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Payoff or Penalty?

A Comparison of the Marriage Wage Differential for Men and Women across 15 Nations

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# Payoff or Penalty? A Comparison of the Marriage Wage Differential for Men and Women across 15 Nations

This paper contributes to a broader understanding of the role of marriage in gender stratification from a comparative perspective by providing important descriptive evidence of the distribution of the marriage wage gap for men and women crossnationally.

This paper focuses on marital status and men's and women's wages in fifteen countries using Wave V of the Luxembourg Income Study (LIS). Examining whether there are systematic wages differences between married and unmarried individuals, I find clear evidence of a wage advantage for married men but mixed results for women; Results suggest that both selection into marriage and, to a much more limited extent, household structure are relevant in accounting for some of the wage advantages of married men as well marriage wage gaps found for women.

Differences in human capital and household structure explain differences in the wages between married and unmarried women in nine of the fifteen countries, but only in one country for men. For men, the variation in the marriage wage gap net of human capital and household context is limited; for women it varies widely. Explorations seeking to link the variation in the wage differential with macro level indicators such as fertility or female labor force participation do not suggest that these aspects of context play a determining role in the marriage wage gap.

# Payoff or Penalty? An Examination of the Marriage Wage Differential for Men and Women across 15 Nations

Gender inequality is a persistent feature of contemporary societies. To enhance our understanding of how gender inequality is reproduced it is important to understand how this mechanism is reinforced through societal mechanisms institutionalized within families and in the workplace. Marriage is one key social institution that shapes men and women's life experiences and life chances. Married people have lower mortality rates (e.g. Ross, Mirowsky, and Goldsteen 1990), better mental health (Simon 2002), have a lower poverty risk (Sigle-Rushton and McLanahan 2002), and are overall better off financially (Waite and Gallagher 2000). For men, a clear "marriage premium" in wages has been established (Bellas 1992; Cohen and Haberfeld 1991; Kaufman and Uhlenberg 2000; Nakosteen and Zimmer 1997) in the US.

The impact of marriage on women's earnings is less clear, since research on their labor market experiences has more often been concerned with work-family balance and especially the consequences of motherhood. Several recent studies compare the wages of mothers and non-mothers, and find persuasive evidence of a wage penalty for motherhood (Avellar and Smock 2003; Budig and England 2001; Gornick, Meyers, and Ross 1998; Waldfogel 1997).

In this paper, I examine the wage inequalities between married and unmarried men as well as women. Comparing wages between unmarried and married individuals cross-nationally allows me to answer two key questions:

First, are there systematic wage advantages or disadvantages for married men and women across countries? Second, to the extent that there are marriage wage differentials,

how can we account for them cross-nationally using individual level theories established in previous research?

This paper provides, for the first time, important descriptive evidence about the distribution of the marriage gap in wages across countries using individual level data for 15 nations. Furthermore, this study provides important insights into whether conventional individual level theories can be generalized to men as well as women.

Additionally, my approach of comparing both men and women's wages crossnationally seeks to highlight the role of institutional context. The descriptive evidence from this study describing the impact of marriage on wages is necessary before we can further speculate about the role of marriage cross-nationally in regulating gender inequality.

## **Theoretical Background**

It has been shown that marriage is a way for women to enhance their chances to escape poverty (Sigle-Rushton and McLanahan 2002), in particular through access to their partners' financial resources. In his examination of U.S. data, (Light 2004) suggests that while there is some evidence for losses in individual income, women gain about 55% in needs-adjusted family income through union entry.

The present paper contributes to the work that has focused on the effect of marriage on individual labor market outcomes. White it is also relevant to look at effects of marital status on economic well-being, given high union dissolution rates in many countries, looking at pooled family income may project a skewed image of individuals' economic situation. Assessments based on joint income may be particularly overly

optimistic for women, who, in the case of union dissolution may lose the added benefit, and are left with their reduced individual level earning power.

Much of the research on the intersection of family and women's labor market outcomes has been on the impact of motherhood on women's careers. Motherhood has a negative effect on women's labor force participation; it has also been shown in a variety of samples and methods that there is clear evidence of a wage penalty for motherhood that does not seem to have diminished over time (Avellar and Smock 2003; Budig and England 2001; Korenman and Neumark 1998). Research on the effect of marriage on women's wages is scant, and according to extant sources women experience little to no marriage penalties (Korenman and Neumark 1992), but the results are inconclusive and there is evidence for gender differences in the effect of union entry (Light 2004).

On the contrary, an important body of literature comparing the earnings of married and unmarried men has consistently found both differences between these two groups and specific wage benefits to entering marriage (Bellas 1992; Cohen and Haberfeld 1991; Kaufman and Uhlenberg 2000; Nakosteen and Zimmer 1997).

The theoretical approaches attempting to understand the marital status gap in wages include individualistic and structural explanations. (1) The selectivity approach suggests that there are differences between the wages of married and unmarried individuals because their chances of entering marriage are related to their earnings potential. (2) The marital context and productivity approach posits that marital status is related to household specialization, breadwinner winner status and subsequent productivity, which in turn determines wages. (3) The structural approach suggests that

factors beyond individual level mechanisms are in place affecting the consequences of marital status.

#### (1) Selectivity approach

The selectivity approach implies that observed wage differences between married and unmarried men can be explained by the fact that highly productive men with increased earnings potential have better chances of entering marriage in the first place (Nakosteen and Zimmer 1997). They are also thought to have better chances of remaining married, which in can explain why married men make more money (Blackburn and Korenman 1994). The evidence as to how much of the male marriage premium can be attributed to this type selection into marriage is mixed. Sundqvist's (1994) results support the selection argument, but Ginther and Zavodny (2001) suggest that only about 10 percent of the premium is due to selection. (Chun and Lee 2001) however, argue that differences are due to specialization and cast doubt on the selection argument altogether.

The selection argument has traditionally been considered to be less applicable to women, whose marriage prospects do not seem to depend as heavily on economic circumstances. More recently, however, increased earning power has been shown to increase women's chances of entering marriage under certain circumstances (Ono 2003). To a much larger extent than men, women are also subject to labor market selectivity. Even though labor force participation has been growing in the past decades, but is not nearly as high as men's in most countries. In comparing married and non-married women, I expect higher earnings for unmarried women, but the gap between married and unmarried women should decrease as women's participation rises and labor market selectivity decreases.

#### (2) The Marital Context and Productivity Approach

The wage premium for married men has also been attributed to the productivity enhancing characteristics of marriage. A number of mechanisms through which marriage enhances productivity have been suggested, such as better physical and mental health, emotional benefits from a stable relationship, generalized social support, and specific support in case of illness. Household specialization has been conceptualized as a crucial mechanism through which marriage enhances men's productivity. Specialization enables men to spend more time and effort on employment, which, in turn, is rewarded by employers with higher wages (Becker 1981). Korenman and Neumark (1991) find that men's wages increase faster after marriage, they receive more frequent promotions and better performance evaluations (see also Gray 1997).

Given that women, regardless of their involvement in the labor force, typically bear more of the housework burden within a couple, entering a union can be expected to have the opposite effect it has for men. Being married may lead to increased domestic responsibilities, and less time and effort in employment (Becker 1981; Kalleberg and Rosenfeld 1990), potentially resulting in reduced productivity and subsequent wage loss.

However, there is more to being married than the level of domestic specialization that has the potential to "pull" down productivity. The marital context includes the potential presence of children and non-wage earners in the household, which can result in "breadwinner pressure" and a sense of responsibility that may be a "push" factor for increased productivity.

While Mandel and Semyonov (2005) provide an excellent example on comparative work on the gender wage gap, studies on the marriage wage gap has

predominantly been done in single-country frameworks, with the exception of (Schoeni 1995) who does an initial cross-national comparison of the effect of marriage on men's wages. The comparative framework used in this paper enables me to assess first whether there is a persistent marriage wage differential for men and women cross-nationally using a high quality data source. In addition to assessing the generalizability of the selectivity and marital context approach using a large number of countries investigating both men and women I also can examine to what extent variation across different social contexts exists.

## **Hypotheses**

Based on the **selectivity approach**, one would expect the marriage gap in wages to shrink considerably once human capital controls are introduced, to the extent that the included human capital measures reflect the marriage selectivity processes. It is consistent with that argument that the level of selectivity into marriage varies crossnationally. Substantial variation in the unconditional marriage gap can thus be expected. Once human capital controls are introduced, however, both the marriage gap for each country, and consequently cross-national variation should disappear.

This difference between unconditional and conditional marriage rates should vary with the selectivity of marriage. I therefore expect that the change in marriage gap, once controls are introduced, to be largest in countries where marriage rates and female labor force participation rates are lowest, as those measures can be seen as an indicator of how selective entry into marriage and the labor market are.

Under the assumption that marriage gaps are based on selectivity I expect

HS: Variation in the effect of marriage on wages is due to variation in human capital.

HSa: Once human capital controls are introduced, cross-national variation in the marriage gap largely disappears.

HSb: The higher women's labor force participation rates, the smaller the difference between married and unmarried women's wages and the smaller the change from the unconditional to the conditional marriage gap in wages.

The marital context and productivity attributes the marital status gap in wages to individual level differences, so there is little to no grounds for expecting cross-national variation in the marriage gap, especially in multivariate models. The anticipation is that married men have higher wages because they are more productive as a result of domestic specialization. Taking household arrangements into account can test this suggestion. If the marital context and productivity approach holds, men should experience more benefits if they are part of a household where non-wage earners are present. The presence of children in the household can work either to reduce productivity because work the demand for domestic labor increases, or productivity increases due to heightened breadwinner pressure. The number of other wage earners in the home can be conceptualized as reducing this pressure, and therefore decreasing productivity.

Under the assumptions of the productivity approach I expect:

HP: Variation in the effect of marriage on wages is due to variation in the level of specialization and breadwinner pressure.

HPa: Introducing measures of household context and specialization reduces the effect of marriage on wages.

## **Analytic Strategy**

The analyses proceed in three steps. First, I provide descriptive evidence of the bivariate marriage gap in wages for men and women across countries in a baseline model. In a second step I introduce human capital indicators and in a third step I include

household context indicators to assess the marriage wage gap for men and women net of these mechanisms.

#### **Data and Methods**

I use data from Wave V of the **Luxembourg Income Study** (LIS) that were collected in the late 1990s and 2000. LIS data are commonly viewed as the best data source for comparative stratification research. The analyses for this paper are based on data from 15 countries: Austria, Belgium, Canada, Germany, Hungary, Ireland, Israel, Italy, Luxembourg, Mexico, the Netherlands, Russia, Sweden (for Sweden data from the 1995 Wave IV are used), the United Kingdom, and the United States. Of the 22 countries that have wave V data available, only the aforementioned 15 countries have detailed information on hourly wages. The sample is limited to employed men and women between the ages of 25 and 55, excluding those currently in the military, unemployed, and students.

I perform cross-sectional analyses estimating linear regressions on the natural logarithm of hourly wages. I focus on wages, which, compared to other labor market outcomes such as occupational prestige or other career indicators, arguably have a much more direct effect on individuals' lives. Confidence intervals presented in this paper are based on bias corrected bootstrapped logistic regressions with 500 repetitions.

In the unconditional model, also referred to as the baseline model, I compare mean log hourly wages for men and women, regardless of other characteristics estimating

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<sup>&</sup>lt;sup>1</sup> Some of the currently excluded countries have some information on gross and/or net income and hours worked. However, the measurement error in suing this information for creating hourly wages is likely to be considerable and will therefore not be included in the first attempt to demonstrate the effect of marriage on individuals' hourly wages.

separate models for men and women using marital status as the sole independent variable. I then introduce two sets of additional independent variables to assess wages net of human capital and household context. The human capital indicators comprise gender, age, education, occupation<sup>2</sup> and an indicator for full-time employment status. These indicators are not measured identically in all of the countries included in the models; however, because the magnitude of the effects of these variables is not of interest here, this does not constitute a problem for the analyses. Models that assess the impact of household context on the marriage wage gap include measures of household specialization and breadwinner pressure: the presence of children under 18, the number of wage earners, and the number of non-wage earners in the household. The number of non-wage earners in the households indicates whether there are other individuals in the household that are not in the labor market and may be more likely to reduce the domestic responsibilities of the respondents.

#### **Results**

My analyses indicate that there is a clear marriage bonus for men that can be found across countries. Figure 1 illustrates the baseline wage gap between married and unmarried men who are employed full time at the time they are surveyed.<sup>3</sup> In all countries, married men have higher hourly wages, with the bonus ranging from approximately 15 to 40%. While the estimates for the marriage premium vary, bootstrapped, bias-corrected 95% confidence intervals suggest only moderate variation across countries. It can be inferred that the bonus for married men's hourly wages is

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<sup>&</sup>lt;sup>2</sup> For Italy, no information on occupation is available.

<sup>&</sup>lt;sup>3</sup> Part-time work among men is relatively uncommon, therefore it will not be considered here.

smaller in the UK, Canada, Austria, and Sweden than it is in the US, Ireland, Israel, and Russia, but the estimates for the marriage bonus typically fall between 15 and 30%.

These baseline results suggest that the marriage premium may be universal across countries and provides some support for hypothesis HPa that states that little crossnational variation in the effect of marriage is to be expected.

#### FIGURE 1 ABOUT HERE

In order to assess the more general hypotheses that differences in wages between married and unmarried individuals are due to variation in human capital (HS) and/or differences in specialization (HP) I move beyond simply comparing the wages of married to those of unmarried men. Controlling for human capital and household context allows me to identify whether the observed differences in wages between married and unmarried men are merely due to differences in individual characteristics between the two groups (HS). If the cross-national differences observed in Figure 1 are due to differences in the selection into marriage, controlling for human capital selection should eliminate cross-national variation (HSa).

#### FIGURE 2 ABOUT HERE

Figure 2 illustrates the shift in the marriage bonus once human capital controls are introduced. As could be expected, the bonus net of human capital is reduced and I find it compressed to being between roughly 10 and 20%.

One country is particularly notable. Once human capital is taken into account, the marriage bonus for Hungary is no longer significant. This suggests that in this country, the observed differences between married and unmarried men's wages are entirely based

on their different human capital characteristics. Individuals with higher levels of human capital seem to be more likely to be married. Austria, the Netherlands, Italy, and Israel also experience a larger than average drop in the marriage differential accounting for individual level differences between married and unmarried individuals, yet wages differences between married and unmarried men remain.

In Italy, on the other hand, human capital seems to explain a smaller proportion of the marital status difference in wages. Similarly, Germany, the United States, and Luxembourg also exhibit a smaller than average decline in the wage advantage of married men after the inclusion of individual characteristics. In a next step I compare these models net of human capital to the results once I also include measure of household context.

Figure 3 shows how the marriage differential is further narrowed by including information about the breadwinner pressure and household specialization experienced by individuals. The results suggest that, in addition to human capital differences, differences at the household level only play a minor role in explaining the male marriage bonus. For most countries the estimated marriage wage differential is on or very close to the diagonal line in figure 3 that indicates no changes between the two models.

The most prominent exception is the United Kingdom. After accounting for breadwinner pressure and division of labor, the wage differential between married and unmarried men is no longer significant. The marriage bonus in Ireland and Italy, but also in Belgium, is, also more strongly affected by including household level information. Here, the household context and breadwinner pressures seem to play a more important role in the magnitude of the marriage differential.

#### FIGURE 3 ABOUT HERE

These results indicate that human capital differences between married and unmarried men are responsible for roughly half of the marriage bonus in most countries. The household division of labor and the breadwinner pressure played a much less important role. Only in Ireland are both human capital and household structure important in explaining the differences in wages between married and unmarried men.

## TABLE 1 ABOUT HERE

The story for women is more complicated. In the baseline model presented in Table 2, married and unmarried women's wages do not differ significantly in Austria, Belgium, Ireland, Russia, and the United States. However, in Germany, Hungary, Luxembourg, Netherlands, Sweden, and the United Kingdom married women have *lower* hourly wages than unmarried women. Meanwhile, in Canada, Israel, Italy, and Mexico, married women have higher wages.

## TABLE 2 ABOUT HERE

#### FIGURE 4 ABOUT HERE

Both the advantage and disadvantages observed for married women are smaller than those for married men. Figures 4 and 5 show the difference between married and

unmarried women's wages grouped by fertility levels and the levels of women's labor force participation.

This does not support hypotheses HSb and HPa, which would have predicted covariation in the marriage effect with the macro level indicators. For the unconditional model, grouping the countries according to the level of labor force participation does not suggest that the macro level labor market structure affects the individual level effect of marriage on women's wages in a systematic pattern.

#### FIGURE 5 ABOUT HERE

As Figure 6 illustrates, human capital differences seem to explain all of the differences between the wages of married and unmarried women in the Netherlands, the UK, and Mexico (which are all clustered together on the 0 effect axis). On the contrary, taking human capital differences into account, results in the manifestation of a small, but significant, wage disadvantage for women in Belgium and the United States that was not observed in the unconditional models. This trend can also be observed in Hungary and Sweden, where accounting for women's human capital further deepens the penalty for marriage that already existed in the unconditional case.

#### FIGURE 6 ABOUT HERE

Adding additional information about the household context in a third analytical step eliminates the marriage wage disadvantage for women in Germany, Belgium, and the United States, but further increases the negative wage gap between married and unmarried women in Sweden.

I find marriage penalties in Hungary, Sweden and Luxembourg, as well as a marriage bonus in Israel, Italy and to a much smaller extent, in Canada, that is reduced but not eliminated through the introduction of the household characteristic.

#### FIGURE 7 ABOUT HERE

Overall, my findings for women suggest that there are not clear, systematic differences between the wages of married and unmarried women. Human capital differences explain all of the difference between married and unmarried women in three countries, Mexico, the Netherlands, and the United Kingdom. In Mexico, the disappearance of the initial wage advantage of married women in the unconditional models suggests that there is a positive selection into marriage, where married women have higher earnings potential than unmarried women. In the Netherlands and the UK the opposite is the case. There, the initial disadvantage disappears, which indicates that there is negative selection into marriage, and, on average, married women have lower levels of human capital than unmarried women.

The negative effects of the presence of children and the presence of other breadwinner on women's productivity are minimal, and only evident to a limited degree in Hungary, Luxembourg as well as Belgium, Germany, and the United States, While in the former two countries there still remains a significant wage disadvantage, in the latter

three countries all (residual) wage disadvantages seem to be explained by differences in the household structure.

#### FIGURE 8 ABOUT HERE

As previously demonstrated for the baseline model, grouping the countries according to the level of labor force participation does not suggest that the macro level labor market structure affects the individual level effect of marriage on women's wages in a systematic pattern, as illustrated in Figure 8. By the same token, there does not seem to be a systematic relationship between levels of fertility and the marriage gap in wages for women after human capital and household structure are introduced (figure not shown here).

## **Summary and Conclusion**

This study shows that there is a virtually universal marriage bonus for men's wages that cannot be entirely explained by individual or household differences between married and unmarried men. Human capital characteristics are a powerful explanation of the wage gap, reducing it by at least 40% in all countries.

While positive selection into marriage seems to be present among men in all countries, this is especially powerful in explaining the marriage gap in wages in Austria, Ireland, Israel, and the Netherlands. In Hungary, married men's higher levels of human capital explain all of the observed differences in wages. This suggests that selectivity into marriage based on these characteristics can explain a significant part of the wage gap, but also clearly shows that other mechanisms are at work.

The results of this study underline the very restricted relevance of selectivity processes in cross-national perspective. My results provide limited support the household structure and productivity approach since household specialization and breadwinner pressure seem to explain at least some of the wages differences between married and unmarried men. The fact that I find any effect breadwinner pressure has an effect in a variety of countries suggests that marriage either pressures men to be more productive or, alternatively, enhances their productivity based on specialization.

However, it has to be noted that these effect of specialization or breadwinner pressure seem to not operate at the same level in all countries. Further research is needed to understand what underlies the cross-national differences in the extent to which married men's wages respond to breadwinner pressure. One of the goals is to identify what it is about societies that makes household specialization more effective or, breadwinner pressures on men more power full, thus leading to increased productivity and higher wages. Alternatively, it needs to be explored whether the differences I find are due to the institutional differences that selectivity reward men with more pronounced family responsibility with higher wages. Possibly the cross-national differences I find are not evidence of a variation in the productivity effect of marriage but evidence for variation in the preferential treatment of married men, or, respectively, wage discrimination against unmarried men.

Overall, married men make more money, and while selection and, at least in some countries, specialization and breadwinner pressure explain some of the differences, there remains a significant wage advantage for married men. The evidence is more mixed for women. In three countries, Austria, Ireland, and Russia, no wage difference between

married and unmarried women could be found in any of the models. For the other countries, the results of this study suggest that that selection into marriage and less so household context and productivity are useful in explaining all of parts of the wage difference between married and unmarried women.

For most countries, I find evidence for a positive selection into marriage. In Luxembourg, the Netherlands and the UK, however, the fact that the marriage wage penalty decreases after human capital controls are introduced, suggests that married women in these countries have lower levels of human capital, and indicate a negative selection into marriage. These results underline the importance of selection mechanisms, yet also make it clear that selection mechanism may operate in different direction depending on the social context.

The evidence on the effect of breadwinner pressure and household structure is also mixed for women. Prior research pointed out that marriage limits women's productivity through increased devotion to domesticity and support of a male (co-)breadwinner. Based on this I would have expected to find that, if the household context and productivity approach holds, accounting for these household level characteristics would substantially reduce the marriage wage penalty for women. I find evidence for this mechanism in Belgium, Germany, Hungary, Luxembourg, and the United States.

Similarly, for women in Italy the results show that household structures reduce married women's productivity, as the wage advantage of married women even increases after the household context is taken into account.

However, the reduction in the net marriage wage gap are rather small, and for four countries, Canada, Mexico, the Netherlands, and the UK, there is no clear evidence that

imply that breadwinner pressures or other aspects of household context have any impact on the wage differential between married and unmarried women. In Israel, on the other hand, household context works in the same way it does for men – household context seems to increase women's productivity. The Swedish case does not fit easy in any of the existing explanatory schemes. There, differences in household structure seem to suppress the wage penalty for married women and once it is taken into account the wage gap for marriage is further deepened.

This leads to the conclusion that both mechanisms tested in this study are relevant cross-nationally, but that the importance and even the direction of the selection and productivity effects varies widely. Moreover, my analyses failed to identify a clear relation between macro factors and the magnitude of wage gaps between married and unmarried individuals. As neither levels of fertility nor levels of women's labor force participation seem to enhance our understanding of the sources of the variation in the marriage wage gap for women, future research further explore this puzzle. Especially a closer look at labor market structures and occupational issues seem promising.

Investigating whether married and unmarried women hold different types of jobs and whether or not occupational segregation and women's level of labor market participation (at the full- or part-time level) may shed light on this important issue. While the source of cross-national variation in marriage wage gaps and the underlying mechanism needs to be explored further, this study establishes several facts that provide an important basis for further investigation.

First, I show that there is a persistent male marriage bonus that exists in a variety of contexts, above and beyond selection and productivity differences. This study shows

that for men, regardless of some differences in magnitude, selection processes seem to be universal. There is greater variation in the important of the breadwinner pressure and productivity differences. This study also shows that wage differences between married and unmarried women vary widely across countries, as do the underlying mechanisms that explain parts or all of the differences.

These findings provide an important first step in (re-)conceptualizing the role of as a factor in the shaping gender stratification. Marriage as an institution seems to universally benefit men's economic standing, but does not serve the same purpose for women. However, the results also make clear that, at least for this examined group of women that is firmly attached to the labor force, marriage in itself is nonconsequential for women's wages or may even be beneficial.

In order to better understand the role of marriage additional research on the causal relationship between marriage and labor market outcomes using longitudinal data for a multitude of countries at the individual level is needed to answer some of the outstanding questions.

#### References

- Avellar, S. and P. J. Smock. 2003. "Has the price of motherhood declined over time? A cross-cohort comparison of the motherhood wage penalty." *Journal of Marriage and the Family* 65:597-607.
- Becker, Gary. 1981. *A Treatise on the Family*. Cambridge, MA: Harvard University Press.
- Bellas, M. L. 1992. "The Effects of Marital-Status and Wives Employment on the Salaries of Faculty Men the (House) Wife Bonus." *Gender & Society* 6:609-622.
- Blackburn, M. and S. Korenman. 1994. "The Declining Marital-Status Earnings Differential." *Journal of Population Economics* 7:249-270.
- Budig, Michelle J. and Paula England. 2001. "The Wage Penalty for Motherhood." *American Sociological Review* 66:204-225.
- Chun, Hyunbae and Injae Lee. 2001. "Why Do Married Men Earn More: Productivity or Marriage Selection?" *Economic Inquiry* vol. 39:pp.

- Cohen, Yinon and Yitchak Haberfeld. 1991. "Why Do Married Men Earn More than Unmarried Men?" *Social Science Research* 20:29-44.
- Ginther, Donna K. and Madeline Zavodny. 2001. "Is the Male Marriage Premium Due to Selection? The Effect of Shotgun Weddings on the Return to Marriage." *Journal of Population Economics* vol. 14:pp.
- Gornick, J. C., M. K. Meyers, and K. E. Ross. 1998. "Public policies and the employment of mothers: A cross-national study." *Social Science Quarterly* 79:35-54.
- Gray, Jeffrey S. 1997. "The Fall in Men's Return to Marriage: Declining Productivity Effects or Changing Selection?" *Journal of Human Resources* vol. 32:pp.
- Kalleberg, Arne L. and Rachael A. Rosenfeld. 1990. "Work in the Family and in the Labor Market: A cross-national Reciprocal Analysis." *Journal of Marriage and the Family* 52:331-346.
- Kaufman, Gayle and Peter Uhlenberg. 2000. "The Influence of Parenthood on the Work Effort of Married Men and Women."
- Korenman, Sanders and David Neumark. 1991. "Does Marriage Really Make Men More Productive?" *Journal of Human Resources* vol. 26:pp.
- —. 1992. "Marriage, Motherhood, and Wages." Journal of Human Resources vol. 27:pp.
- —. 1998. "Marriage, Motherhood, and Wages." Pp. 192-214 in *Women in the labour market*, vol. 2.
- Light, A. 2004. "Gender differences in the marriage and cohabitation income premium." *Demography* 41:263-284.
- Mandel, Hadas and Moshe Semyonov. 2005. "Family Policies, Wage Structures, and Gender Gaps: Sources of Earnings Inequality in 20 Countries." *American Sociological Review* 70:949.
- Nakosteen, Robert A. and Michael A. Zimmer. 1997. "Men, Money, and Marriage: Are High Earners More Prone Than Low Earners to Marry?" *Social Science Quarterly* vol. 78:pp.
- Ono, Hiromi. 2003. "Women's Economic Standing, Marriage Timing, and Cross-National Contexts of Gender." *Journal of Marriage and the Family* 65:275-286.
- Schoeni, Robert F. 1995. "Marital Status and Earnings in Developed Countries." *Journal of Population Economics* vol. 8:pp.
- Sigle-Rushton, W. and S. McLanahan. 2002. "Richer or poorer? Marriage as an anti-poverty strategy in the United States." *Population* 57:519-538.
- Simon, Robin W. 2002. "Revisiting the Relationships among Gender, Marital Status, and Mental Health."
- Sundqvist, C. 1994. "Who Do Married Men Have Higher Wages Than Unmarried Men." Ekonomiska Samfundets Tidskrift 47:235-245.
- Waite, Linda J. and Maggie Gallagher. 2000. *The Case for Marriage*. New York: Doubleday.
- Waldfogel, J. 1997. "The effect of children on women's wages." *American Sociological Review* 62:209-217.

# **Tables**

Table 1: Relevance of Human Capital and Household Context across Countries

	Human capital very	Human capital not/moderately
	important	important
Household Context moderately important	Ireland	Belgium Italy, UK
Household Context not important	Hungary, Austria, Israel, Netherlands	Canada, Germany, Luxembourg, Mexico, Russia, Sweden, US

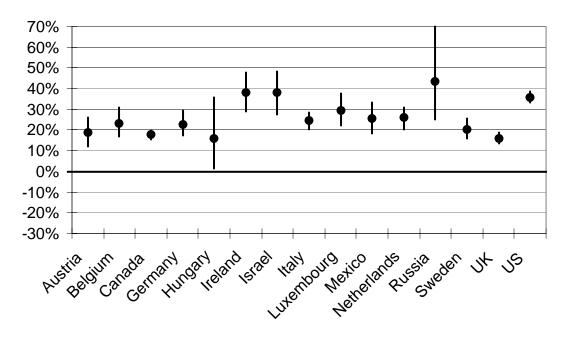
Table 2: Wage Differences between Married and Unmarried Women

	Unconditional Model
Austria	(-1.74%)
Belgium	(3.53%)
Canada	6.84%
Germany	-9.32%
Hungary	-14.80%
Ireland	(5.26%)
Israel	30.10%
Italy	13.06%
Luxembourg	-11.60%
Mexico	17.86%
Netherlands	-7.06%
Russia	(-4.79%)
Sweden	-9.09%
UK	-5.82%
US	(-0.86%)

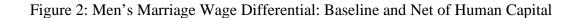
Note: Percentages in parentheses indicate that wage gap is not significant at the .05 level.

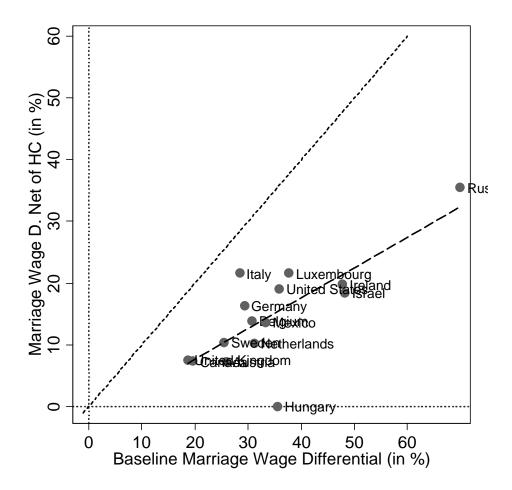
# **Figures**

Figure 1: Advantage in Log Hourly Wages of Married Men Compared to Unmarried Men (employed full-time)



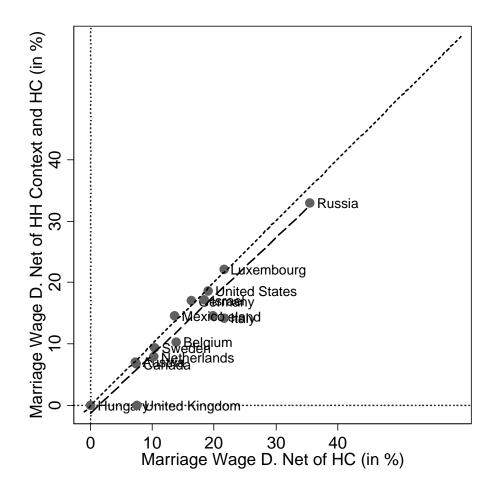
Note: Whiskers denote bias corrected 95% confidence interval





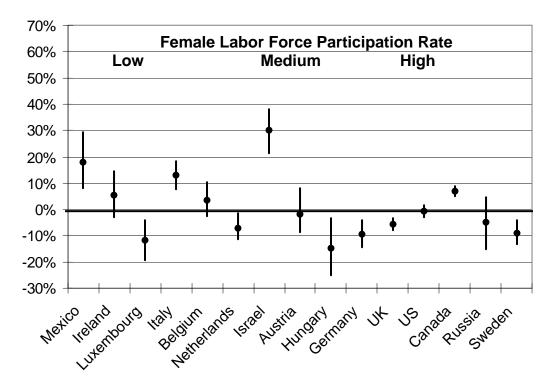
Note: Dashed line indicates average relationship between baseline marriage wage differential wage differential net of human capital, dotted diagonal indicates no change between the two models..

Figure 3: Men's Marriage Wage Differential: Net of Human Capital and Net of Household Structure (and Human Capital)



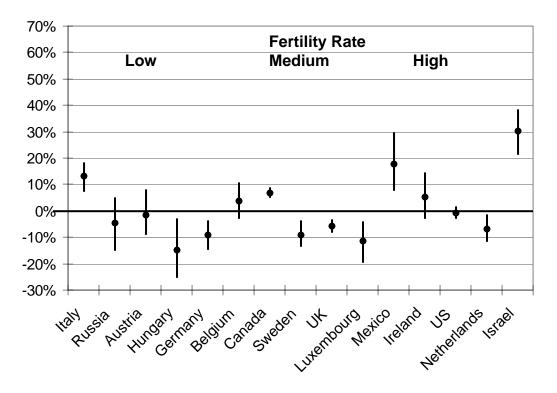
Note: Dashed Line indicates average relationship between wage differential net of human capital and wage differential net of human capital and household context, dotted diagonal indicates no change between the two models.

Figure 4: Marriage Gap for Women's Wages (Unconditional Model) grouped by Women's Labor Force Participation Level



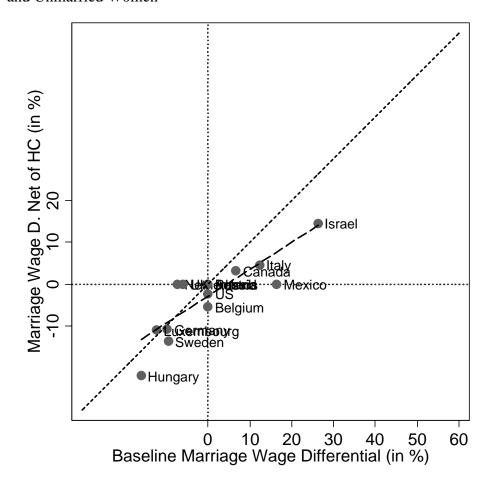
Note: Whiskers denote bias corrected 95% confidence interval

Figure 5: Marriage Gap for Women's Wages (Unconditional Model) grouped by Fertility Levels



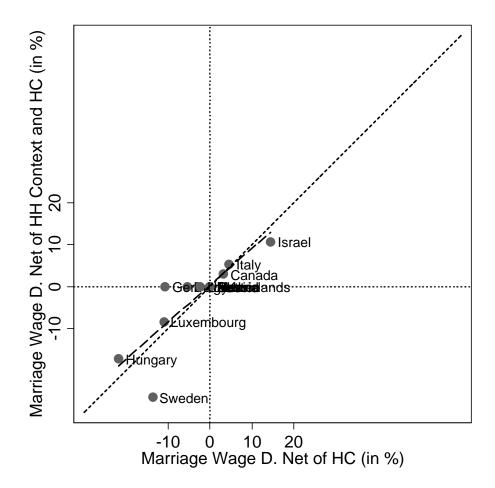
Note: Whiskers denote bias corrected 95% confidence interval

Figure 6: Unconditional and Human Capital Conditioned Wage Gap Between Married and Unmarried Women



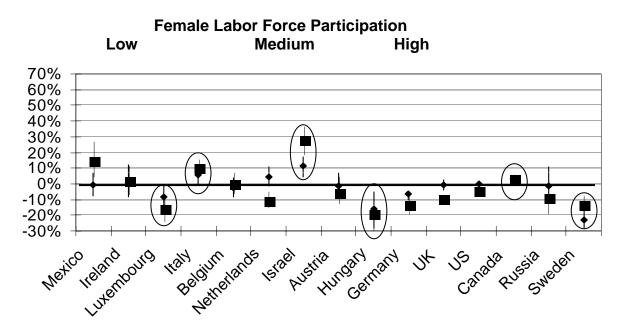
Note: Dashed line indicates average relationship between baseline marriage wage differential wage differential net of human capital, dotted diagonal indicates no change between the two models..

Figure 7: Human Capital Conditioned and Household Structure Conditional Wage Gap Between Married and Unmarried Women



Note: Dashed line indicates average relationship between wage differential net of human capital and wage differential net of human capital and household context, dotted diagonal indicates no change between the two models.

Figure 8: Unconditional and Conditional Wage Gap between Married and Unmarried Women



Note: Squares represent unconditional estimates; diamonds represent conditional estimates; whiskers denote bias corrected 95% confidence interval; countries with significant wage gaps are circled.