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THE DIVISION OF LABOR AND FAMILY OUTCOMES
IN ITALY AND SPAIN

by

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The South Revisited:
The Division of Labor and Family Outcomes in Italy and Spain

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Abstract

Social provisions and market services assist families in balancing production and reproduction, so that women's employment need not be associated with lower fertility. Yet men's participation in childcare has not kept pace with women's rising labor force participation. Here, the effect of men's childcare hours on the likelihood of second births is analyzed for Italian and Spanish couples using the European Community Household Panel. While different sources of care, such as another household adult and private childcare, significantly increase the odds of second births, so, too, among the youngest cohort of Italian couples, does a father's greater time in childcare. This suggests that even in a country with strong cultural support for the male breadwinner model, this model is family sub-optimal in modern economies.

The South Revisited:
The Division of Labor and Family Outcomes in Italy and Spain

INTRODUCTION

Families must be responsive structures, processing state and market resources in production of the family "good," the most widely-recognized of which is children. While a rigid gendered division of paid (for men) and unpaid (for women) labor may have been theoretically optimal for producing the family good during the short historical period of low female wages and high male wages and job security, exogenous factors change and families must adapt. Two exogenous changes since World War II are rising female wage rates that induce more women to join the labor force (Butz & Ward 1979), and the rising precariousness of male employment as labor markets become more flexible that makes female employment desirable (Oppenheimer 1988, 1997). While these factors have caused the division of paid labor to dissolve, the division of domestic, unpaid labor appears to remain firmly gendered and female (Blossfeld & Drobnic 2001; Gershuny 2000). Across industrialized countries, men's average participation in domestic tasks remains at most a third of the time contribution of women (Gershuny 2000). This suggests that the opportunity costs of having children are born primarily by women, a circumstance which neoclassical economists claim creates a negative relationship between female employment and fertility (Becker 1985).

To date, much research has focused on the extent to which the opportunity cost of maternal employment can be externalized through social provisions such as public childcare and parental leave. Recent evidence suggests these provisions are somewhat successful in ameliorating the negative fertility effect of female employment. While in 1980, fertility was higher in countries where women's employment and educational attainment were lower, the same relations reversed their sign by 1999 (Brewster &

Rindfuss 2000; McDonald 2000; Rindfuss & Brewster 1996; Sleebos 2003). In the

Nordic countries, welfare state provisions supportive of maternal employment are

credited for this trend reversal (Brewster & Rindfuss 2000; McDonald 2000; Sleebos

2003). But the trend reversal is also evident in the United States, Iceland and New

Zealand (Sleebos 2003), more liberal welfare states where mothers can purchase

supportive services in the market. In contrast, "lowest-low fertility" has spread rapidly

in southern European and newly-industrialized states, caused in part by macro-

economic factors and a lack of supportive social or market provisions for maternal

employment that delay age at first birth and/or reduce the likelihood of higher parity

births (Kohler, Billari & Ortega 2002).

But change can occur within the family as well, and what is absent from these

analyses is the role of the father. While men as yet may not be doing much more of the

care work or other domestic tasks, even small increases in men's participation might

prove important to family outcomes. There is evidence that the likelihood of second

births increases with men's greater participation in domestic tasks in Hungary, or when

Swedish fathers take parental leave (Oláh 2003). This suggests that, contrary to the

neoclassical economic claims, those families now *dissolving* traditional gender labor

boundaries are more adaptive in post-industrial societies.

In this paper I will assess the extent to which this is true in two of the most

extreme cases of lowest-low fertility, Italy and Spain. In contrast to the northern

European countries, Italy and Spain are relative newcomers to modernization. Prior to

its onset, authoritarian regimes had codified Catholic familialism within other state

structures, firmly institutionalizing traditional gender roles. As will be discussed in the

next section, however, the confluence of market factors creates a situation where, while

the majority of women in these two countries are not in the labor force, the majority of those who are have very high employment intensities. This yields a bifurcation in the pressure exerted on family institutions, in that traditional male breadwinner families are ideologically supported if not economically feasible, while dual-earner families are economically viable yet not institutionally supported. These competing factors yield an unusual configuration of demographic effects: as of 1996, female labor force participation was 43 percent in Italy and 46 percent in Spain, versus an OECD average of 62 percent (OECD 2000), whereas 1998 total fertility rates were only 1.18 and 1.15 in Italy and Spain, respectively, versus the OECD average of 1.59 (EUROSTAT 2000).

Here I will use the European Community Household Panel to explore whether Italian and Spanish men's greater participation in childcare improves the likelihood of second births despite the strong institutional reinforcement of the traditional male breadwinner model. The next section reviews the theories and evidence pertaining to the division of labor and family outcomes across OECD countries, followed by a more detailed discussion of Italy and Spain. The third section presents the data and methods, with results presented in Section 4. The fifth section concludes.

THE DIVISION OF LABOR & FAMILY OUTCOMES

Neoclassical economists contend that the gendered division of labor—men in employment and women in unpaid domestic work—is the most efficient means of increasing joint household production given women's lower returns in the labor market and preferences for unpaid domestic tasks (Mincer & Polachek 1974; Becker 1981). The rise in women's real wage rates since World War II increased women's opportunity cost of staying at home, providing an incentive for women to forego family to pursue

paid work (Becker 1981, 1985; Butz & Ward 1979). At first, demographers did find a negative relationship between women's labor force participation and family size (Weller 1977). Yet Lehrer and Nerlove (1986) reviewed numerous studies where the relationship between female employment and fertility is mediated by exogenous factors such as availability of childcare, the local employment market and the sequential nature of couples' fertility-employment decision-making across time.

Over the past decade, researchers have looked at the extent to which social provisions reduce the work-family conflict so that mothers can participate in the labor market (cf. Bradshaw, Ditch, Holmes & Whiteford 1993; Cochran 1993; Gornick, Meyers & Ross 1998; Gustafson & Stafford 1995; Kahn and Kamerman 1994; Kamerman and Kahn 1997). Using the Luxembourg Income Study, I compared the proportion of dual-earner households where the woman is less than 49 years of age and the average number of children under 18 in the mid-1980s versus the mid-1990s in nine countries (Cooke 2001). As shown in Figure 1, the proportion of dual-earner households increased between the two time periods in all the countries, mirroring the rise in female employment during that time. But while the negative effect of female employment on average family size was ameliorated in Sweden, which has the most extensive social policies supporting maternal employment, Australia, Canada and the US show similar results, suggesting that market services can substitute for the social provisions, although the former undoubtedly exacerbate class differences. It is in those welfare states with strong support for a male breadwinner model and women's responsibility for unpaid care work (Lewis 1992, 1993)—Belgium, West Germany, Italy, the Netherlands and the UK—that the average family size declined as the proportion of dual-earner households rose. This is evidence that in post-industrial

societies, the gendered division of labor is not optimal, but may instead exacerbate the negative relationship between female employment and fertility.

[Figure 1 here]

This is an argument raised by McDonald (2000), who suggests that very low fertility in advanced countries comes about due to a conflict between high levels of gender equity in individual-oriented institutions and sustained gender inequity in family-oriented social institutions. There is evidence of this at the family level. Oláh (2003) found that Hungarian men's greater domestic contribution increases the likelihood of second births in that country, whereas second births are more likely in Sweden among men who took parental leave. Consequently, although men's contribution to domestic tasks, on average, has only increased slightly, where it occurs, its effects on family outcomes are significant.

Extending McDonald's logic, one should find the lowest fertility rates in countries where the intensity (if not necessarily the incidence) of women's labor force participation is high, but the institution of family is more resistant to change. This appears to be the case for southern European and newly-industrializing countries (Kohler, Billari & Ortega 2002). Here I will look at the division of paid and unpaid household labor in Italy and Spain, where there are unique institutional factors that make maternal employment more difficult while also more economically necessary for younger generations. These factors should provide strong incentives for younger men's greater domestic participation despite the historical gender norms.

Italy and Spain

Adsera (forthcoming) argues that whenever the costs of childbearing in terms of loss of present or future income are intensified by high unemployment and rigid labor markets such as found in Italy and Spain, fertility rates will be low. A rapid decline in agriculture and parallel growth in industrialization that marks modernization began in Italy in the late 1950s, followed by a period of labor activism that resulted in numerous labor regulations that enhanced employees' job security, just prior to the 1973-74 oil crises that heralded in a rapid rise in inflation and unemployment (Bernardi & Nazio 2001). Modernization began about a decade later in Spain and was even more rapid, although it also encountered the sustained structural unemployment problems (Jurado Guerrera & Naldini 1996).

To address the long-term unemployment problem, temporary contracts have been introduced in Italy and Spain, with young persons most likely to be offered a series of these rather than transition quickly into permanent employment (de la Rica & Iza 2003; Del Boca 1997, 2002). This results both in delayed onset of childbearing (Bernardi & Nazio 2001; de la Rica & Iza 2003; Kohler, Billari & Ortega 2002) and an increase in the cost of children as young persons depend upon and reside with their parents for longer periods of time (Del Boca, Pasqua & Pronzato 2003). Also extending the time young persons depend on their parents are the limited rental sectors, rising house prices, and mortgage restrictions that make it difficult for young people to find affordable housing (Bernardi & Poggio 2002).

Rigidities in the Italian and Spanish labor markets, including highly-codified work rules and centralized wage-setting policies, discourage part-time employment (Ariza, de la Rica & Ugidos 2003; Del Boca 1997, 2002). As a result, most dual-earner

households in Italy and Spain are comprised of two full-time workers: 83 percent in Spain and 71 percent in Italy report that both adults in dual-earner households work full-time, versus a 67 percent average across the original 12 European Union Member States (Franco & Winqvist 2002). Yet among couples with children under 6, even more couples would prefer to do so. According to the OECD (2001: Table 4.3), while 35 percent of Italian families with small children report both parents work full-time, 50 percent would prefer to; in Spain, 26 percent report both parents work full-time, whereas 60 percent would like to. Consequently, while some claim what is needed to increase maternal employment in Italy and Spain is the availability of part-time work (Del Boca 1997, 2002), mothers themselves in these countries report a preference for full-time work.

Because of the preference for full-time employment, its flexibility is perhaps more important to women as they balance work and family. Maternity policies are quite generous in both Italy and Spain in terms of length and payment (Gonzalez, Jurado & Naldini 2000; OECD 2001), yet taking extended leave still puts the quality of future full-time employment at risk in a market with high unemployment. Consequently, leave is more likely to be taken when mothers are employed in the public sector, which generally provides more job flexibility (Adsera 2003). The public sector, however, is less developed in Italy and Spain than in northern European countries such as Sweden (Adsera 2003).

Another barrier to maternal employment in the two countries is the lack of childcare, particularly for children under the age of three, although it is extensively available in both countries once children reach that age (OECD 2001). Public childcare places in Italy in the late 1980s were available for only five percent of this age group

(Gauthier 1996). As of 1998, only six percent of Italian children were in either public or private care (OECD 2001). In Spain in 2000, the figure was just five percent (OECD 2001). This forces women to choose between interrupting a career for an extended period of time and delaying childbirth, the latter decision having marked negative effects on the ability to achieve higher-parity births (Kohler, Billari & Ortega 2002).

A more common coping strategy in both Italy and Spain is a reliance on familial networks, particularly female relatives of the mother's family (Jurado Guererra & Naldini 1996; Tobio 2001). Less frequently analyzed is the role of Italian and Spanish fathers in supporting family fertility. Del Boca (1997, 2002) analyzed the presence of a woman's parents to predict maternal labor force participation, but not the father's parents or the father himself. Italian men spend among the least amount of time in childcare than men in other countries and significantly more time in out-of-home leisure activities than Italian women (Gershuny 2000). While data are not available for Spain, it is likely that the time allocations are similar given the similarities of other institutional factors.

Thus, in Italy and Spain, full-time female employment appears requisite for the family economic security necessary to support additional children, supportive social or market provisions for maternal employment are minimal, yet gender role norms do not support fathers' greater participation in the domestic sphere to help ameliorate the negative fertility effects of female employment. On the other hand, Tobio (2001) reports that Spanish men's involvement in household tasks is increasing among younger cohorts. Consequently, it is hypothesized that any effects of father's greater participation in childcare on the likelihood of second birth will be evident primarily in the youngest cohort. Given the differences in the length of the modernization process

in the two countries, however, and the fact that a greater proportion of Spanish wives still report that they are homemakers, it is unclear whether these effects will as yet be statistically significant in Spain.

DATA AND METHODS

Waves 1 through 7 (1994 to 2000) of the European Community Household Panel (ECHP) are used to analyze the division of labor and likelihood of second births within married person households in Italy and Spain. (1) The ECHP is an annual survey based on standardized questionnaires covering income, health, education, housing demographic, employment characteristics and other topics. Overall, 83 percent of original sample households have been retained between 1995 and 1999, the last year for which such statistics are available. (2) From Wave 1, all married persons in Italy and Spain where the woman is less than 49 years of age and the couples have one child are selected and followed through the 2000 wave or attrition from the panel. This yields an Italian sample of 819 married couples with one child, and a Spanish sample of 605 married couples with one child.

The extent to which men's participation in childcare affects the likelihood of second birth will be assessed with discrete-time logistic event history analysis (Allison 1984; Yamaguchi 1991), resulting in an Italian sample of 5,733 couple years and a Spanish sample of 4,235 couple years. To correct for correlation in the error terms when using couple years, robust standard errors will be calculated by clustering on a unique couple identification number.

The risk of second rather than first birth is chosen because while the risk of any birth has declined somewhat across OECD countries, the most dramatic drop affecting

the fertility rate is the much lower risk of second and subsequent births (Kohler, Billari & Ortega 2002; Sleebos 2003). In addition, within the literature on the division of domestic labor, Hochschild (1989) reports that couples experience a crisis in the gendered division of domestic labor after the birth of the first child. This suggests that the impact of men's participation in domestic tasks more generally should be greater after the first birth, with his time in childcare only relevant after that point. At the same time, results here only reflect conditional probabilities of second births, given that couples had a first birth. Therefore, one should keep in mind that these couples have already passed some minimum threshold of factors necessary for the first birth.

Ideally, one would follow all couples from the onset of risk of second birth from the time of the first birth, but many first births in the samples occur before the initial wave of the ECHP in 1994. Consequently, the onset of risk will be set to the year couples entered into the panel, which in all cases is 1994, with variables included for the age of the first child to control for time since the first birth, as described in the next section.

Variables

The standardization of the questionnaires in the ECHP allows for identical variable construction for Italy and Spain. Descriptive statistics of the samples are presented in Table 1. The dependent variable is a dummy variable indicating whether or not a second birth occurs in a given year. As shown in the bottom panel of Table 1, 27 percent of Italian couples had a second child at some time while they were observed in the panel, whereas 30 percent of Spanish couples were observed to have a second

child. Since couples are only followed for six years, this is not an indication of final fertility levels, but only transitions observed during the observation window.

[Table 1 here]

The likelihood of a second birth is modeled with variables measuring the division of labor, and control variables for demographic and economic factors found to affect fertility across countries. According to neoclassical economists, women's specialization in the domestic sphere should increase fertility. Almost 45 percent of Italian households report this traditional division of labor, whereas 56 percent of Spanish households do. Because such a sizeable proportion of each sample is either a male breadwinner or a dual-earner couple, models will be run separately based on this categorization to avoid needing to include a large number of interaction terms. As argued by Oppenheimer (1988, 1997), a male breadwinner household strategy is not economically flexible in precarious labor markets such as in the southern European countries. Consequently, for the Italian and Spanish couples, being a traditional male breadwinner couple is not expected to increase the likelihood of second births. A control variable is included for when the man is self-employed, which is more common in Italy and Spain than other countries, and can be an indicator of a more precarious employment situation (Bernardi & Nazio 2001).

As shown in Table 1, wives in Italy and Spain who are employed tend to be employed full-time: of Italian women who are employed, 68 percent work 30 hours or more per week; of Spanish women who are employed, 75 percent work 30 hours or more per week. Women's weekly work hours will be used in the model to predict the likelihood of second births, lagged by one year to avoid endogeneity. *Ceteris paribus*, the more her weekly hours, the less likely a second birth if such women are more time-

poor than women working less hours or not at all. Also included is a dummy variable indicating whether she is employed in the public sector, to see if the flexibility of public employment increases the likelihood of a second birth.

The ECHP measure of domestic time is limited to weekly hours of childcare. While different functional forms were tried, the best fit to the model was when using women's and men's actual hours in childcare, lagged by one year to avoid endogeneity, the situation when greater reported childcare hours in the same year as the second birth result from rather than cause it. As shown in Table 1, women still devote more hours to childcare than men, but the difference is less in Italy at –22 relational hours than in Spain, where it is –33 relational hours. When the wife is employed, both Italian and Spanish fathers spend more time in childcare: an additional hour per week for Italian men, and an additional four hours per week for Spanish men. Their relational hours drop to –16 and –19 for Italy and Spain, respectively. Consequently, employed women's childcare hours drop more than men's childcare hours increase, but the women still retain primary responsibility for childcare.

To see whether non-traditional trends are evident in families of the youngest cohort of women, an interaction term is included for men's hours in childcare when the wife was born after 1960. If younger families are changing the traditional division of childcare to help employed mothers balance competing time demands, this should be a significant predictor of second births.

Other variables measuring effects of other sources of care include whether the couples pays for childcare (10 percent of households in both countries), and a dummy variable for when there is another adult present in the household (one percent of households in both countries). Ideally, one would have a measure of available relatives

both within the home and the vicinity, but information on the latter is not available within the ECHP. A reliance on kinship networks can also work against a couples' fertility, in that they might find themselves with responsibilities not only for children, but perhaps also for aging parents. To see if this affects the likelihood of second births, a dummy variable is included for those women who spend time each week caring for an adult. Nine percent of Italian married women report doing so, while three percent of Spanish women report caring for an adult.

Control variables include mother's education, her age at first birth, housing variables, and household income variables. Two dummy variables are included to control for women's educational attainment, treated as time-constant in the analysis: one indicates a woman with secondary education, and the second indicating a woman with some tertiary education, against a referent of women with less than secondary education. Almost 40 percent of Italian wives under the age of 49 have a secondary degree, while seven percent have some tertiary education. In contrast, just 17 percent of Spanish married women under the age of 49 have a secondary degree, but 21 percent report some tertiary education. The extent to which women's higher educational attainment is associated with greater labor force participation can be seen in Table 2. Women with less than secondary education in both countries overwhelmingly report that they are housewives. Among the remaining women in each educational category who are employed, most work full-time regardless of education level, with earnings as a percent of household labor income also fairly consistent across educational levels.

[Table 2 here]

Housing factors are measured with two variables: the number of rooms other than the kitchen in the household, and a dummy variable for when couples report that

housing costs are a heavy financial burden. The log of total household income from all sources, lagged, is included in the model for dual-earner couples. Using the continuous measure for male breadwinner households, however, did not capture any effects, a result which is counter-intuitive. Thus, for the male breadwinner samples, two household income dummy variables are used: one indicating those households with income between 51 and 75 percent of the median household income for all families, and one indicate households in the top income quartile, against a referent of incomes below the median. The relative importance of women's earnings to household income is also included in the dual-earner models, calculated as women's lagged labor earnings as a percentage of total household labor earnings, ranging from 1 to 100. The relative security of earnings is assessed with two measures: the regional unemployment figures for men and for women based on OECD data for the given year. (3)

As noted at the end of the previous section, it would be ideal to follow couples in the panel from first birth until second birth, but there are too few of these in the short time span of the ECHP to allow for a separate analysis. Consequently, a series of dummy variables will be constructed to assess how long after the first birth a second birth is most likely, indicating three to five years, six to eight, nine to 11, 11 to 15 and 16 or more years after the first birth, against a referent of the first three years following the first birth. These are used instead of a simple measure of the age of the first child, as effects are expected to be curvilinear, first increasing for some years after the first birth, then declining. The selection of three years following first birth is to account for the availability of public childcare for children age three and older.

RESULTS

Male Breadwinner Households

The effects of the variables on predicting the likelihood of a second birth among Italian and Spanish male breadwinner couples are presented in Table 3. Model 1 includes all variables except the couples' own hours in childcare. Model 2 includes these, as well as the interaction term for when the woman is in the youngest cohort. Among male breadwinner families, several of the variables significantly affect the likelihood of second births, and for the most part effects are similar in the two countries. Not surprisingly, the older a mother at first birth, the lower her odds of having a second child. Time in general is a significant predictor, with male breadwinner couples in both countries significantly more likely to have a second child three to eight years after the birth of the first, as compared with having a second child within the first three years of the first child's birth. After 15 years from the first birth—which places the average mother in her early 40s—the relative risk of a second birth reduces to almost zero as compared with having the child within the first three years.

Male breadwinner couples in the highest income quartile have between two and three times the odds of having a second birth as compared with couples with income below the median. Higher female regional unemployment is associated with greater odds of a second birth, although the effect is only marginally statistically significant in Spain. This suggests that being a housewife may be less a matter of personal choice and more a function of limited female employment opportunities.

[Table 3 here]

Whether the man reports himself as self-employed has competing effects in the two countries, although the effect is not statistically significant in Spain. In Italy, the

odds of a second birth are almost twice as high among the self-employed as when men are regular wage earners. This contrasts with the insignificant effect of self-employment among young labor market entrants on likelihood of first birth found by Bernardi and Nazio (2001), but could reflect a selection effect, in that only the most skilled entrepreneurs are likely to still be self-employed into their thirties and forties.

As found by others (Del Boca 1997, 2000; Tobio 2001), the availability of another adult to assist in care dramatically increases the odds of second births in both countries and reaches statistical significance despite the small cell size, even though an additional carer is not helping housewives balance competing time demands. All Spanish households that reported the presence of another adult in the household had a second birth, so that the variable had to be excluded from the model. In contrast, men's hours in childcare in male breadwinner households in Italy and Spain do not alter the likelihood of second births at all. In Spain, however, each additional weekly hour a *mother* spends in childcare lowers the odds of second birth by one percent, and inclusion of the care variables significantly improved the fit of the model in Spain. As was shown in the descriptive statistics, Spanish women on average spend appreciably more weekly hours in childcare than Italian women regardless of employment status. This suggests there may be a quality/quantity trade-off for children in Spain based on mother's time, although no data are available within the ECHP to explore this possibility further.

Dual-Earner Couples

As shown in Table 4, some effects predicting second births among male breadwinner couples are similar for the dual-earner couples. Among working Italian

mothers, each additional year in her age at first birth reduces the odds of second birth by nine percent before controlling for men's childcare participation, and by six percent after controlling for it. The direction of the effect in Spain is similar, but both smaller in magnitude and statistically insignificant. Time effects are also similar, but smaller in magnitude and/or statistical significance. Working mothers in Italy are significantly more likely to have a second birth three to five years after the first birth as compared with the years immediately following the first birth. The odds are higher in both countries for the period six to eight years following first birth, while the odds are significantly reduced 16 years or more after the first birth.

[Table 4 here]

The dynamics of the division of paid and unpaid labor are different for the two countries among dual-earner couples. In Italy, each additional hour a mother works reduces the odds of a second child by two percent, but this effect is only marginally statistically significant and becomes insignificant once controlling for men's domestic participation. The more an Italian wife contributes to the household income, however, the greater the likelihood of second birth, although the effects are only marginally significant. This suggests the Italian mother's income is important in enabling the family to afford additional children.

While the main effects of men's hours in childcare are not significant, the effects among the youngest Italian cohort of working wives are. For this group, each additional hour the husband spends in childcare increases the odds of second birth by four percent, an effect significant at the 0.05 level. Further, inclusion of the care variables improves the fit of the model among dual-earner Italian couples at the 0.05 level.

In contrast, in Spain, women's working hours by themselves hold no predictive power, but her earnings reflect the classic opportunity cost trade-off claimed by neoclassical economists, once controlling for men's domestic hours: each additional percentage point of household income represented by Spanish women's earnings reduces the odds of a second birth by one percent, although the effect is only marginally significant. The effects of men's hours in childcare care, including those in the youngest cohort, are insignificant. Together the results suggest that the additional decade along the modernization trajectory is sufficient to see the adaptive mechanism of men's greater childcare participation in Italy which is not yet apparent in Spain.

The other care strategies have a greater effect on the likelihood of second births among dual-earner couples in both countries than husband's time in childcare. As found for male breadwinner couples, the presence of a third adult in the household dramatically increases the odds. Paying for childcare also increases the odds, although the effect is appreciably smaller in magnitude and only marginally significant among Italian dual-earner couples.

Predicted Probabilities: Male Breadwinner v. Dual-Earner Families

While the previous analyses allow us to see the relative risk of second birth associated with changes in the values of variables, the results do not provide the overall predicted probability so that we might compare which type of couple—and family strategy—is most likely to yield a second birth in Italy and Spain. Table 5 presents predicted probabilities for various combinations of the most significant factors for each type of family. In Italy, male breadwinner households with another adult present are the most likely families in that country to have a second birth, regardless of the family's

income. Without the third adult, however, the probability of a second birth in Italian male breadwinner families drops to 43 percent for families in the top income quartile, and to just 28 percent for families in lower income quartiles. If the youngest cohort of men in dual-earner Italian families does not participate above the mean in childcare hours, the probability of a second birth remains below that of the male breadwinner families. Where Italian men contribute the most hours, however, the probability of having second child is greater in dual-earner than male breadwinner families with no third adult, regardless of other childcare arrangements. Given that only one percent of families report the presence of a third adult, these results suggest that a dual-earner family with an intra-family allocation of care time is a more sustainable strategy across the Italian population.

[Table 5 here]

In Spain, male breadwinner families are the most likely to have a second birth, except in the case of dual-earner families with another adult present. Any other care scenario among dual-earner families still yields a probability of a second child less than half that of male breadwinner families. Thus, for Spain, the male breadwinner family is still, as predicted by neoclassical economic models, the most likely to maximize family outcomes in terms of fertility. This is consistent with the results found for Spanish women's opportunity cost of children. Whether this continues to be the case as Spain moves along the modernization trajectory is an area for future research.

CONCLUSIONS

The gendered division of family labor was at best an ideal-type for middle class couples in a stable economic environment. In contrast, modern families` economic

flexibility is enhanced by women's greater labor force participation, so it follows that fertility should be more easily sustained if men participate more in the domestic sphere, but this adaptive strategy has been slow to materialize. Evidence presented here suggests some timeline of the progression. In Spain, the more recent newcomer to modernization, male breadwinner families are still more likely to experience a second birth. Further, Spanish women's greater earnings represent an opportunity cost of additional children, and men's hours in childcare do not alter this trade-off. For Italy, a decade further along the modernization trajectory, evidence of the adaptation is already apparent among the youngest cohort, where men's greater participation in childcare increases likelihood of second births in dual-earner couples and, where men participate the most care hours, the probability of Italian dual-earner families experiencing a second birth is higher than that of male breadwinner families if no third adult is present in the household.

Reflecting the persistence of strong family networks in the two countries, the presence of third adult in the household significantly increases the likelihood of second births in all family types. This is a less sustainable strategy as more cohorts of women choose to have a career and will not, in late middle life, be available to care for their children's children. This suggests that development of childcare facilities for the youngest age group of children will be increasingly important in these two countries across time if there is a desire to stop further fertility declines.

Together, this is evidence that women's labor force participation may be increasingly important in the decision of whether additional children are financially feasible. Further, while still at present only a modest determinant of the outcomes, fathers' greater participation in childcare can facilitate a positive fertility outcome

among dual-earner families. While these results reveal we are far from gender equity in family institutions, movement away from a rigid gendered division of labor appears more sustainable than the male breadwinner model in post-industrial economies.

ENDNOTES

1. In some countries, the rate of cohabitation and out-of-wedlock births are sufficiently high to warrant analyses of these couples' transitions to second birth as well. In Italy and Spain, however, there has been little increase in the percent of out-of-wedlock births over the past two decades (Sleebos 2003).

2. In Italy, the number of household respondents declined 10.6 percent between 1995 and 1999, whereas in Spain the decline is 16.9 percent.

3. While it might be argued that a lag of the regional unemployment rate is a more appropriate measure, within-region variation year-to-year is quite small, whereas across-region variation is more dramatic.

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FIGURE 1
Proportion Dual-Earner Households and Child Penalty Thereof
mid1980 versus mid1990
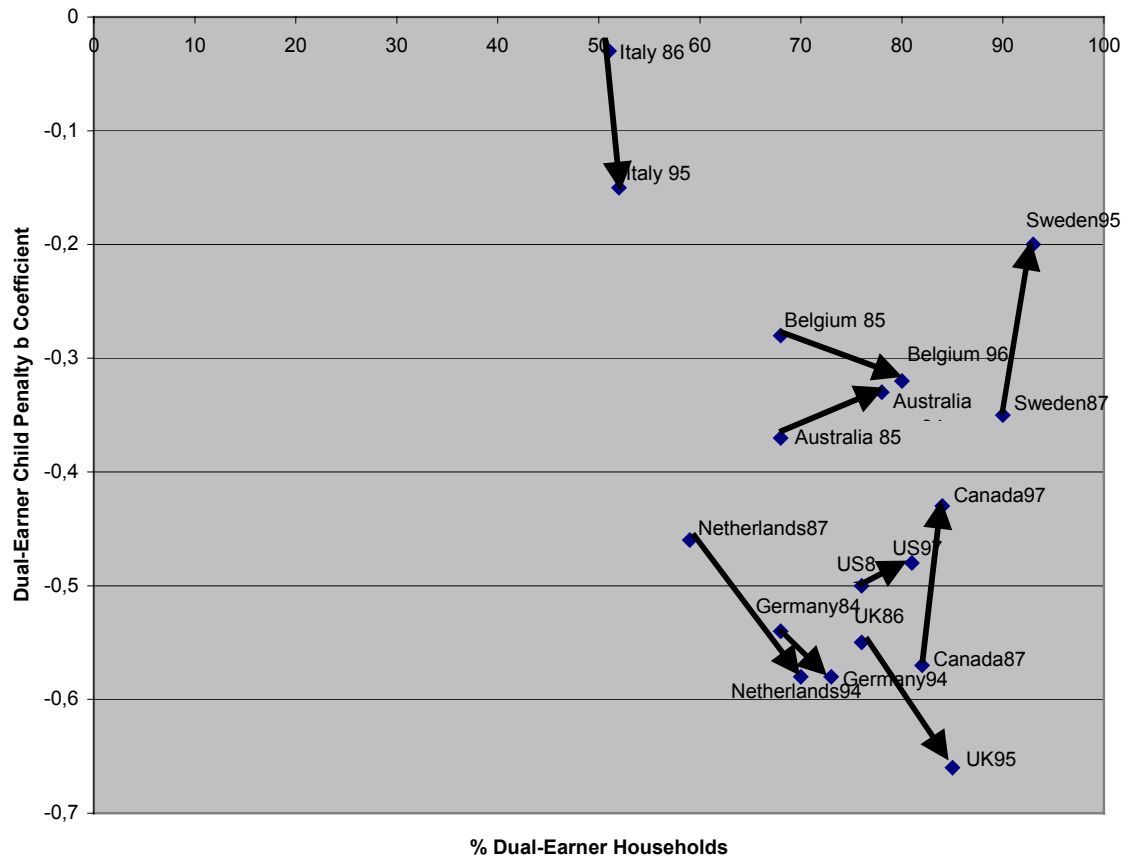
Source: Cooke (2001, Figure 1). The plotted effect is the coefficient in an ordinary least squares regression where the average number of children under 18 is regressed on whether both partners worked, along with a series of control variables.

TABLE 1
Descriptive Statistics Based on Couple Year File Predicting Second Birth

	ITALY		SPAIN	
N (married couples with one child)	819		605	
Couple years	5733		4235	
	Mean	**SD**	**Mean**	**SD**
Husband's year of birth	1955	7.78	1957	7.76
Wife's year of birth	1958	7.16	1960	7.04
Wife's age at first birth	27	4.62	27	4.14
Age of child in 1994	9	7.32	8	6.69
Husband's weekly work hours	39	15.54	40	20.18
Wife's weekly work hours (all)	18	18.86	14	19.44
Wife's earnings as % household income (all)	24	31.95	17	29.23
Husband's weekly childcare hours	7	11.81	8	14.76
Wife's weekly childcare hours	28	23.82	42	32.52
Wife's weekly hours, employed only	35	10.36	37	12.10
Wife's % earnings, employed only	45	31.47	44	32.25
Husband weekly childcare, wife not a housewife	8	12.54	12	17.67
Men's relational childcare, wife not a housewife	- 16	18.06	- 19	25.45
Total household gross earnings (000US)	21	17.22	19	16.44
Male regional unemployment rate[1]	6	4.63	13	4.37
Female regional unemployment rate[1]	13	7.63	23	4.98
Number of rooms in household	4	1.06	4	0.99

	Percentage	**Percentage**
Observed second birth	27 %	30 %
Male breadwinner w/ housewife	44	56
Man self-employed	22	19
Women employed who work 30+ hours per week	68	75
Woman in public sector (if employed)	17	11
Couple pays for childcare	10	7
Presence of another adult in household	1	1
Woman cares for an adult	9	3
Housing costs a heavy burden	35	29
Wife with secondary education	39	17
Wife with tertiary education	7	21

1. As percent of persons age 25 and over

2. As a percentage of employed persons

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TABLE 2
Wives' Employment
by Educational Attainment Level

Wife's educational level:	ITALY			SPAIN		
	$< 2^{nd}$	2nd	$> 2^{nd}$	$< 2^{nd}$	2nd	$> 2^{nd}$
Proportion housewives	56 %	32 %	15 %	70 %	50 %	22 %
Household income (000US):						
Male breadwinner families:	16	21	30	15	18	22
standard deviation	(9.82)	(12.50)	(13.43)	(9.15)	(12.02)	(10.95)
Dual-earner families:	25	31	39	20	28	32
standard deviation	(11.25)	(14.83)	(18.33)	(11.34)	(13.69)	(14.14)
Among employed wives:						
Weekly work hours	36	34	30	36	38	37
standard deviation	(10.90)	(9.83)	(9.01)	(14.43)	(10.71)	(9.44)
Earnings as % hh labor income	41	47	48	39	48	46
standard deviation	(32.81)	(30.47)	(29.19)	(35.31)	(29.99)	(29.09)

TABLE 3
Likelihood of Second Births Among Male Breadwinner Families
Italy and Spain
Odds ratios with robust standard errors

	ITALY		SPAIN	
	Model 1	**Model 2**	**Model 1**	**Model 2**
Observations	**1342**	**1342**	**1188**	**1188**
Log-likelihood	**- 279**	**- 277**	**- 273**	**- 270**
Mother's age at first birth	.96	.96	.89***	.90***
50-75th income percentile	.99	1.01	1.39	1.36
75+ income percentile	2.27*	2.19+	2.86**	2.73**
Men's regional UE rate	.85	.86	.97	.97
Women's regional UE rate	1.14*	1.14*	1.05+	1.05+
Man self-employed	1.78*	1.73*	.91	.87
Wife with secondary	1.07	1.05	.62	.66
Wife with tertiary	1.08	1.05	.77	.75
Housing costs a burden	.87	.89	.83	.88
Number of rooms	1.10	1.12	1.07	1.06
3-5 years since first birth	3.06**	3.21**	5.10***	5.07***
6-8 years since first birth	3.37**	3.61***	7.40***	7.22***
9-11 years since first birth	.60	.68	.67	.60
12-15 years since first birth	.40	.44	.82	.60
16+ years since first birth	.06***	.07***	.08*	.04**
Other adult in household	70.27***	74.20***	d	d
Woman cares for an adult	.58	.59	d	d
Men's weekly childcare hours, lagged		.99		1.00
Women's weekly childcare hours, lagged		1.01		.99*
Woman >1960*men's childcare, lagged		1.00		.99
χ-square		*1.33*		*2.00**

d = dropped as predicts failure perfectly

*** p <= .001   ** p <= .01 * p <= .05   + p <= .10

TABLE 4
Likelihood of Second Births Among Dual-Earner Families
Italy and Spain
Odds ratios with robust standard errors

	ITALY		SPAIN	
	Model 1	**Model 2**	**Model 1**	**Model 2**
Observations	**1827**	**1827**	**943**	**943**
Log-likelihood	**- 241**	**- 238**	**- 150**	**- 149**
Mother's age at first birth	.91***	.94*	.97	.97
Log of total hh income, lagged	.87	.84	1.17	1.14
Men's regional UE rate	.96	.97	1.06	1.06
Women's regional UE rate	1.05	1.04	1.00	1.01
Man self-employed	1.51	1.56	.79	.73
Wife's weekly work hours, lagged	.98+	.99	.99	.99
Wife's % earnings, lagged	1.01+	1.01+	.99	.99+
Wife in public sector	1.18	1.27	1.32	1.42
Wife with secondary	1.30	1.31	.99	1.00
Wife with tertiary	.96	1.08	1.07	1.11
Housing costs a burden	1.62	1.61	.48	.50
Number of rooms	.90	.90	1.00	1.01
3-5 years since first birth	3.87**	3.88**	1.77	1.86
6-8 years since first birth	2.98*	3.27*	2.45+	2.72*
9-11 years since first birth	.90	1.12	1.01	.98
12-15 years since first birth	.74	1.03	.28	.23
16+ years since first birth	.03***	.05**	.16+	.10*
Pay for childcare	1.76+	1.70+	5.17***	5.55***
Other adult in household	43.23***	41.93***	d	d
Woman cares for an adult	.55	.55	1.05	1.07
Men's weekly childcare hours		.97		.99
Women's weekly childcare hours		1.01		.99
Woman >1960*men's childcare		1.04*		1.01
χ-square		*2.00**		*0.33*

d = dropped as predicts failure perfectly

*** p <= .001   ** p <= .01 * p <= .05   + p <= .10

TABLE 5
Predicted Probabilities of Second Births
Male Breadwinner versus Dual-Earner Families
Italy and Spain

MALE BREADWINNER FAMILIES			ITALY	SPAIN
Top Income Quartile	Man Self-Employed	Other Adult		
Yes	Yes	Yes	.95	.88
No	Yes	Yes	.91	.79
Yes	Yes	No	.43	.69
No	Yes	No	.28	.51

DUAL-EARNER FAMILIES			ITALY	SPAIN
Other Adult	Pay for Childcare	>1960* Men's Childcare		
Yes	Yes	Mean	.76	1.00
No	Yes	Minimum	.24	.19
No	Yes	Mean	.26	.20
No	Yes	Maximum	.64	.26
No	No	Minimum	.19	.11
No	No	Maximum	.58	.16