10.37 0.87584 0.8705 Male Hours 2080 2080 1 1 Female Hours 2080 2080 1 0.7 Size: 15397 3161 0.87564 0.7 0.7 Size: 15397 41219 0.87564 0.7				

Sample Size: 1751

All currency values converted to US 2000 Dollars.

The sample consists of married couple households in which the woman is between the ages of 25 and 44, and in which the woman has a medium level of education.

All samples are from the years 1999-2000, except for Sweden (1995) and Belgium (1997).

^{**} Significant at p<.05

^{*} Significant at p<.10

Table 2, Continued

Sweden

Median	Wages & Salaries	42960	39583	0.92139	**
Median	Social Transfers	1470	8855	6.02381	**
Median	Gross Income	48097	50157	1.04283	
Median	Taxes	14438	13597	0.94175	**
Median	Disposable Income	33630	36637	1.08941	**
Median	Male Wage	11.7	11.57	0.98889	
Median	Female Wage	11.41	10.52	0.922	**
Median	Male Hours	2028	2028	1	
Median	Female Hours	1872	1404	0.75	**

Sample Size: 2218

All currency values converted to US 2000 Dollars.

The sample consists of married couple households in which the woman is between the ages of 25 and 44, and in which the woman has a medium level of education.

All samples are from the years 1999-2000, except for Sweden (1995) and Belgium (1997).

^{**} Significant at p<.05

^{*} Significant at p<.10

Table 3: Family Gap Structures by Regime Type

Panel A: Family Gaps by Regime Type

	Sweden Family Gap		Anglophone Family Gap		ContinentalFamily Gap	
Wages/Salary	-3111	*	-4851	**	-9726	**
Gross Income	1659		-4199	**	-6546	**
Net Transfers Disposable	6011	**	2989	**	5734	**
Income	2560	**	-1858	**	-2274	**
Male Wage	0.27		-1.14	**	0.41	
Female Wage	-1.28	**	-1.81	**	-2.89	**
Female Hours	-441	**	-698	**	-1087	**

^{*} Significantly Different from Zero at p<.10

Panel B: Differences between Family Gaps of Regime Types

	Sweden Family Gap - Anglophone Family Gap		Sweden Family Gap - Continental Family Gap		Anglophone Family Gap - Continental Family Gap	
Wages/Salary	1740		6615	**	4875	**
Gross Income	5858	**	8205	**	2347	
Net Transfers Disposable	3022	**	277		-2745	**
Income	4418	**	4834	**	416	
Male Wage	1.41	**	-0.14		-1.55	**
Female Wage	0.53		1.61	**	1.08	**
Female Hours	257	**	646	**	389	**

^{*} Regime Types Significantly Different at p<.10

Sample includes married couple households in which the woman is between the ages of 25 and 45, and in which the woman has a medium level of education.

The Swedish sample year is 1995. The Belgian sample year is 1997. All others are 1999-2000. All currencies converted to 2000 US Dollars.

^{**} Significantly Different from Zero at p<.05

^{**} Regime Types Significantly Different at p<.05

Table 4: Differences Associated with Additional Children by Regime Type

Net Transfers Anglophone Continental Sweden	Difference Between No Children and One Child 2054 3885 3835	** ** **	Difference Between Two Children and One Child 542 2281 1221	** ** **	Difference Between Three Children and Two Children 2558 2399 4622	** ** **	Difference Between More than Three Children and Three Children 4612 5027 5028	** ** **
Female Wages Anglophone Continental Sweden	Difference Between No Children and One Child -1.15 -0.87 -1.39	** * **	Difference Between Two Children and One Child -0.62 -2.31 0.1	**	Difference Between Three Children and Two Children -1.13 -5.89 -0.63	**	Difference Between More than Three Children and Three Children -2.98 -8.64 0.04	**
Female Hours Anglophone Continental Sweden	Difference Between No Children and One Child -338 -855 -364	**	Difference Between Two Children and One Child -356 -277 -86	**	Difference Between Three Children and Two Children -421 -563 -352	** ** **	Difference Between More than Three Children and Three Children -916 -689 -220	** **

Sample includes married couple households in which the woman is between the ages of 25 and 45, and in which the woman has a medium level of education.

The Swedish sample year is 1995. The Belgian sample year is 1997. All others are 1999-2000. All currencies converted to 2000 US Dollars.

^{*} Significant at p<.10

^{**} Significant at p<.05

Table 5: Differences Associated with Additional Children Across Regime Types

A. Difference Between Anglophone and Continental States

	1 Child		2 Children		3 Children		4 Children	
Net Transfers	-1831	**	-3570	**	-3412	**	-3985	**
Female Wage	-0.28		1.41	**	6.18	**	7.07	**
Female Hours	517	**	438	**	581	**	210	**

B. Difference Between Anglophone States and Sweden

	1 Child		2 Children		3 Children		4 Children	
Net Transfers	-1781	**	-2460	**	-4524	**	-9291	**
Female Wage	0.24		-0.47		-0.97	**	-2.86	**
Female Hours	26		-245	**	-314	**	-589	**

C. Difference Between Continental States and Sweden

	1 Child	2 Children		3 Children		4 Children	
Net Transfers	50	1110		-1112		-5306	**
Female Wage	0.53	-1.88	**	-7.14	**	-9.93	**
Female Hours	-491	** -683	**	-894	**	-800	**

^{*} Significant at p<.10

Sample includes married couple households in which the woman is between the ages of 25 and 45, and in which the woman has a medium level of education.

The Swedish sample year is 1995. The Belgian sample year is 1997. All others are 1999-2000. All currencies converted to 2000 US Dollars.

^{**} Significant at p<.05

Table 6: Components of Disposable Income by Country

US	·	Households with No Children	Households With Children	Parent/ Childless Ratio	
Median Median	Wages & Salaries Social Transfers	55000 0	50000 0	0.9	**
Median	Gross Income	59010	55000	0.93	k **
Median	Taxes	12097	8807	0.73	
Median	Disposable Income	46219	45906	0.99	
Median	Male Wage	12.02	13.82	1.19	
Median	Female Wage	10.71	9.62	0.90	
Median	Male Hours	2080	2080	1.00	
Median	Female Hours	2080	1560	0.7	5 **
Sample	Size: 7000	Year: 2000			
Canada					
Median	Wages & Salaries	40541	38649	0.9	
Median	Social Transfers	203	1301	6.4	
Median	Gross Income	43666	43463	1.00	
Median	Taxes	10591	10500	0.99	
Median Median	Disposable Income Male Wage	32767 10.86	32591 11.61	0.99 1.0	
Median	Female Wage	8.18	7.38	0.90	
Median	Male Hours	2120	2120	1.00	
Median	Female Hours	1855	1272	0.69	
Sample S	Size: 5891	Year: 2000			
UK					
Median	Wages & Salaries	42960	39583	0.92	2 **
Median	Social Transfers	1470	8855	6.02	2 **
Median	Gross Income	48097	50157	1.04	1
Median	Taxes	14438	13597	0.94	
Median	Disposable Income	33630	36637	1.09	
Median	Male Wage	11.7	11.57	0.99	
Median	Female Wage	11.41	10.52	0.92	
Median	Male Hours	2028	2028	1.00	
Median	Female Hours	1872	1404	0.7	5 **

Sample Size: 2218 Year: 1999

All currency values converted to US 2000 Dollars.

The sample consists of married couple households in which the woman is between the ages of 25 and 44, and in which the woman has a medium level of education.

^{**} Significant at p<.05
* Significant at p<.10

Table 7: Adjusted Family Gaps by Country

Anglophone Wages/Salary Gross Income Net Transfers Disposable Income Male Wage Female Wage Female Hours	US Family Gap -2,917 -2,186 2,613 860 -1.36 -0.96 -483	** ** ** **	UK Family Gap -15,374 -11,542 5,693 -7,394 -5.86 -5.65 -1023	** ** ** ** ** **	Canada Family Gap -3,469 -1,554 1,748 -1,066 0.06 -0.95 -576	** ** ** ** **
Continental Wages/Salary Gross Income Net Transfers Disposable Income Male Wage Female Wage Female Hours	Germany Family Gap -17052 -13056 12285 -5023 1.51 -10.57 -1998	** ** ** ** **	Neth Family Gap -9019 -7374 4707 -3412 0.26 -3.30 -912	** ** ** ** **	Belgium Family Gap -2257 -61 4570 2133 -8.53 0.34 -880	**
	Sweden Family					

	Sweden Family	
Nordic	Gap	
Wages/Salary	-2863	**
Gross Income	2360	**
Net Transfers Disposable	5888	**
Income	3089	**
Male Wage	0.22	
Female Wage	-1.27	**
Female Hours	-520	**

^{*} Significantly Different from Zero at p<.10

Sample includes married couple households in which the woman is between the ages of 25 and 45, and in which the woman has a medium level of education. Model also controls for the age of the woman, and age-squared.

The Swedish sample year is 1995. The Belgian sample year is 1997. All others are 1999-2000. All currencies converted to 2000 US Dollars.

^{**} Significantly Different from Zero at p<.05

Table 8: Differences Associated with Additional Children by Country

<u>US</u> Net Transfers Female Wages	Difference Between No Children and One Child 1215.1891 -0.19584592	**	Difference Between Two Children and One Child 1525.4198 -0.80697975	**	Difference Between Three Children and Two Children 1558.391 -0.80136559	**	Difference Between More than Three Children and Three Children 1903.6089 -1.175316	**
Female Hours	-158.22221	**	-317.33335	**	-506.66665	**	-571.00002	**
<u>Canada</u>								
Net Transfers	1496.8219	**	-565.40568	*	3524.8652	**	1971.4375	**
Female Wages	-0.66555083	**	-0.02194928		-1.4621922	**	-5.1750892	**
Female Hours	-319.64833	**	-228.99045	**	-557.64114	**	-247.1555	
UK								
Net Transfers	4760.1788	**	457.49316		2312.8841	**	6965.4849	**
Female Wages	-3.9571985	**	-2.235118	**	-1.2527971	**	-6.6556988	**
Female Hours	-770.30769	**	-279.62636	**	-136.37363	**	-810.81319	**
Germany								
Net Transfers	12057.561	**	211.32278		2955.5715		5379.3616	
Female Wages	-9.2083356	**	-2.52711	**	-0.98155486		-0.11395859	
Female Hours	-1927.1272	**	-116.70286	*	-140.17		18.472855	
<u>Netherlands</u>								
Net Transfers	3751.9876	**	1229.8667	*	1880.0272	**	-2108.1259	
Female Wages	-0.61916923		-2.7422658	**	-6.8463082	**	-0.73540028	
Female Hours	-624	**	-364	**	-364	**	-312	**
Temate Hours	-024		-304		-304		-312	
<u>Belgium</u>								
Net Transfers	2386.9182		4463.4596	**	6885.2788	**	7479.5772	**
Female Wages	0.1925999		-0.31503395		1.8348906		-5.2095596	*
Female Hours	-364	**	-499.54287	**	-973.71429	**	-29.885713	
Sweden								
Net Transfers	3701.632	**	1692.0848	**	4704.4637	**	7491.2488	**
Female Wages	-1.445271	**	0.33246403	*	-0.64280682	**	0.13421434	
Female Hours	-312	**	-201.33335	**	-347.11111	**	-210.22222	**

^{*} Significant at p<.10

Sample includes married couple households in which the woman is between the ages of 25 and 45, and in which the woman has a medium level of education.

The Swedish sample year is 1995. The Belgian sample year is 1997. All others are 1999-2000. All currencies converted to 2000 US Dollars.

^{**} Significant at p<.05

Table 9: Family Policy Scores

Sweden	0.92
Belgium	0.75
Netherlands	0.69
Germany	0.63
UK	0.45
Canada	0.38
US	0.29

Source: Gornick and Meyers (2003).

Scores reflect relative level of support given to working families based on public child care and maternity leave benefits. A score of zero indicates no support, while a score of one indicates the maximum level of support.

Table 10: Social Transfers as % of Household Income for Families with Children

Canada	2.8
US	4.5
Netherlands	8
UK	8.3
Belgium	8.6
Sweden	16.2
Germany	16.7