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How Care Work Employment Shapes Earnings in a Cross-National Perspective

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Summary

This report investigates the effect of employment in a job involving care work – conceptualized as work in occupations where workers provide face-to-face services that strengthen the physical health and safety or the physical, cognitive, or emotional skills of those they serve – on the relative earnings of both men and women workers in twelve countries that represent a range of economic and political policy contexts. In addition, this report descriptively explores the characteristics of workers engaged in care employment and how these vary cross-nationally. We examine how much of the effects of care work employment on wages can be attributed to differences in worker characteristics such as educational attainment, age, gender, and nativity. Importantly, where possible, we disaggregate our category of care workers into smaller occupational groups, namely physicians, nurses, primary/secondary teachers, university professors, and domestic workers versus all other care workers to examine whether the effect of care work employment on earnings varies by the type of care work performed. We also discuss three major explanations for the potential differential pay of care workers: cultural devaluations of care work due to its association with 'women's work,' economic tensions due to the expense of high quality care provision, and political factors shaping labor market and social inequalities regarding care work. We consider how national context and social policies – including the degree of country-level earnings inequality, size of public sector, immigration, and labor union density – shape variation in the relative net effects of care work on earnings.

Generally, in terms of family structure, age, and demographic characteristics, care workers are fairly similar to the overall workforce within each country, although they are more likely to be women. However, care workers differ, both in terms of their educational attainment and in the characteristics of their jobs, from workers in non-care employment. Both men and women care workers tend to be more highly educated than those not in care

work and more likely to be in professional jobs and public sector employment. These measures would suggest that care workers should earn more, all else equal, than those outside of care work. Yet, results show the unadjusted earnings of care workers in most countries are about the same as non-care workers, despite the higher skills of care workers. That care workers do not exceed non-care workers in unadjusted earnings may be related to the fact that care workers are more likely to be in occupations and industries predominantly staffed by women. In regression analyses, we find frequent net gaps in earnings between care workers and non-care workers, once we control for educational attainment, potential experience, and other worker characteristics.

Regression results show that care employment frequently, but not always, entails wage penalties, which means wages lower than would be expected, controlling for other factors. While this finding is not always true for some subcategories of care occupations, namely physicians, among men, care employment more consistently has negative effects on earnings. In countries where negative effects for care employment are also found among women, the size of these care penalties is often larger for women, compared to men. Worker characteristics, particularly education and potential experience, do not account for the effects of care work on earnings. Indeed, education appears to have protective effects vis-à-vis care employment by mitigating care penalties and increasing care bonuses. If care workers did not have higher amounts of education, on average, compared to non-care workers, the effects of care work on earnings would be less positive/more negative. The fact that care employment is more gender segregated than non-care employment, in the direction of being female dominated, accounts for some but not all of the penalties incurred by care workers.

We also examined whether the effects of care work employment are moderated by location of care work in the public sector, part-time employment, professional status of worker, and nativity of the worker. Across countries, we find that wage penalties for care

work tend to be larger among professional workers, among full-time workers, and among those working in the private sector. In contrast, wage bonuses are often associated with care work among those in the public sector and who are part-time workers and non-professional workers. Among women these types of bonuses are most consistently found in Sweden, Germany, and the Netherlands and among men these types of bonuses are found in Sweden, Germany, and Canada. We draw few conclusions from our immigrant status analysis, due to data limitations and inconsistent effects. For a subset of countries, we disaggregated care work into a number of occupations where we expected effects of the particular form of care work on earnings might vary, either due to the skill requirements of those occupations or due to the labor market and government systems regulating those occupations. Generally we found that medical occupations, particularly doctors and nurses, are associated with fewer wage penalties or larger wage bonuses. In contrast, educational occupations (teachers, professors) and domestic employment are more often associated with larger wage penalties, particularly for women. This set of analyses points to the importance of considering different forms of care work separately when analyzing earnings.

In terms of policy context, we examined whether labor market policies, social inequality, and work-family policies matter in explaining wage penalties in respect of care. While we did not find that work-family policies, such as maternity and parental leave, family allowances, and family tax systems, mattered for the relative earnings of care workers, we did see consistent patterns in regard to labor market policies. Our analysis presents strong results indicating that where income inequality is greater and where the public sector is smaller, higher wage penalties are incurred for performing care work. On the other hand, where income inequality is low and the public sector is large, those in caring occupations may even earn care bonuses. Our results here are more suggestive than definitive, but point to arenas where social and labor market policies may influence the relative pay of care workers.

Introduction

Over the last several decades, with the entrance of larger numbers of women across the globe into the paid labor market, care sectors of the economy have seen tremendous growth. Yet, as many scholars note, 'paid care work is devalued and underpaid' (Cancian 2000:136; Cancian and Oliker 2000; Lewis 2001; Abel 2000; Folbre 2001a; Tuominen 2002; Abel and Nelson 1990), even though care clearly deserves both 'public recognition and reward' (Folbre 2001a:232). We focus on wages in paid care work – conceptualized as work in occupations where workers provide face-to-face services that strengthen the physical health and safety or the physical, cognitive, or emotional skills of those they serve – and examine how it is recognized and rewarded across different national contexts (England et al. 2002).[1] Other definitions of care work might be broader (for example, including restaurant workers as providing sustenance) or narrower (for example, focusing upon occupations such as childcare workers or nursing home attendants). Our approach takes an intermediate position by focusing on care work as face-to-face human interaction between provider and recipient that develops or maintains the capabilities of the recipient.

Taking a comparative approach to care work across twelve countries, we wish to understand whether there is variation in the wages for care work relative to wages in non-care employment. We examine whether wage differences between care and non-care workers can be explained by differences in worker characteristics or job characteristics, considering how both men's and women's wages may be affected by engaging in employment in care work. Next, we consider whether wage differences between care and non-care employment may be explained by occupational gender segregation by examining whether variations in the proportion of women in the occupation and industry are related to wages to help explain

[1] We conceptualize care work carefully in order to avoid including a broader range of 'interactive service work' such as that done by waiters or receptionists (Leidner 1993; England et al., 2002). While interactive service workers more broadly face wage penalties, we are most interested here in the wage penalties associated with caring labor. However, there are clearly other approaches to conceptualizing care work.

differences in wages for care and non-care employment. Importantly, we consider how any variations in the effects of care work on wages, controlling for worker and job characteristics, may relate to differing labor market contexts, such as the proportion of care work employment taking place in the public sector. Finally, in our individual-level analyses we disaggregate our measure of care workers into particular medical, educational, and private service occupations to examine variation in the effects of these different forms of care work on earnings. We then turn to macro-level analyses to situate our findings within a broader framework of country differences in inequality, worker political strength, and the socialization of care work. Our greatest contribution lies in considering the cross-national variation in how employment in care work is associated with wages.

Examining care work allows us to consider larger issues of gender, of inequality, and of the value of care to society (Daly 2001a; Razavi 2007).[2] Care is a profound and central experience in human lives, making it an important subject of inquiry. While a substantial proportion of care work is performed without pay, in this paper we focus on wages for employed care workers, who comprise a growing segment of the paid work force.[3] Yet, we do not mean to de-emphasize the importance of unpaid care, and see unpaid care and paid care as deeply intertwined, reflecting societal ambivalence regarding to what extent care should be a 'private' or 'public' activity (Ungerson 2000; Daly 2001b).[4] Indeed, there are significant issues about the relationship between family provision of care and market provision of care, while the state plays its own role by providing and supporting care or placing and shifting responsibility for care from the state to the private sector and/or

[2] For example, workers have also been drawn into commodified care in different ways. Evelyn Nakano Glenn (1992) powerfully indicates this point in her analysis of the racial division of paid reproductive labor, showing historically how, in the United States, gender and race systems have been constructed to devalue racial/ethnic minority women's care of their own families, while appropriating their labor for the care of white families.
[3] As Folbre and Nelson (2000) document, the proportion of professional and domestic care workers in the United States labor market doubled in relative size between 1900 and 1998.
[4] Unfortunately, our study does not allow us to examine caregivers who earn wages or symbolic payments from the state to care for family members, or analyze the penalties paid by those who provide care for their families for free (Ungerson 2000). But the existence of such arrangements should reiterate the difficulties of separating private and public care.

families.[5] By looking across a range of countries – including a variety of wealthy welfare states, post-socialist countries, and developing economies – we reflect on the role of the state and its policies in supporting wages for care employment.[6]

Effect of Care work on Relative Earnings

Wage studies predict that certain characteristics of the workers (e.g., educational level) and jobs (e.g., managerial positions) affect the wages paid in these jobs. Wage penalties, however, come into play when workers with similar characteristics in jobs with similar characteristics are paid less because, for example, they are engaged in care work. By controlling for the attributes of workers and their jobs that affect wages, we can determine whether there remains a penalty or a bonus for workers engaged in care work.

One previous study has documented clear wage penalties for workers engaged in care work in the United States. England et al. (2002:468) found in fixed effects models[7] that, controlling for changes in the characteristics of both individuals and jobs, U.S. 'workers generally experience a decline in wages when they enter a care occupation, and an increase when leaving care work.' Indeed, this study estimates a 5-6 percent pay penalty for doing care work,[8] controlling for a host of factors including education and background of the workers, and characteristics of the job such as whether it is female-dominated, public sector, or unionized.[9] Therefore, strong evidence exists that U.S. workers pay penalties for engaging in care work. However, we do not know whether these penalties exist more widely, and

[5] Folbre (2001a:67) discusses a National Family Caregivers Association report that shows that the value of the services provided by U.S. family caregivers can be estimated at $196 billion a year.
[6] We examine the impact of state provision of care, by comparing public and private sector care work, to test whether such provision leads to higher wages for caregivers or strengthens gender equity as argued in past research (Daly 2001b; Razavi 2007). However, state provision of care may also weaken individual rights of care recipients, and may reflect other problematic tensions.
[7] Fixed effects models assist in controlling for unobserved heterogeneity when this heterogeneity is constant over time. This constant can be removed from the data, for example, by subtracting each individual's means from each of her/his observations before estimating the model.
[8] The occupational exception in this study were medical occupations other than physicians, a category largely dominated by nurses, who experienced an 8 percent bonus in hourly wages in contrast to all other care workers.
[9] See also, earlier, somewhat broader analyses of 'nurturant' work (England 1992; England et al. 1994).

would expect some differences based on labor market and social policy context, which is why we look across a range of countries in this study.

What might explain wage penalties to care work, if they exist? Economic factors may help explain lower wages among care workers. Care work may be less profitable, or even less economically sustainable, due to the intensive labor demands of care work.[10] Baumol (1967) noted that service provision would have slower productivity growth and higher rising labor costs than manufacturing where labor can be replaced more easily with technology. While some types of service provision have escaped this prediction, in part due to advances in information technology, 'productivity growth has been and is likely to continue to be slowest in care services requiring personal and emotional contact' (Folbre 2001b:180; Folbre 2001a, 2008). The 24-hour 365-days-per-year demands of care provision for the young, the sick, the disabled, or the elderly place a ceiling on profits and create trade-offs between the cost-containment and quality of care services. As Razavi (2007:11) comments, 'The difficulty of increasing productivity without cutting into the quality of output is in fact one of the distinctive features of care work.'

Care recipients or care providers (or often both) absorb the high costs of care through higher fees and lower wages (Meyer 2000; Daly 2001a). Employers may attempt to contain costs by speeding up care work[11] and/or by employing workers disadvantaged in the labor market on the basis of ascribed attributes (gender, race, immigrant status) and achieved attributes (human capital) (Glenn 1992; Folbre 2006). Importantly, the vulnerability of most care recipients hampers their ability to pay ever-higher amounts for care services, also limiting profitability or unsubsidized sustainability of this type of work (Meyer 2000;

[10] The strong interpersonal nature of care work cannot be completely replaced through increasing the usage of productivity-enhancing technology, although other forms of service work, such as insurance and banking, have benefited from innovations in information technology (England et al. 2002).

[11] 'Speeding up' the work process, either by making workers perform faster or by increasing the ratio of care recipients per care worker, is extremely difficult for many types of care work. Indeed, it leads to high levels of worker turnover and lower levels of quality (Folbre 2006; Meyer 2000).

England et al. 2002). As Folbre (2001a: xv) notes, 'the increased cost of care … means that more people, especially children, the elderly, and other dependents, cannot always afford the care they need . . . [and] increased pressure to cut costs leads to reductions in the quality of care. . .' In sum, the reduced ability of care businesses to reduce labor costs by replacing care workers with technological innovations (as is done in other sectors of the economy, including the broader service sector) combined with the high elasticity of the price of care work (given the lower ability of care recipients to pay for services) results in both lower profitability/unsubsidized sustainability of the care sector and depressed skill-commensurate wages for care workers. In this way, care workers face wage rates that are low, particularly relative to the human capital and skill level requirements of their jobs.

While these economic pressures are difficult to measure with the data we have, we believe that governments may attempt to alleviate the economic pressures that lead to low wages for care workers by subsidizing or providing care. For example, public sector care work employment may be one indicator of how governments address these pressures. [12] Governments are less likely to pay very low wages due to the greater legal and public scrutiny they face, compared to private sector employers (Kearney and Carnevale 2001). Gornick and Jacobs (1998), writing about seven wealthy countries, argue that both the skills required and the pay policies of governments help equalize women's wages, relative to men's. These effects may also be true for the wages of care workers, relative to those not in care work. Here, however, we would argue that public sector care work employment is more likely to raise the wages for very low paid care work such as childcare or household-based personal care services – which can be particularly low in the private sector – but have more

[12] Yet at the same time, over the last twenty years, there have been many attempts to either privatize or marketize public care services (Knijn 2000; Folbre 2006; Razavi 2007). Surprisingly, we have not seen a similar analysis of the educational attainment of care workers, using our operative definition, in the literature. It is possible that, due to lack of detail in occupational coding for less-skilled service occupations, we undercounted low-skill care workers. To examine whether effects of care work on employment differ by skill level of care workers, we disaggregate care work by occupation in supplemental analyses.

ambivalent effects on wages for more highly professionalized care work, such as that of physicians, nurses, or college professors.

Another explanation for lower wages in care work occupations is the cultural devaluations of care work due to its association with 'women's work.' Any wage penalty to care work may be due to a devaluing of the importance of care work, in part because women have predominantly performed it (England 1992; Cancian 2000; Folbre 2001a, 2001b).[13] Indeed, as shown in Figure 2 (below), across a range of countries, paid care work is more likely to be performed by women. The notion that care work should be provided out of love, usually by women, persists to varying degrees in most countries and economies, and may lower wages. This cultural association of care work with 'women's work' may impact wages in ways that controlling for the sex composition of jobs does not capture. Thus, the continued association of care work with women's work may lead to the devaluation of care work and lower wages when care work is performed for pay. In addition, the assumption that caring labor is its own reward and/or should not be commodified may normatively justify the low pay care workers receive (Folbre and Nelson 2000; Zelizer 2002).[14] At the same time, marginalized women – who face hiring and wage discrimination due to their nativity (including regional nativity within a country), citizenship, and race/ethnicity, as well as their gender – carry out much poorly paid care work, particularly domestic work and home care for children and the elderly (Rollins 1985; Glenn 1992; Anderson 2000; Romero 2002; Lutz 2002; Hondagneu-Sotelo 2001; Parreñas 2001; England and Folbre 2002; Tuominen 2002; Misra et al. 2006; Misra and Merz 2007).[15] This implies that minority women, particularly,

[13] For example, although most physicians in the Soviet Union were women – suggesting greater gender equity -- physicians were paid much less well relative to other highly educated workers (England and Folbre 2002).
[14] Related to this is the argument that care workers receive compensating differentials (satisfaction, pride) for performing this work in lieu of higher wages (without acknowledging satisfaction or pride received by non-care workers in the same way).
[15] Parreñas (2001:78), describes this system: 'The hierarchy of womanhood – involving race, class, nation, as well as gender – establishes a work transfer system of reproductive labor among women, the international system of caretaking.'

in our analysis, immigrant women, who perform care work may face even larger wage penalties compared to more socially powerful workers. We examine these cultural devaluations by looking at whether the gender composition of both occupations and industries decreases, increases, or has no effect on the wages paid for care work. We also examine whether immigrant women receive significantly different penalties for care work than do native women, and we consider the size of the foreign-born population within each country as well in interpreting these differences.

Labor market contexts may also shape the wages of care workers, relative to other workers. For example, in some nations (for example, Sweden) labor market policies effectively limit wage dispersion and create more equitable earnings. Indeed, variation in wage distributions cross-nationally plays a crucial role in explaining the gender gap in wages cross-nationally (Blau and Kahn 1992, 1996, 2003). To consider these questions, we can examine differences in income inequality in relation to wages for care work employment relative to non-care work employment.

Similarly, we would expect that collective bargaining agreements, such as those made by unions, might limit the differential between wages for care work compared to non-care work employment. In their study of wage penalties to care work in the United States, England, Budig, and Folbre (2002) report that being a union member had a positive and significant impact on wages. Unfortunately, our data does not include measures of union membership, but we can examine the association of larger rates of union density against wages for care work employment relative to non-care work employment.[16]

Social policy strategies vary in the extent to which they support care provision through the family, the market, the public sector, or the not-for-profit sector (Razavi 2007).

[16] Absent individual-level union membership data, we would also prefer to have measures of union density among care work employment, as we would expect that collective bargaining would increase wages for care workers where they are unionized. Yet, such cross-national data does not currently exist, and we rely on broader measures of union density.

Where states socialize the costs of care by providing and subsidizing care work in the public sector, wage penalties for care workers may be reduced (Morgan 2005).[17] Additionally, we see public provision of care as more broadly legitimizing the importance of care, and also giving caregivers and care recipients greater flexibility and choice regarding care (Razavi 2007). However, where policy strategies emphasize family caregiving (through employment leaves, cash payments, and/or pension supports to family caregivers), fewer supports may exist to bolster the earnings of care workers (Morgan 2005).[18] Here workers should incur wage penalties for employment in care work. Similarly, where policy strategies encourage care provision through (unregulated) markets, market principles should result in reduced wages for care workers due to the lack of profitability of these businesses (Morgan 2005; Daly 2001b). Indeed, much poorly paid care (such as child care done by migrant workers) may be invisible in government statistics, because it takes place in unpaid markets that are not included in government statistics of economic productivity nor regulated by labor contracts (Razavi 2007). We can examine whether wages for care work are better, relative to wages for non-care employment measures of social policy, where levels of public provision of care are higher (as measured by proportion of care work taking place in the public sector). In this way we come full circle, since we began by arguing that states may step in to provide and subsidize care in order to reduce the economic pressures created by lower profit margins in care work.

In summary, we document the extent to which pay for care workers differs from pay for non-care workers, and examine how much of this care pay gap is accounted for by worker characteristics, how much is related to the characteristics of the jobs, including whether the job is in the public sector, and how much is related to the devaluation of work predominantly

[17] Yet, this does not mean that state subsidies are necessarily a panacea; caregivers may still be hired for low wages, such as U.S. elder-care workers in Medicaid financed nursing homes (England and Folbre 2002).
[18] In a number of countries, such as Sweden, policy strategies support both public provision of care and family caregiving. Yet, we view these contexts as different from countries, such as Germany, where the greatest emphasis is given to policies that support family caregiving (Misra, Budig, Moller 2007).

performed by women. Finally, we consider the patterns of wage penalties for care work across a range of countries, and consider how penalties may be related to labor market and social policy strategies. We ask the following questions in our research:

1) What is the effect of employment in care work on wages, and does this effect vary across national and policy contexts?
2) How much of the gap between care and non-care worker wages are attributable to labor market characteristics of workers in these jobs?
3) To what extent are differences in pay attributable to the characteristics of care versus non-care jobs?
4) How much of these penalties can be attributed to levels of state socialization of care provision, as measured through the proportion of care workers working in the public sector?
5) How much of the pay gap between care and non-care workers is associated with the devaluation of work predominantly performed by women, as measured through the proportion of workers in caring occupation that are women?
6) Are the effects of care employment similar for all workers, or do workers with particularly high skill levels (doctors, nurses, professors) fare differently from those with moderate skill requirements (teachers) or low skill requirements (household service workers and other care workers)? Moreover, do the wage effects of these forms of care work vary across countries with different systems of health care and education?
7) How do labor market and social policy regimes shape variation in the relative wages for care work? Examples may include the level of income inequality, the strength of unions, and the level of state subsidies for public care provision.

Data

We use micro-level data from wave five of the Luxembourg Income Survey (LIS). The LIS database provides the best cross-national data for comparing income across OECD countries (OECD 1995). LIS gathers data from household-based national surveys and harmonizes the data to ensure comparability. We have selected countries that offer a variety of policy strategies to care work, that represent differential market development (post-industrial capitalist, post-socialist capitalist, and developing market economies), and that contain detailed occupational and industrial sector variables that allow us to identify care workers. These countries are: Nordic: Finland 2000 and Sweden 2000; Continental European: Netherlands 1999, Germany 2000, Belgium 2000, and France 2000; Post-Socialist: Russia 2000 and Hungary 1999; Liberal: U.S. 2000 and Canada 2000; Developing Market: Mexico 2002 and Taiwan 2002. We limit our sample to employed adults with valid earnings data, aged eighteen to fifty-nine to limit the number of retirees. We exclude respondents who are unemployed and who are out of the labor force, students and retired persons, even if they are employed, and those in the military.[19]

Our dependent variable is the natural log of annual earnings, adjusted for hours worked and annual weeks worked, where available. In each country, prior to taking the natural log of earnings, we top and bottom coded earnings at the one percent and ninety percent[20] values of the overall earnings distribution to minimize the effect of outliers. Our primary independent variable is care work employment. This variable is identified by the occupation and industrial sector of the respondent's job. While detailed occupations and

[19] Because our dependent variable is wages, we excluded unpaid family workers with no valid earnings data. In all likelihood, this exclusion leads to conservative estimates of the effect of care work employment on earnings.
[20] Top and bottom coding means that if respondents' earnings fell below the 1% point in the distribution of all respondents' earnings, we recoded the value to equal the value of earnings at the 1% point in that distribution. Similarly, if respondents' earnings fell above the 90% point in the earnings distribution, we recoded the value to equal the value of earnings at the 90% point in the distribution. In addition to reducing the distorting effects of outliers and guarding against egregious errors in the recording of wages, top and bottom coding wages at the 1% and 90% points in the overall earnings distribution enables better comparisons across countries with extreme differences in overall levels of wage inequality. We investigate the remaining cross-national differences in wage inequality in subsequent analyses in this manuscript.

industries vary across countries, occupations and industries are cross-classified at the finest level possible in order to identify care workers.

We conceptualize care work using the framework developed by England, Budig, and Folbre (2002). In this framework, care work involves 1) face-to-face human interaction between provider and recipient that 2) develops or maintains the capabilities of the recipient.[21] We distinguish this from a broader category of interactive service work, which includes waiters, sales clerks, taxi drivers, receptionists, etc. -- these also involve human interactive service work, but the focus is not on increasing the capacities of the recipient. This distinction is important in order to avoid slipping into an analysis of the service sector broadly, rather than of care work. Occupations that indicate care work include teachers, nurses, social service workers, childcare workers, health aides, personal service workers, religious workers, physicians (including family doctors and specialists), and other medical professionals. We also include some traditionally male occupations that involve community care and protection through police work and protective services.[22] These occupations involve providing a face-to-face service and develop (or protect) human capabilities such as social, cognitive, and productivity-related skills, as well as mental and physical health and personal safety.

Because the level of detail in occupational coding varied widely across countries, we decided to also include industrial sector criteria. For example, where we could identify professionals in health and nursing in an occupation (such as in Canada, with restricted detail on occupational codes), sometimes we couldn't distinguish based on the occupational codes whether those health professionals were working in the health care or educational sector (where they are likely providing care) or working in the financial/insurance sector (where

[21] 'That is, the service promotes the development, learning, skill acquisition, or physical or psychological health of the recipient' (England et al. 2002:459).
[22] We also estimated all models excluding these kinds of security and protective workers from the care employment measure. All results were robust, so we include these occupations as care work.

they are likely advising insurance companies or legal entities whether a particular request from a patient or health care provider for services or payment is legitimate). Using industry codes as a second set of criteria enables us to better identify workers who are providing care to recipients versus nominally holding a caring occupational title, but likely consulting with businesses or government about care delivery or insurance coverage of those in need of care. Industries indicating care work employment include education, health and social work, recreational and cultural services, private household employees, and public administration. The level of detail in occupational and industrial codes varied across the countries in our analysis. To clarify how we identified care employment in each country, Appendix table A-1 lists the specific occupational and industrial codes in each country we coded as care work. Our coding rules required the respondent be *both* in a care occupation *and* a care industry in order to ultimately be coded in a care work job.

We want to understand the wage penalties, or potentially bonuses, for performing care work. To do so, we include control variables that could affect a) whether an individual is employed in care work versus other non-care work and/or b) individuals' earnings (other than simply predicting care work employment). These control variables include demographic, labor supply, human capital, and job characteristics.

Demographic factors include gender, immigrant status, age, disability status, marital status, and parenthood status. Cultural and economic arguments have suggested that women are more likely to perform most kinds of care work due to socialization toward this form of work and due to a taste for most types of care work. Following this logic, men and women are assumed to have different socialization and tastes, thus these arguments suggest factors other than tastes or socialized preferences, such as human capital deficiencies preventing hire into higher-wage jobs, should push men into care work. Moreover, women earn less, all else equal, than men in most countries. To address gender, we estimate a pooled model including

men and women in each country and test for a significant interaction between being a woman and working in a care sector job. As our findings will show, we found significant interactions between gender and caring labor in most countries. Thus, our subsequent analyses present results separately for men and women.

Immigrants, due to marginalized positions in the labor market and the difficulty of transferring educational and professional credentials into foreign labor markets, may be more likely to work in low-level care jobs and to command lower wages. We control for immigrant status as a dichotomous measure =1 if the respondent was not born in the country.[23] Immigrant status was available in all countries except in the Netherlands, Hungary, Taiwan, and Mexico.[24] We also control for age of the respondent measured in years as a proxy for potential experience (discussed below in the human capital variables section). In addition, we include a measure of disability where available. We measure disability =1 if the disability is indicated as severe and/or employment limiting. Disability indicators were available in all countries except France, Russia, and Taiwan. Typically, the rates of the disabled among employed persons are very low, around 1 to 3 percent, in most countries, except Canada, the Netherlands, and Belgium, where rates are around 10 percent. Thus, disability is associated with non-employment. However, because having a disability may lead to lower earnings due to restrictions on effort or labor supply, or due to employer discrimination, we include it as a control variable in our models.

Finally, family structure, particularly for women, is known to impact wages and may also shape participation in care work if these jobs are thought to be more amenable to

[23] Admittedly this is a crude measure if the respondent immigrated as a child (before acquiring educational credentials or job experience). It is, however, the only measure available in the LIS data regarding immigrant status and is commonly used in research on immigrants.

[24] Unfortunately the LIS data do not contain uniform measures regarding race or ethnicity for non-immigrant respondents, greatly reducing our ability to analyze how race and ethnicity may shape the pay of care workers. For example, in France, respondents are either categorized as 'French by birth,' 'French by naturalization or marriage,' or by nation of birth. Therefore, non-whites born in France are categorized as the same as whites born there.

women's family responsibilities (Budig and England 2001; Misra et al. 2007). We control for marital, cohabitation, and parenthood statuses. We measure marital status with a dummy variable =1 if the respondent is married or cohabiting. We measure parenthood with two dummy variables. The first measure, 'parent,' indicates whether any children of the respondent co-reside in the household with the respondent; this measure includes adult children living in the household. Our second measure is a dichotomous variable =1 if any of the children in the household are aged 5 or younger.

Individual labor supply, such as usual weekly hours and annual weeks worked, impact earnings and may also be related to employment in care work. We control for full-time and part-time status and annual weeks worked. We define full-time employment as weekly hours greater than thirty (Gornick and Meyers 2003). Data for some countries included usual weekly hours worked; where available we calculated a part-time dummy variable =1 if hours were thirty or less. In the remaining countries, while hours worked was not available, an indicator of part-time status was and we used this as our measure of part-time employment. A measure of annual weeks worked could be calculated in all countries except Sweden, France, Taiwan, and Mexico. In Sweden, we were limited to a measure that indicated part-time *or* part-year employment (combining the two statuses).

Human capital, including educational attainment, job experience, and job tenure (experience with current employer), are all known to impact wages and may impact one's ability to obtain work in the care and non-care jobs. Of these human capital measures, only educational attainment and potential experience (indicated by respondents' age) were consistently available in all countries in our analysis. Controlling for age of the respondent in cases where we lack experience and seniority measures helps reduce bias for those omitted variables. Educational attainment is measured with a set of categorical variables based on the international standard classification of education from UNESCO. LIS has harmonized this

variable across countries to create three educational categories: low (no education through lower secondary education), medium (upper secondary education through vocational post-secondary education), and high (university/college education through post-doctoral education). We use low education as the reference category and include dummies for medium and high education in all regression models.

Job characteristics, such as professional/managerial status, are known to impact wages and may also be related to care work employment. We include controls for professional and managerial status with a dichotomous measure =1 if the respondent is in a non-professional/non-managerial job. We also include dichotomous measures indicating self-employment and employment in the agricultural sector. Both measures were available in all countries included in the analyses.

We also hypothesize that job characteristics, such as the proportion female of one's occupation and of one's industry, and working in the public or private sector, may impact wages for care work employment relative to non-care employment. Using the LIS data, we calculated the percent female of one's occupation and industry at the finest level of detail possible in each country. While we have percent female in occupation for all countries, we were unable to calculate percent female in one's industry for France and Russia. We calculated these measures by counting the number of women employed in the respondent's specific occupation (or industry) and dividing by the total number of workers in that occupation (or industry). The result is entered into the regression model as the percentage female of the respondent's occupation (or industry). Public sector employment is measured as a dichotomous variable =1 if the respondent works in local, regional, or national government. This measure was available for all countries excluding Finland. We also calculate the percentage of workers in one's occupation who are located in the public sector (versus the private sector) as a measure of the degree of socialization of one's occupation. Here we

follow the same approach as calculating the percent female of one's occupation or industry, substituting public sector workers for women in the equation. Including the percent female of one's occupation/industry allows us to test arguments about the devaluation of care work due to its association with women workers. Including the percent public sector worker of one's occupation allows us to examine whether the degree of socialization of care work impacts wages.

Methods

We begin our analyses with a battery of weighted descriptive statistics within each country to document characteristics of care work. We show means and standard deviations for all variables in our analysis for each country separately by gender of respondent and whether the respondent's job is in the care sector. These within-country statistics allow us to make comparisons of care workers across countries. We present the relative size of the care workforce compared to the non-care workforce and compare the typical earnings, gender and immigrant composition, worker educational attainment, and leading occupations of care work employment versus other kinds of employment. We also discuss the similarities of women in the care and non-care sector in terms of family status in the results section.[25]

Based on these findings, we use weighted ordinary least squares regression models to analyze the impact of care sector employment on earnings. We regress the natural log of annual earnings on care work employment and the control variables as outlined. Using logged earnings allows us to interpret coefficients (multiplied by 100) as the percentage change in

[25] Because women's participation in the labor market is selective (based on family responsibilities and availability of kin or social supports for unpaid care work), and because women are disproportionately found in care and service sectors, differences in the care work earnings penalty across countries could be due to differential selection of women into employment across countries. To test for the effects of selectivity in models predicting women's earnings, in analyses not shown we conducted two-stage Heckman sample selection correction regression models where we included transfer income, other family income, and presence of a preschooler as selection criteria. However, while these factors influence women's selection into employment, we found that they do not influence women's selection into care versus non-care jobs. Therefore, we present regular weighted OLS estimates in the findings section.

earnings given a one-unit change in the independent variable. Thus, the coefficient on 'care work,' multiplied by 100, tells us what percentage less (or more) care workers earn, compared to those not employed in care work. Thus, this logged transformation of earnings enables us to compare the gap between care and non-care workers across countries with different currencies. Moreover, taking the log of earnings minimizes the effect of outliers.

We first estimate the effect of care employment on earnings for each country in a model that pools men and women together and includes an interaction between being a woman and working in a care job. This allows us to test whether the effects of care employment differ between men and women. Based on our findings of significant gender differences in the effects of care on earnings in most countries, we next estimate separate models for men and women where we examine the effect of care employment on earnings with a series of models that include successive sets of theoretically relevant control variables, as outlined above. Here our initial models include demographic and family structure variables; next we add educational attainment, then job characteristics, and, lastly, the percent female of one's occupation and industry. This allows us to examine how these sets of control variables either explain or suppress the effect of care work employment on earnings. More precisely, adding sets of theoretically grouped control variables shows whether and how worker characteristics, job characteristics, and gender segregation shape the effects of care employment on earnings. In a separate set of analyses, we test for interactions between care work employment and other job characteristics in a series of regression models, again separated by gender, to see whether and how the effect of care employment varies by public sector versus private sector employment, part-time versus full-time employment, and non-professional versus professional employment. Additionally, we test for statistical interactions between immigrant status and care worker status to examine whether immigrants and natives incur different effects of care employment on their earnings. In a fourth set of analyses, we

disaggregate care workers into a number of occupational groups: doctors, nurses, teachers, professors, domestic workers, and other care workers. We examine whether the effects of care work employment for our general measure are robust across these subgroups. Finally, we turn to a more macro level of analysis to examine correlations between our micro-level findings and country-level differences in social inequality, worker union strength, and size of public sector employment.

Results

Descriptive Findings

Table 1 and Figure 1 show the distribution of workers by gender and by care employment for all countries. The first column of Table 1 reveals the relative size of the care sector within each country. Sweden and Belgium have the highest proportions of the workforce in care employment, with roughly 24 percent of all workers holding care jobs. The proportion of workers in care jobs in Hungary, the U.S., Mexico, and Taiwan is half as much--roughly only12 percent of workers are in care employment in these countries.

The gender divide in care and non-care employment is striking in all countries. The second and third columns in Table 1 (and Figure 2) show that while women constitute between 32 and 54 percent of all workers in these countries, they are greatly overrepresented among care workers, constituting between 68 and 88 percent of care workers. Post-socialist and Nordic countries, as well as the United States, show the greatest gender segregation in care work, while France, the Netherlands, Mexico, and Taiwan show relatively less (though still substantial) gender segregation in care work. Column 4 of Table 1 shows that while roughly 10 percent of men are in care jobs in Belgium, France, Sweden, the Netherlands, and Canada, very few men are in care jobs in post-socialist countries, the U.S., or Mexico, as can be seen in the third table column. As column 5 of Table 1 shows, while more than one-third

of women are in care jobs in Belgium and Sweden, less than one in five are in care jobs in Hungary, the U.S., and Taiwan. Given this gender divide in care work, is there any evidence in this table that countries with higher proportions of care workers also have higher proportions of women in the labor force? Examining Figure 2, and comparing the 2nd column in Table 1 with the 3rd column, we can see that countries with relatively lower levels of female labor force participation (Mexico, Taiwan, Belgium, and Germany) do not show consistently smaller proportions of care workers. Conversely, Hungary, which has the smallest proportion of care workers, has one of the highest proportions of women making up the labor force. Thus it does not appear, based on these twelve countries, that there is a strong correlation between these two proportions.

Tables 2a and 2b present descriptive statistics, separately by gender and care employment status, for each of the twelve countries in our analysis. In terms of educational attainment, for both men and women, care workers tend to be more educated. Across all countries, care workers tend to be more educated than non-care workers. The difference in educational attainment between care workers and non-care workers is much more dramatic for men (with the exceptions of Hungary and Russia). For example, while 30 percent of Finnish men and 18 percent of Swedish men in non-care employment have the highest educational qualifications, fully 68 percent of Finnish and 51 percent of Swedish men in care employment have these credentials. Comparatively among women, while only 23 percent of Swedish and 36 percent of Finnish women in non-care employment have the highest education credentials, 43 percent of Swedish and 54 percent of Finnish women in care employment do. As we look at educational differences between care and non-care workers in other countries we see this pattern repeated. Care workers are disproportionately more likely to have higher educational credentials than non-care workers, and this education gap is more pronounced among men than among women, except in Canada and Hungary.

At the same time, in every country, both men and women care workers are more likely to be professionals than those in other kinds of employment. Clearly, many care workers are highly skilled and in professional jobs (for example, doctors or nurses). In terms of holding low educational credentials, the pattern of differences between care versus non-care workers mirrors that of high education: the point estimates and the standard deviations for the proportions of care workers holding low education credentials are smaller than the proportions and variances for non-care workers. This confirms again that care workers hold higher educational credentials than non-care workers and that there is more diversity in the educational credentials held by non-care workers compared to the more educated care workers.

Moreover, while men tend to have more education than women among care workers, in contrast, among non-care workers it is women who tend to have higher qualifications. This implies greater positive selectivity among men into care employment (and thus counters the economic argument that men with fewer skills are pushed into care employment). Given the descriptive findings thus far, indicating low participation of men in care employment combined with men's high qualifications when they are in care employment, we considered whether male care workers tend to hold better jobs than female care workers. In Nordic, continental European, and developing countries, men are slightly more likely than women to be professionals in the non-care sector, but in the care sector, while both men and women are more likely to be professionals, men are much more likely to be professionals than women. Men are also more likely to be professionals in the care sector, compared to women, in the U.S., Mexico, and Taiwan. In contrast, women are more likely to hold professional jobs in the care sector in post-socialist countries and, to a lesser extent, in Canada.

In terms of labor supply, the proportion of workers who are employed part time is higher among men in care employment (compared to non-care employment) in all countries

except Canada, the U.S., and Taiwan. For women, part-time work is more common in care employment in Sweden, Belgium, France, Hungary, Russia, and Mexico. There seem to be few differences in the average number of weeks worked between care and non-care workers, except in Belgium where care workers, both among men and women, tend to work fewer weeks per year, and in Hungary where care workers tend to work more weeks per year than non-care workers. In the LIS data, self-employment is quite rare, and perhaps underestimated, for both men and women. There are few differences in self-employment rates between care and non-care workers across countries, though the data may not be sensitive enough to capture this accurately.

Earlier, we noted that the proportion of care and non-care workers who are in the public sector might be important in order to assess the level to which the state steps in to address the economic pressures caused by low productivity in care work, as well as the social policy context regarding public provisioning of care. A striking difference in the proportions of care and non-care workers who are in the public sector emerges in all countries. This also varies significantly by gender. Looking at Table 2a for men first, we see that while the proportion of non-care workers in the public sector ranges from a low of 9 percent in Sweden and 11 percent in the U.S. and Mexico to a high of 36 percent in Russia, care workers are far more likely to be in the public sector, ranging from 37 percent in Taiwan to 81 percent in Germany and 88 percent in Russia. Women are more likely than men to be in public sector jobs in non-care employment, but less likely than men to be in the public sector if employed in a care job. However, the disproportionate representation of care workers in the public sector is also pronounced among women, although men care workers are more likely than men non-care workers to be in public sector jobs except in Hungary, Russia, and Sweden. Among women workers in non-care jobs, 11 percent in Taiwan and 13 percent in the U.S. are in the public sector, a figure that ranges to a high of 32 percent in France and 42 percent in

Russia. In contrast, women care workers are much more likely to be in the public sector, with 30 percent in the public sector in Taiwan and fully 93 percent in the public sector in Russia.

Not surprisingly perhaps, based on findings in Table 1, occupational and industrial gender segregation is higher among care workers than among non-care workers, with care workers being located in disproportionately female occupations and industries. Occupational and industrial gender segregation are positively correlated in all countries, though they are not perfectly correlated. Among women, gender segregation of non-care workers is unexpectedly low--women in non-care employment work in occupations that are 42 (Mexico) to 80 (Russia) percent female. Women care workers are extremely gender segregated however, particularly in post-socialist countries where average occupational percent female exceeds 90 percent for women care workers, but also in Finland, Germany, and the U.S. where women care workers are in jobs exceeding 80 percent female. None of the men in non-care jobs work in an occupation that exceeds 43 percent female (Sweden) in any country. Notably, the standard deviations for these point estimates are larger among non-care workers compared to care workers. This indicates that there is greater variation in the level of gender segregation in non-care occupations and industries whereas care occupations and industries are more consistently highly segregated. Men in care employment, however, tend to be in gender balanced occupations, with the exception of Belgium and Finland where male care workers are in occupations exceeding 70 percent female.

In terms of demographic characteristics, there are fewer differences between care and non-care workers. With the exception of post-socialist countries and Taiwan, care workers tend to be slightly older, ranging from two to four years older, than non-care workers, and this pattern is true for both men and women. For both men and women, care workers are less likely to be immigrants in North American countries, and for men, in Germany, and more likely to be immigrants in Finland and France. Because the LIS datasets measure formal

employment, it is possible that higher levels of immigrants work in informal (or under-the-table) employment, and are thus underestimated in the LIS. There are virtually no differences in disability rates between care and non-care workers in any country. Probably related to age differences, care workers are slightly more likely to be married or in cohabiting relationships than non-care workers, with the exception of female care workers in Taiwan, who have lower rates. In Nordic and continental European countries there is also a slight tendency for male care workers to more often be fathers, whereas female care workers have slightly higher rates of motherhood in all countries. But these family structure differences are quite minimal, particularly compared to the dramatic educational attainment and job characteristics differences between care and non-care employment. Similarly, there are virtually no differences in the proportions of male and female care workers who have a preschooler at home, compared to their non-care working peers. The one exception to this is Hungary, where 10 percent of women in non-care jobs have a preschooler at home, compared to 20 percent of women in care employment.

Overall, these descriptive measures suggest that care workers are demographically fairly similar to the overall workforce in these countries. However, they differ both in terms of their educational attainment and in the characteristics of their jobs. Both men and women care workers tend to be more highly educated than those not in care work and more likely to be in professional jobs and public sector employment. These measures would suggest that, if care work is not penalized, we would expect care workers to earn more than those outside of care work. Yet, as Tables 2a and 2b show, the unadjusted earnings of care workers in most countries is about the same as non-care workers, despite the higher skills of care workers. That care workers do not exceed non-care workers in unadjusted earnings (indeed, they seem to slightly exceed the unadjusted earnings of non-care workers) may be related to the fact that care workers are more likely to be in occupations and industries predominantly staffed by

women. In the next section, we analyze this gender segregation and other factors that shape earnings for care workers.

Regression Findings

Gender Differences and Similarities in the Effect of Care Employment on Earnings

While the descriptive results are revealing, the results are unadjusted for other factors. We next turn to results from weighted ordinary least squares regression models to examine the net effects of caring employment on earnings. Table 3 shows results for each country for pooled models containing both men and women, and including an interaction between gender (female=1) and care sector employment to test whether the net effects of care employment on earnings differ for men and women. All models include controls for family structure, education, labor supply, and job characteristics, and thus earnings are adjusted for these factors. Full regression results for each country model shown in Table 3, including standardized coefficients, are presented in Appendix Table A-2. The standardized coefficients (beta coefficients) allow us to compare the relative strength of the various predictors within the model, even when their underlying metrics are different. The beta coefficients are measured in standard deviations instead of the units of the variables; in other words, the beta coefficients are the coefficients that one would obtain if the outcome and predictor variables were all transformed into standard scores before running the regression. For example, looking at Hungary, care work employment has an unstandardized coefficient of -.239, showing that care workers are paid 24 percent less than non-care workers. The beta coefficient for care work employment of -0.090 tells us a one standard deviation increase in care work leads to a -.090 standard deviation decrease in predicted log earnings. In comparison, the beta coefficient for Hungarian self-employment is -.277, indicating that a one-standard deviation

change in self-employment lowers wages three times as much as a one standard deviation change in care work employment. In this way, we can talk about relative strength of effects.

Table 3 reveals some surprising results, with significant effects bolded and effects that significantly differ for men and women marked with a ‘y’ in the last column. When controlling for other factors, generally, care employment typically entails a wage penalty for men; however, this is not the case in Sweden where care work is associated with a wage bonus for both men (12.5 percent) and women (23.4 percent). Men receive no net impact of care work on earnings in Finland, Belgium, or Russia. But men incur wage penalties for care work in the remaining six countries, ranging from -33.1 percent in Mexico to -8.8 percent in Taiwan, with Canada (-24.9 percent), Hungary (-23.9 percent), the Netherlands (-13.8 percent), France (-13.4 percent), and the U.S. (-10.6 percent) falling in between.

For women, care work is associated with a wage bonus in three countries and a wage penalty in six countries, and it has no effect in three countries. Women receive a wage bonus in Sweden (23.4 percent), the Netherlands (10.9 percent), and Germany (7.8 percent). There is no net effect of care employment on women’s annual earnings in Finland, Belgium, or the U.S. Women incur care work penalties in Mexico (-33.1 percent), France (-25.3 percent), Hungary (-24.1 percent), Russia (-17.2), Canada (-9.7 percent), and Taiwan (-8.8 percent). The effect of care is the same for women and men in Finland and Belgium (no effect), and in Hungary, Mexico, and Taiwan (wage penalty), but differs significantly by gender in the majority of countries, typically with women incurring larger effects, whether penalties (France and Russia) or bonuses (Sweden, Germany, and the Netherlands). The U.S. stands alone with care work carrying a pay penalty for men but no effect for women. Based on these findings of sex differences in the effects of care work on earnings in the majority of our countries, we estimate separate models for men in women in the subsequent analyses.

Education and Job Characteristics: Mediating Care Employment Wage Penalties and Bonuses

We anticipated finding wage penalties for care work, or perhaps no effect of care employment on earnings in some countries. The findings of care bonuses for men and women in Sweden and for women only in Germany and the Netherlands were surprising. To understand what aspects of these countries and workers might shape these different outcomes, we conducted a series of additional analyses. Tables 4a and 4b show the effect of care employment, separately for women and men, on earnings for a series of cumulative models. The first model includes control variables for demographic characteristics and family structure. The second model adds educational dummy variables to model 1. In the third model we add labor supply and job characteristics, except for gender segregation and public sector segregation. In model 4 we add measures of occupational and industrial gender segregation. Finally, in model 5, we add a measure of the extent to which the respondent's job is segregated by public versus private sector employment.

Results in Tables 4a and 4b show us what happens to the effect of care employment as control variables are introduced into the model. When we introduce age and education measures in model 2, in every case, for both women and men in each country, the change in the effect of care work on employment is the same: Introducing educational controls increase the care penalties found in model 1, diminishes care bonuses found in model 1, and occasionally turns bonuses found in model 1 into penalties in model 2. This tells us that care workers, as we have measured them, have higher amounts of education, as we are able to measure it, than non-care workers, and their greater average skill mitigates the negative effects of care employment on earnings. However, holding education and potential experience constant, care workers compare less well to non-care workers in terms of earnings. This reinforces the descriptive findings reported in Table 1.

In model 3 we add all job characteristics control variables (e.g., public sector, professional/managerial employment) except for gender segregation and public sector segmentation. Among women, the addition of these controls has a similar effect on the care penalty in nine countries: care work compares favorably to non-care work on these job characteristics in Finland, France, Germany, the Netherlands, Hungary, Canada, the U.S., Mexico, and Taiwan. More precisely, if it were not for the disproportionate location of care jobs in these countries in the public sector, and if care work was not more likely to be professionalized than non-care work, the negative effects of care employment on earnings would be larger, and the positive effects of care work on earnings would be entirely eliminated, except in the case of the Netherlands. Surprisingly, in three countries, adding job characteristics measures either reduced the negative effects of care employment on earnings (as in Belgium and Russia), or similarly increased the positive effect of care work on earnings (as in Sweden). This implies that care workers in these three countries hold jobs with more negative job characteristics, and accounting for these differences reduces the negative effects, and increases the positive effect, of care work in these three countries. Among men, adding job characteristics exacerbates the wage penalties of care work in seven countries, indicating again that in these countries care employment is associated with more positive characteristics (such as public sector location and greater likelihood of being professionalized) than is non-care employment. This situation applies to men employed in Finland, France, Russia, Canada, the U.S., Mexico, and Taiwan. However, in the five remaining countries, predominantly continental European countries, adding job characteristics to the model reduces the wage penalty for care work, indicating care jobs are associated with more negative job characteristics. This is true in Sweden (where the care employment penalty was eliminated), and in Belgium, Germany, the Netherlands, and Russia (where the care penalty was reduced but not eliminated).

Next, model 4 in Tables 4a and 4b adds our measures of gender segregation: percent female in one's occupation and percent female in one's industry.[26] For both men and women in all countries except the developing market economies of Mexico and Taiwan, including measures of job gender segregation reduced wage penalties, or increased wage bonuses, associated with care employment. This tells us that in these ten countries care work is significantly more likely to be performed in female-dominated occupations. It is a stylized finding that jobs with a disproportionate share of women workers are paid less, all else equal, than jobs with lower proportions of women workers (England 1992; Reskin 1988, 1993). Thus, care work in part pays less well because it is a feminized form of employment. Even so, after controlling for job gender segregation, care work wage penalties remained in all but two countries for men and in the majority of countries for women. Surprisingly, including measures of occupational and industrial gender segregation served to increase the care work penalties for both men and women in Mexico and Taiwan.[27] This indicates that these care jobs might pay even less if they were less feminized; however, the causal direction of this relationship is not clear.

Finally, model 5 in Tables 4a and 4b adds a measure of occupational segmentation into public and private sectors. In regard to men, adding this measure slightly increases the size of the effects in most countries, compared to model 4 – both in terms of wage penalties and wage bonuses. For women, adding a measure of occupational public sector segmentation slightly changes the magnitude of effects in most countries, for example, lowering the wage bonuses in Holland and Germany (suggesting that wages for care work would be lower if not

[26] Concerned that these two measures might be correlated and cause problems of multicollinearity in the model, we conducted a variance inflation factor analysis on all twenty-four models (twelve countries and two genders) to test for multicollinearity. The variance inflation factor was below 2.0 in all models, indicating no multicollinearity.

[27] Tables 4a and 4b also show a model 5 which adds the percentage of workers in the respondent's occupation who are public sector workers. This was our initial attempt to assess how the prevalence of public sector employment in one's occupation might impact earnings, regardless of whether the respondent's own job was in the public sector. However, we are still in the process of modeling and interpreting these findings. While we do not include an interpretation in the current draft, our final draft will incorporate findings from this model.

so highly segmented into the public sector), and increasing the bonus for Sweden (suggesting that here - where 88 percent of care workers are located in the public sector – the public sector nature of care work may actually be having a dampening effect on wages). However, it substantially changes the findings for Canada. Whereas prior models for Canada found a wage bonus or no effect for care work on earnings among women, the fifth model shows a wage penalty for care work among Canadian women. This indicates that if care work was not so disproportionately located in the public sector in Canada, the pay would be far worse among both women and men.

We conclude from our analyses presented thus far that:

1) Care employment frequently, but not always, entails wage penalties.

2) Care employment more consistently has negative effects on earnings among men, and men are more negatively affected by care work employment in Germany, the Netherlands, Canada, and the U.S. However, in most countries where negative effects are also found for women, the size of the care penalties are larger for women.

3) Across countries, women are also more likely than men to incur a wage bonus for care employment.

4) Worker characteristics, particularly age and education, do not account for the effects of care work on earnings. Indeed, education appears to have a protective effect vis-à-vis care employment by mitigating care penalties and increasing care bonuses. If care workers did not have higher levels of age and education, on average, compared to non-care workers, the effects of care work on earnings would be less positive/more negative.

5) The fact that care employment is more gender segregated than non-care employment, in the direction of being female dominated, accounts for some but not all of the penalties incurred by care workers.

6) The fact that care workers are disproportionately located in the public sector is generally a protective factor regarding the effect of care work on earnings, although this is not true for Swedish women. Particularly in Canada, if care workers were reallocated to the private sector, significant wage penalties would emerge.

Which Workers Incur Higher and Lower Penalties for Care Employment?

Now we will turn our analysis toward investigating whether care employment affects the earnings of all workers similarly, or if some groups of workers are more or less affected by care employment. To do so, we examine differences by worker characteristics (immigrant status, part-time employment, and professional status) and by the location of the care work performed in the public or private sector. Finally, we disaggregate our care worker category into occupational specialties to see if being a physician, nurse, teacher, professor, domestic worker, or some other kind of care worker differentially affects earnings.

How Worker and Job Characteristics Shape The Effects of Care work on Earnings

Tables 5a and 5b show a series of models where we created statistical interactions between care work employment and public sector employment, part-time employment, and non-professional employment to better understand where bonuses and penalties were experienced by care workers in these diverse economies. Based on our earlier discussion, we expected that public sector care employment would pay better than private sector care employment. At the same time, we expected that, particularly in countries with fewer

protections and regulations for non-standard work, part-time employment and non-professional employment might incur greater wage penalties.

The first pair of columns in Tables 5a and 5b show the effects of working in a care job if the respondent is in the private sector versus the public sector, controlling for demographic variables, education, and job characteristics. Among men, care work in the private sector virtually never carries a wage bonus, with the exception of Sweden where private sector care work increases men's earnings by 7 percent. Private sector care work is associated with large and significant net penalties for men in Russia, Germany, the Netherlands, France, and Mexico, with a somewhat smaller penalty in the U.S. Men performing private sector care work in Russia incur a 50 percent penalty in annual earnings and a 44 percent penalty in Germany; these penalties may reflect that much health care work is in the public sector in these countries. These penalties are striking, particularly given the control variables for educational attainment and labor supply in the model. Care employment penalties are experienced by men in the private sector also in the Netherlands (-22 percent), France (-18 percent), the U.S. (-10 percent), and Mexico (-7 percent). Among men, public sector employment diminishes these penalties significantly in five countries, while having no effect in five other countries, and curiously increasing the care employment penalty in Taiwan. The five countries where public sector significantly reduces care employment penalties are France, Germany, the Netherlands, Russia, and Canada. Location in the public sector completely eliminates care work penalties for men in Germany, the Netherlands, Russia, and Canada. The care work penalty is not eliminated in France, but is reduced to -3 percent. In the U.S. and Mexico the wage penalty associated with care work for men is unchanged in the public sector. Finally, in Taiwan, while there is no penalty for care employment in the private sector, there is in the public sector where men experience a penalty of 17 percent. Generally,

however, care work in the public sector is less harmful and even occasionally beneficial for men's earnings, compared to care work in the private sector.

The differences between public sector and private sector care work, with private sector care work being more deleterious on earnings, are similar for women. Women performing care work in the public sector fare better than those in the private sector in four countries: Sweden, France, Russia, and Mexico (but they still incur wage penalties for care in all but Sweden). In France, Hungary, Russia, Canada, Mexico, and Taiwan, significant care penalties found in the private sector, ranging from -16 percent to -67 percent reductions in annual earnings, are comparatively reduced, though not eliminated, to a range of -8 percent to -31 percent when performed in the public sector. In Sweden, while women performing care work in the private sector find a net boost of 9 percent in their annual earnings, women in the public sector receive a 29 percent increase for performing care work. In six countries no differences appeared between the effects of care work performed in the public or private sector. In contrast, in the U.S. alone, performing care work in the public sector significantly increased the wage penalty for care work for women, from a nonsignificant effect in the private sector to a -8 percent effect in the public sector. This may reflect poorly paid public sector care work in the U.S., such as elder care workers in Medicaid facilities or preschool teachers in Head Start (England and Folbre 2002).

Turning to the second pair of columns in Tables 5a and 5b allows us to compare the effect of care work on earnings among professionals and among non-professionals. Where differences in the effects of care employment are found, for both women and men care work appears more deleterious among professionals than among non-professionals. Among men, care work carries a smaller penalty among non-professionals in Taiwan, Mexico, and Canada, no effect on wages in the U.S., and a wage bonus for non-professionals in Sweden, Germany, and Russia. In most of these countries care work incurs a significant wage penalty among

professionals, the exceptions being Finland, Sweden, Belgium, and Hungary. The effect of care work on earnings (no significant effect) is the same for male professionals and non-professionals in Finland, Belgium, and Hungary. Among women, where differences emerge in the effects of care work on earnings between professionals and non-professionals, it is often in the direction of professionals paying the higher penalty for caring labor, or receiving no effect, while non-professionals receive a wage bonus. Professional women do worse than non-professionals in terms of the effects of care work in all countries except in Belgium, Hungary, and Russia, where the effects are the same, and France, where non-professional women pay greater penalties. In Finland, Sweden, Germany, Netherlands, and the U.S., non-professionals actually receive a wage bonus for care work, while professionals do not.

The third set of columns in Tables 5a and 5b shows the difference in the effect of care work on earnings between full-time and part-time workers. Among men, those working full time pay a higher price (or receive a smaller benefit) for care employment in six of our twelve countries, compared with those working part time, while this is true for eight of our twelve countries among women. Looking at the results for men first, we see that male part-time workers incur wage penalties for care work in France and the Netherlands, but these do not differ from those of full-time workers in those countries. While part-time workers receive wage bonuses for care work in Sweden, Belgium, and Taiwan, their full-time peers receive no effect of care work or a penalty (in Taiwan). In Canada, the U.S., and Mexico full-time male workers incur larger wage penalties for care work than do part-time male workers. Turning to women, we see that full-time workers incur larger penalties for care employment than their part-time peers in Mexico (-50 percent compared to -17 percent for part-time care workers), Hungary (-28 percent compared to +24 percent), and Russia (-15 percent compared to +26 percent). Similarly, while their part-time peers enjoy a wage bonus for care work employment, full-time care workers get no benefit in Belgium, Germany, and the

Netherlands. Finally, among Swedish men care work carries a wage bonus, but it is larger for part-time workers than full-time workers.

The final set of columns in Tables 5a and 5b shows the differential effects of care work employment on earnings by immigrant status. The very last column of the table, presented in italics, does not represent a regression coefficient, but shows the percentage of the population in each country (estimated from LIS data) that is non-native. This column is shown to aid in the interpretation of the regression coefficients shown in the columns entitled 'Native' and 'Immigrant.' The differences between immigrants and natives in terms of the effects of care work on earnings show no consistent patterns across countries. For both women and men in France, native workers pay a larger penalty for care work compared to immigrants. While male immigrants receive a small bonus for care work in France, female immigrants incur a -6 percent penalty. In other countries, effects are varied. In the U.S. there is a similar finding, with immigrants receiving a bonus for care work compared to native men who incur a wage penalty and native women who incur no effect. Among Russian men, immigrants incur a much larger care penalty, while among Russian women immigrants gain a wage bonus. Finally, in Finland, female immigrants incur a significantly larger care penalty than native women. The lack of consistent patterns in the effect of care work employment on the earnings of immigrants versus native-born workers puzzled us. To examine whether the size of the immigrant population in each country might be linked to our findings, we computed the size of the immigrant population from the LIS data and present this in the final column of the table. Again, we do not see that immigrants incur greater or smaller penalties in countries with larger immigrant proportions. We make no strong conclusions from these wide-ranging findings, particularly because immigrant and native comparisons could not be made in the Netherlands, Hungary, Mexico, or Taiwan, due to data limitations, and because much immigrant labor – particularly informal work – may not be picked up through our data.

To summarize our findings from Tables 5a and 5b, we find that wage penalties for care work tend to be larger where returns to experience are high – among professional workers, among full-time workers, and among those working in the private sector. In contrast, wage bonuses are often associated with care work among those in the public sector and who are part-time workers and non-professional workers. Among women these types of bonuses are most consistently found in Sweden, Germany, and the Netherlands, and among men these types of bonuses are found in Sweden, Germany, and Canada. We draw few conclusions from our immigrant status analysis, due to data limitations and inconsistent effects.

DISAGGREGATING OCCUPATIONS COMPRISING OUR CARE WORK MEASURE

We now turn to an analysis of the particular occupations within the care worker category to see if there are differences among the kind of care work occupation held and its effect on earnings. The extent to which the health sector is socialized (i.e., overrepresented in the public sector, compared to the private sector) and the degree to which teachers are unionized in countries may shape the effects of particular caring professions on earnings, namely, those of doctors, nurses, teachers, and post-secondary professors. The degree of occupational detail allowed us to examine how being a doctor, nurse, teacher, professor, or another kind of care worker impacts earnings in nine countries with sufficient detail in the occupational coding to separate these professions from other care professions. In four countries with significantly different forms of socialized medicine--Russia, Hungary, Germany, and the U.S.--we were able to distinguish doctors from nurses, while in two additional countries—Belgium and Canada--we were able to distinguish doctors and nurses as a group separately from other workers -- Belgium and Canada. The countries of Germany, Belgium, Canada, Hungary, and Russia all have universal, publicly funded (through taxation

and compulsory insurance) health care systems. Indeed, the United States is the only wealthy country without universal health coverage, although it does provide support for military families and veterans, as well as some vulnerable sectors of the population such as the elderly and very poor. We were unable to separate nurses and doctors from other care workers in the remaining six countries; however, in Finland and Mexico we were able to identify those in teaching professions separately from other care workers.

Tables 6a and 6b present the results of being a doctor, nurse, teacher, professor, or another kind of care worker on earnings from fully specified models, separately by gender. Looking first at the results for men in Tables 4a and 6a, we see that in Finland and Belgium the nonsignificant effect of care work on earnings persists even when we disaggregate care occupations into medical, teaching, and other care occupations. In contrast, in Russia, Germany, and Hungary, where we also initially found no net effect of care work on men's earnings, Table 6a shows that disaggregating care workers into doctors, nurses, and other care workers reveals some countervailing effects. Among German men, we find significant wage penalties for being a teacher and a professor, while nurses receive a wage bonus. And in Russia, we found wage penalties for doctors, teachers, and professors (there were too few male nurses in Russia to analyze), while we found positive effects of other care employment on earnings. Of all these effects, only the large negative effect of being a teacher (-38 percent) is significant among men. Similarly, in Hungary, the finding of a null effect of care work on earnings in model 5 of Table 4a may again be due to countervailing effects. Table 6a shows that there is a significant negative effect of being a nurse on Hungarian men's earnings (-44 percent), and nonsignificant negative effects of being a teacher/professor or other kind of care worker may be outweighed by a strong (but nonsignificant) wage bonus for being a doctor.

Still looking at men, we initially found net wage penalties for care work employment in France, the Netherlands, Canada, the U.S., and Mexico (see Table 4a). In Table 6a we can see whether and which various occupations drive these penalty effects. In France and Mexico, where we could only disaggregate teachers/professors from other care workers, we see both categories (teachers/professors and other care workers) receive wage penalties. However, in the Netherlands we find that male teachers incur the wage penalty while other male care workers receive no significant effect. In Canada, where we were able to disaggregate medical and educational care workers from other care workers, we find that while doctors/nurses incur a wage penalty, teachers/professors and other care workers do not receive any effect from their occupational grouping. Finally, the U.S. is most complex when it comes to male care workers: Doctors receive a significant wage bonus, nurses and professors incur no wage effect, and teachers and other care workers incur wage penalties for their performance of care employment.

Turning to women, we see that in four countries the results of Table 4b are replicated in Table 6b, showing no difference in the direction or significance of findings even when we disaggregate care work occupations. Those four countries where results are not altered by disaggregation include Belgium and Russia, where initially we found no effect of care work employment on women's earnings, and France and Mexico, where we initially found a wage penalty for care work on women's earnings. In contrast, in Germany, where we initially found a wage bonus for care work employment among women, when we disaggregate by occupation we see that this wage bonus is enjoyed only by nurses, while other care workers have no net effect of care work on employment. In five other countries, we find countervailing effects of care occupations on earnings. First, in Finland, we find that when we disaggregate teachers/professors from other care workers, the null effect of care work employment on earnings found in Table 4b is not true for teachers. Finnish women incur a

wage penalty of -6.4 percent for teaching, while all other female care workers receive a wage bonus of 6.2 percent. In the Netherlands, where we initially found a wage bonus for care work, disaggregation reveals that teachers and professors receive a wage penalty (though not significant) while other forms of care work receive a wage bonus. In Hungary, Canada, and the U.S. we find that while doctors and nurses receive wage bonuses for their care work, teachers, professors, and other care workers incur wage penalties. This disaggregation is particularly important for the U.S., where initially we found no net effect of care employment on women's earnings. We see that this is driven by the countervailing effects of bonuses for doctors and nurses and significant penalties for teachers, professors, and other care workers.

In a smaller subset of five countries (Finland, Germany, Canada, the U.S., and Mexico) we were additionally able to distinguish domestic workers (private household employees) from other workers in our care measure. We present this further disaggregation in appendix Tables A-3a (for men) and A-3b (for women). The findings for men are largely uninformative. There were too few male domestic care workers to analyze in Finland, and in all but one of the remaining countries domestic care work had no effect on men's earnings. In Canada only did employment as a domestic worker significantly affect men's earnings, and here the effect was positive. The findings for women are more intriguing. As might be expected, working as a household domestic worker has significantly large earnings penalties in four of the five countries, ranging from -18 percent in the U.S. to -70 percent in Mexico. Only in Germany was the domestic worker wage penalty not significant. This further disaggregation of care workers did not alter the main findings in most countries, with the exception of Mexico. Much of the non-education worker care work penalty incurred by women appears to be driven by domestic work employment in Mexico. However, a significant -8 percent penalty remains among Mexican women engaged in non-educational and non-domestic work care employment.

In sum, the inclusion of physicians, and occasionally nurses, in the care work measure may minimize the wage penalties of care work, particularly in countries with privatized medical systems. In contrast, the inclusion of teachers/professors in the care work measure may increase the overall wage penalty found for care work. However, the level of occupational detail does not allow us to investigate this for all of the countries in our studies.

Policy Contexts

How do labor market and social policy regimes shape variation in wage penalties for care work? We argue that labor market and social policy context may matter by limiting wage penalties in countries with lower levels of income inequality or higher levels of collective bargaining, or they may increase wage penalties in places that provide greater support for unpaid care inside the home.

Labor market policies help shape wages in many crucial ways. For example, Blau and Kahn (1992, 1996, 2003) show that the gender gap in wages cross-nationally is deeply affected by the wage distribution.[28] Although in every country women earn less than men, this gap is smaller where the wage distribution is more equitable. Similarly, we consider whether the cross-national variation in the wage penalty to care work may be explained by differences in the wage distribution.

Figures 3a and 3b examine the Gini coefficient[29] and Figures 4a and 4b examine the 90-10 decile ratios[30] for our sample of countries, calculated from LIS Key Figures (accessed at http://www.lisproject.org/keyfigures.htm on April 15, 2008). These measures provide a rough estimate of the degree of income inequality in these nations. On these graphs, the effect

[28] We expect that labor market policies help shape this wage distribution.

[29] The Gini coefficient is a measure of dispersion of household income in a society. A society in which every household earned the same amount would score '0'; a society in which one household earned all of the income and everyone else earned nothing would score '1.' Therefore, lower scores indicate lower levels of income inequality.

[30] These measures are calculated by taking the ratio of an income of a household at the 90th percentile to the income of a household at the 10th percentile. In Russia, a household at the 90th percentile brings in more than eight times the income of a similar household at the 10th percentile; in Finland, the household at the 90th percentile brings in less than three times the income of a similar household at the 10th percentile.

of care work on wages (as reported in Table 5, model 4)[31] is represented on the Y axis (with wage bonuses above the line and wage penalties below), while the degree of inequality is represented on the X axis (with lower levels of inequality on the left). Clearly, countries with very high levels of inequality (Mexico, Russia, and the U.S.) also are associated with higher penalties to care work. However, the mapping is not perfect; a number of countries have similar levels of inequality, and yet quite different penalties and bonuses to care work, such as France and Germany.[32]

Union density may also help predict where wage penalties to care are lower, as we might assume that nations with higher unionization rates are less likely to penalize care workers with low wages. Figures 5a and 5b examine the relationship between union density (the percentage of wages and salaried workers belonging to unions) and the effect of employment on care work on wages for men and women (Visser 2006).[33] On these graphs, the effect of care work on wages is represented on the Y axis (with wage bonuses above the line and wage penalties below), while the union density is represented on the X axis (with lower levels of union density on the left). As we might expect, countries with higher levels of union density are more likely to see wage bonuses to care work, and vice versa. This finding is particularly striking in that we are using a very rough measure of union density (for workers as a whole, rather than care workers).

Supporting care work through the government is another clear way of addressing penalties paid to care work – particularly for low-wage workers – although it is not necessarily fool-proof.[34] As England et al. (2002:469) argue, 'If we care about the collective

[31] We use model 4 of Table 4 for these measures, since Finland is not included in model 5 due to data limitations. In most cases, the effects are similar, although model 4 underestimates the wage penalty to care work for Canadian workers.
[32] As the French case would suggest, the care bonus men find is more in keeping with the level of inequality in France than the care penalty from which women suffer, suggesting a more complicated story.
[33] These measures are broader than we would like; a better measure would look at the percentage of care workers who are unionized, rather than all workers.
[34] For example, in the U.S., nursing home attendants in Medicare-funded nursing homes are not paid generous wages. Allocating care to the public sector may increase social pressure on governments to keep wages low.

well-being of society, about the well-being of those who need care but have limited means to pay for it, and about those who do care work, the most practical way to express this concern is through collective action to ensure governmental and other support for the work of care.' Others agree. Anneli Anttonnen (2001:145) argues that universalistic social care regimes, such as the Nordic model, where all citizens have access to the same level of high-quality care services paid for through tax revenues and *actually use* these when in need, have created a 'woman-friendly welfare society, where women's needs as mothers and workers are widely acknowledged.' These models, which clearly value the importance of care services, may be similarly friendly for care workers. Indeed, our results showed that only in the Nordic countries neither women nor men incurred penalties for care work: Care workers are either not particularly paid more or less in Finland, while care workers receive the greatest boost in earnings in Sweden.

One approach to measuring public support for care work is through a measure of the percentage of care work occupations performed in the public sector. As our regression results showed, the prevalence of public sector employment has significant positive effects on wages for both men and women. This suggests that where care work jobs are more privatized, wages for care work are, generally, lower.[35] Therefore, state socialization of care provision can have important effects on mitigating care penalties, or even providing care bonuses, for those working in care sectors. Figures 6a and 6b summarize how these measures relate to the penalties paid by men and women caregivers.[36] Although Russia remains an odd case out (with its very high levels of care work provided through the public sector relative to non-care work, but also serious care penalties), these figures do support the idea that countries with higher support for public care are more likely to have higher wages for care workers. On the

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However, socializing care work does potentially offer some protection from pure market pressures that reduce the pay of care workers.

[35] Of course, this may not be true for all workers. For example, doctors working in the public sector may earn less, while childcare workers in the public sector may earn more.

[36] Because we do not have a measure of public sector employment for Finland, it is left out of these figures.

other hand, as most clearly illustrated in Figure 6a, countries with smaller levels of care work occurring in the public sector – such as Hungary, the U.S., Mexico, and Taiwan--tend to see greater care penalties (particularly for men). Yet again, there remain complexities not adequately explained by these figures. For example, the Netherlands and France have similar sized public sector care work, yet French men and Dutch women in care work receive care premiums, while French women and Dutch men in care work suffer from care penalties.

Initially, we imagined that a variety of social and labor market policies might shape wage penalties for care. While the labor market context regarding income inequality, union density, and the size of the public sector seem to help explain some part of wage penalties to care, these measures are not perfectly associated with lower wage penalties to care. In part, this appears due to gendered processes that lead to greater devaluation of caring occupations--in some cases, men are more likely to be penalized for working in caring occupations; in others, women are more likely to be penalized, and face higher penalties.

We also examined whether social policy measures might be associated with the effects of care employment on wages. We examined a number of measures, including measures of extended leaves for caring for family members, tax incentives aimed at two-earner families, and public provisioning of childcare (OECD 2001).[37] As Figures 7a and 7b show, higher levels of public provisioning of childcare are associated with higher wages for those employed in care work. However, this association is much stronger in relation to wages for men in care work relative to other employment (Figure 7a), than for wages to women in care work relative to other employment (Figure 7b). While we expected support for extended care leaves and tax penalties for two-earner families to encourage care within the home and

[37] Public expenditure on childcare and early educational services refers to all public financial support (in cash, in kind, or through the tax system) for families with children participating in formal childcare and pre-school institutions (OECD 2001). We used measures from 2000, or the year closest to 2000 where measures were available, in the social expenditure database. In most cases, there is not very wide variation from year to year.

dampen wages for care workers, we see relatively flat trends (as in Figure 7b), although longer parental leaves do appear to be associated with somewhat higher care penalties.

Therefore, our best answer to the question of whether policy context matters in explaining wage penalties to care is that the labor market policy matters a great deal – while the larger social policy context has less of an effect. Clearly, where income inequality is greater and where the public sector is smaller, we see higher wage penalties. Where public spending on childcare is lower, we also see higher wage penalties, particularly for men. Where income inequality is low, the public sector is large, and public spending on care is high, those in caring occupations may even earn care bonuses.

Discussion

Our study began by asking what the effect of employment in care work on wages is, and whether this effect varies across national and policy contexts. While earlier research suggests that workers face penalties for engaging in care work (England 1992; England et al. 1994; England et al. 2002), we indeed found that this effect varies across national and policy contexts, and based on the gender of the worker. In most cases, care employment does entail wage penalties, but not always. For example, both men and women earn bonuses for engaging in care work in Sweden, and women in Holland and Germany also earn bonuses, although more fine-grained analyses showed that these bonuses were enjoyed only by particular groups of workers. Our analyses also show that certain types of care work may be more highly valued and/or regulated. For example, in the case of Germany, it appears that both men and women in nursing enjoy wage bonuses, while other care occupations do not.

We find a number of other interesting gendered effects. Across the countries in our sample, men suffer from wage penalties to care work in France, Germany, the Netherlands, Hungary, Canada, the U.S., Mexico, and Taiwan; women suffer from wage penalties to care

work in France, Hungary, Russia, Canada, Mexico, and Taiwan. However, holding education, potential experience, job characteristics, and personal characteristics constant, men in these countries, on average, suffer from a wage penalty of -16 percent, while women suffer from a wage penalty of -20 percent. In other words, while men find penalties in more countries, where women are penalized the sizes of these penalties are greater.

We also asked whether the penalties we find might be attributable to the labor market characteristics of the workers. For example, if care workers had low levels of education, this might explain why they earn less than other workers. However, care workers tend to have higher levels of education. Indeed, education tends to mitigate penalties and increase care bonuses, since care workers tend to have relatively high levels of education.

Next, we asked whether the penalties we find might be attributable to the characteristics of the jobs themselves. Again, in general, we find that – for both men and women – care employment is associated with more positive characteristics (such as public sector location and greater likelihood of being professionalized) than is non-care employment. As a result, these characteristics actually mitigate penalties. When we examined these issues in more detail through a series of interactions, we found that wage penalties for care work do tend to be larger among professional workers than among non-professional workers. At the same time, working in the public sector, by and large, benefits care workers, while working in the private sector leads to greater wage penalties (or, in the case of Swedish women, smaller wage bonuses).

Another question was whether any penalties to care work might be attributable to the devaluation of work predominantly performed by women, as measured through occupational gender segregation. Indeed, measuring both gender segregation within the occupation and within the industry, we found that (except for Taiwan and Mexico) for both men and women including measures of gender segregation reduced wage penalties, or increased wage

bonuses, associated with care employment. Care work is substantially more likely to be performed in occupations staffed primarily by women; at the same time, many studies have shown that jobs with a disproportionate share of women pay less well than those staffed primarily by men. Care work penalties are due, in part, to gender segregation – but cannot be perfectly explained by it, as penalties remain even after we control for gender segregation.

We also were interested in whether if in countries where more care work employment occurs within the public sector, there would be higher wages given to care work on average. In fact, we assume that public sector employment would benefit care workers with lower levels of education more than those with high levels of education (such as doctors). Overall, we find that the disproportionate location of care workers in the public sector generally protects workers' wages, particularly in Canada. However, this is less true in other contexts, such as for Swedish women.

We looked at particular occupations within care employment for a smaller subsample of countries. These findings illuminate many of our earlier findings. For example, we find that doctors and nurses in the United States incur wage bonuses – and that indeed, other women in care employment in the United States – including teachers – face wage penalties. Therefore, the insignificant effect of care employment for U.S. women in the overall model is an artifact of positive (for some) and negative (for others) effects of care employment on wages. This finding suggests that future research should examine the effects of working in specific care occupations on wages in greater detail.

We considered the possibility that labor market and social policy context might be affecting wages in care employment by looking at measures of income inequality, union density, public sector size, and public spending on childcare (as well as some additional measures of support for care leaves). Generally, we see strong associations between labor market contexts – where income inequality is high and centralized bargaining through unions

is low, wage penalties for care employment are more widespread. At the same time, lower proportions of care employment occurring within the public sector and lower public spending on care also seem associated with wage penalties.

Overall, our study makes a number of other important contributions. We find important variations across contexts in the size and direction of the effects of engaging in care work on wages. In addition, we were able to identify interesting gendered wage effects, with men suffering more frequently from wage penalties to caring (relative to other men), but women suffering from larger care penalties (relative to other women). This is an important contribution, since many studies of care employment do not look specifically at men. In addition, we discovered that wage penalties to care are not due to workers' lower levels of education– indeed, these workers tend to have higher levels of education, which helps mitigate any wage penalties. Similarly, we found that these workers tend to be employed as professionals and in public sector employment, both of which mitigate the negative impact of being in a caring occupation, although professional care workers face greater wage penalties than non-professional wage penalties. This may also be related to how particular occupations are more or less rewarded, as our more fine-grained analyses of doctors, nurses, professors, and teachers show. Our analyses also show that care work may be devalued because women are predominantly working in caring occupations; controlling for gender segregation lessens the wage penalties to care.[38] At the same time, controlling for public sector segregation shows that, generally, public sector employment mitigates penalties. One of the most interesting contributions of this study may well be in our attempt to locate labor market and social policy impacts on wages for care employment by looking across different countries. And these findings do suggest that *context matters.* Workers in care employment may be more likely to earn care bonuses in contexts where income inequality is low, union density

[38] Of course, the causality may be reciprocal: Lower wages for care work are a disinclination for workers with more job opportunities (men) to avoid care work, thus increasing gender segregation.

and the public sector are large, and public spending on care is high. Conversely, wage penalties are more likely to exist where the labor market context is less egalitarian and less oriented toward public sector jobs, and the public spending on care is low. While these findings are based on associations between different types of contexts and wage penalties, we believe that these associations warrant further, more elaborate explication.[39]

In sum, we find that care work often entails wage penalties for those who perform it. These penalties cannot be marginalized as simply a 'women's issue' because both men and women in these jobs are economically disadvantaged for performing this work. These penalties cannot be explained by negative selectivity into care work based on worker characteristics, such as education. Indeed, education and skill prevent the wages of care workers from falling even farther. Thus, we find little evidence to support the notion that care workers are paid poorly because of their own attributes.

This indicates institutional factors must be considered in identifying and solving wage gaps for care work. Very importantly, care work is not unilaterally associated with wage penalties. Some countries, notably Sweden and, to a lesser extent, Germany, not only show no evidence of care work penalties, but appear to pay wage premiums for care work. These exceptions are critical for understanding how the social and institutional conditions of care work might be altered so that those who perform the care services that are essential to the welfare of society are not economically harmed in doing so, nor pushed out of this form of work altogether. Future research on this topic needs to continue in a two-pronged approach: first by examining which care workers are the most disadvantaged (and advantaged) in terms of pay, and second by examining what country-level factors shape the conditions that lead to care work wage penalties and bonuses. Supporting the wages of care workers will help to

[39] With a greater number of countries, for example, researchers could use multilevel models to identify whether measures of the labor market and policy context at the country level predict wage effects for care employment at the level of the individual. However, with only twelve countries in our sample, such a modeling approach is not possible.

ensure that dedicated and skilled personnel continue to provide the services that are critical for the maintenance of healthy societies.

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APPENDIX TABLE A-1: OCCUPATIONAL AND INDUSTRY TITLES USED IN COMBINATION TO CODE A RESPONDENT'S JOB AS 'CARE EMPLOYMENT'

Below lists the occupation and industry codes used to code care employment. A respondent's job must have met BOTH an occupation AND an industry code criteria in order to be coded as care employment.

Nordic Countries

Finland

Occupations
Life Science and Health Professionals
Teaching Professional
Life Science and Health Associate Professionals
Teaching Associate Professionals
Personal and Protective Services Workers

Industries
Investigation and Security Activities
Provision of Services to Community as a Whole
Compulsory Social Sec. Services
Education
Human Health Services
Social Work Activities
Library, Archives, Museums, Other Cultural Activ.
Sporting Activities
Other Recreational Activities
Other Service Activities
Private Households with Employed Persons

Sweden

Occupations
Not Skilled, in Service-Production
Skilled, in Service-Production
Lower-Level Civil Servant/Employee
Medium-Level Civil Servant/Employee
High-Level Civil Servant/Employee
In Leading Positions
Self-Employed
Not Classified Self-Employed

Industries
Primary Education
Secondary Education
Higher Education
Adult and Other Education
Human Health Services

Social Work Activities
Library, Archives, Museums, Other Cultural Activ.
Sporting Activities
Investigative and Security Activities

Continental European Countries
Belgium

Occupations
Life Science and Health Professionals
Teaching Professional
Life Science and Health Associate Professionals
Teaching Associate Professionals
Personal and Protective Services Workers

Industries
Public Administration and Defense Compul. Social Sec.
Education
Health and Social Work
Recreational, Cultural, and Sporting Activities

France

Occupations
Teachers, Science Prof.
Primary Education Teachers and Associate Prof.
Healthcare and Social Workers
Religious Professionals
Police Officers
Personal Service Workers

Industries (no industry data available, below list second step criteria used)
Unskilled Worker
Skilled Worker
Teacher, Social Assistant
Higher Personnel
Office Employee, Commercial Employee
(Excluded categories = foremen, technicians, engineers)

Germany

Occupations
General Managers Personal Care, Cleaning, etc. Services
Pharmacologists, Pathologists, etc. Professionals
Medical Doctors
Dentists
Pharmacists
Higher Education Teaching Professionals
Secondary Education Teaching Professionals
Primary Education Teaching Professionals

Special Education Teaching Professionals
Other Teaching Professionals, nec
Librarians, etc. Information Professionals
Psychologists
Social Work Professionals
Religious Professionals
Dieticians and Nutritionists
Optometrists and Opticians
Physiotherapists, etc. Associate Professionals
Pharmaceutical Assistants
Modern Health Associate Professionals Except Nursing, nec
Nursing Associate Professionals
Midwifery Associate Professionals
Pre-Primary Education Teaching Associate Professionals
Special Education Teaching Associate Professionals
Other Teaching Associate Professionals
Police Inspectors and Detectives
Social Work Associate Professionals
Religious Associate Professionals
Museum Guides
Housekeepers, etc. workers
Childcare Workers
Institution-based Personal Care Workers
Home-Based Personal Care Workers
Personal Care, etc. Workers, nec
Other Personal Services Workers, nec
Police Officers
Protective Services Workers, nec
Domestic Helpers and Cleaners

Industries
Public Administration & Defense, Compul. Social Sec.
Education
Health and Social Work
Recreational, Cultural, Sporting Activities
Other Service Activities
Private Households with Employed Persons

<u>The Netherlands</u>

Occupations
Lower Teachers Athletics courses
Lower (Para) Medical Professions
Secondary Teachers Athletics courses
Secondary Generalized (Para)Medical Occupations
Secondary Curative (Para)Medical Occupations
Secondary Technical (Para)Medical Occupations
Secondary Social Work Professions etc.
Higher Educational Professions (regardless specialty)
Primary Education Teachers, general educational courses

Primary Education Teachers, academic specialty courses
Higher General, Caring (Para)Medical Professions
Librarians
Social Workers
Social Science Teachers
Communications Teachers
Psychology Teachers
Anthropology Teachers
Health Teachers
Agricultural, Technical, Transportation Teachers
Science Teachers
Administrative and Legal Studies Teachers
Cultural Studies Teachers
Teachers, nec
Scientific (Para)Medical Occupations
Religious Occupations
Social Science Welfare Occupations
Communications, Cultural, and Recreational Occupations

Industries
Investigation and Security Activities
Public Administration & Defense, Compul. Social Sec.
Administration of State, Economic, and Social Policy of Community
Provision of Services to Community as a Whole
Compulsory Social Sec. Services
Education
Primary Education
Secondary Education
Higher Education
Adult and Other Education
Human Health Services
Social Work Activities
Recreational, Cultural, Sporting Activities
Library, Archives, Museums, Other Cultural Activ.
Sporting Activities
Other Recreational Activities
Other Service Activities
Private Households with Employed Persons

Post-Socialist Countries

Hungary

Occupations
Medical Doctor
Health Professional exc. Nursing, nec
Nursing, Midwifery Professional
College, Uni., High. Edu. Teaching Pro.
Secondary Teachers, Academic Track
Secondary Teachers, Vocational Track

Primary Education Teaching Professional
Pre-Primary Education Teaching Professional
Special Education Teaching Professional
Other Education Teaching Professional, nec
Archivists, Librarians, etc. Information Professionals
Librarian, Relat. Info. Professional
Social Work Professionals
Medical Assistant
Dietician, Nutritionist
Dental Assistant
Mod. Health, Asso. Prof. Exc. Nursing, nec
Nursing Associate Professionals
Midwifery Associate Professionals
Primary Education Teaching Associate Professionals
Pre-Primary Education Teaching Associate Professionals
Other Teaching Associate Professionals
Police, Inspector Detective
Social Work Associate Professional
Personal and Protective Services Workers
Police Officer

Industries
Public Administration
Education
Culture, Entertainment
Health, Social Work
Personal, Property Protection
Community Service
Personal Services

Russia

Occupations
Medical Doctors
Dentists
Health Professionals Except Nursing, nec
Nursing and Midwifery Professionals
Higher Education Teaching Professionals
Secondary Education Teaching Professionals
Primary Education Teaching Professionals
Pre-Primary Education Teaching Professionals
Special Education Teaching Professionals
Education Methods Specialists
Other Teaching Professionals, nec
Psychologists
Social Work Professionals
Medical Assistants
Mod. Health, Asso. Prof. Exc. Nursing, nec
Nursing Associate Professionals
Midwifery Associate Professionals

Pre-Primary Education Teaching Associate Professionals
Other Teaching Associate Professionals
Police, Inspector Detective
Social Work Associate Professional
Childcare Workers
Institution-based Personal Care Workers
Personal Care, etc. Workers, nec
Police Officers

Industries
There were no industrial codes available for Russia

Liberal Countries

Canada

Occupations
Professionals in Health & Nurse (Supervisr)
Technical, Assisting, & Rel. Occup. in Health
Social Science, Government Service, and Religion
Teachers and Professors
Art, Culture, Recreation, and Sport
Occupation in Protective Services
Childcare and Home Support Workers

Industries
Professional/Scientific/Technical Services
Management, Administrative & Other Support
Educational Services
Health Care and Social Assistance
Information, Culture, Recreation
Other Services
Public Administration

USA

Occupations
Physicians
Dentists
Optometrists
Podiatrists
Health Diagnosing Practitioners, nec
Registered Nurses
Pharmacists
Dietitians
Respiratory Therapists
Occupational Therapists
Physical Therapists
Speech Therapists
Therapists, nec

Physicians Assistants
Earth, Environmental, and Marine Science Teachers
Biological Science Teachers
Chemistry Teachers
Physics Teachers
Psychology Teachers
Economics Teachers
History Teachers
Political Science Teachers
Sociology Teachers
Social Science Teachers, nec
Engineering Teachers
Mathematical Science Teachers
Computer Science Teachers
Medical Science Teachers
Health Specialties Teachers
Business, Commerce, and Marketing Teachers
Agriculture and Forestry Teachers
Art, Drama, and Music Teachers
Physical Education Teachers
Education Teachers
English Teachers
Foreign Language Teachers
Law Teachers
Social Work Teachers
Theology Teachers
Trade and Industrial Teachers
Home Economics Teachers
Teachers, postsecondary, nec
Postsecondary Teachers, subject not specified
Teachers, pre-kindergarten and kindergarten
Teachers, elementary school
Teachers, secondary school
Teachers, special education
Teachers, nec
Counselors, Educational and Vocational
Librarians
Psychologists
Social Workers
Recreation Workers
Clergy
Religious Workers, nec
Dental Hygienists
Licensed Practical Nurses
Teachers Aides
Childcare Workers, Private Household
Private Household Cleaners and Servants
Supervisors, Police and Detectives
Police and Detectives, Public Service
Dental Assistants

Health Aides, except Nursing
Nursing Aides, Orderlies, and Attendants
Welfare Service Aides
Family Childcare Providers
Early Childhood Teacher Assistants
Child Care Workers, nec
Personal Service Occupations, nec

Industries
Funeral Service and Crematories
Offices and Clinics of Physicians
Offices and Clinics of Dentists
Offices and Clinics of Chiropractors
Offices and Clinics of Optometrists
Offices and Clinics of Health Practitioners, nec
Hospitals
Nursing and Personal Care Facilities
Health Services, nec
Legal Services
Elementary and Secondary Schools
Colleges and Universities
Vocational Schools
Libraries
Educational Services, nec
Job Training and Vocational Rehabilitation Service
Child Day Care Services
Family Childcare Homes
Residential Care Facilities, without Nursing
Social Services
Museums, Art Galleries, and Zoos
Religious Organizations

Developing Market Countries

Mexico

Occupations
Professionals
Workers in Education
Civil Servants and Directors in Public/Private Sector
Workers in Personal Services in Establishments
Workers in Domestic Services

Industries
Education
Health and Social Work
Human Health Services
Social Work Activities
Recreational, Cultural, Sporting Activities
Library, Archives, Museums, Other Cultural Activities

Private Households with Employed Persons

Taiwan

In Taiwan, due to data limitations, Care Occupations had to meet two sets of criteria by matching one criterion in Step A and one criterion in Step B, in addition to matching the industry criteria:

Occupations, Step A Criteria
Non-Agricultural Own-Account Workers
Non-Agricultural Administr. and Prof. Employees
Service persons, Salespersons, Clerks

- (Excluded from Step A= agricultural employers, agricultural own-account workers, agricultural employees, industrial laborers, soldiers)

Occupations, Step B Criteria
Senior Officials and Managers
Professionals
Technicians and Associated Professionals
Service Workers and Shop and Market Sales Workers
Elementary Occupations

- (Excluded from Step B = armed forces, clerks, market-oriented crop and animal producers, forestry, etc. workers, fishery workers, hunters and trappers, craft, etc. trades workers, plant and machine operators and assemblers)

Industries
Social and Personal Service

Table 1. Distribution of Care Workers and Gender of Workers for Twelve Countries

	% Care Workers of All Workers	% Care Workers of Women	% Care Workers of Men	% Female of All Workers	% Female of Care Workers
Scandinavian					
Finland	17,4%	29,5%	6,3%	48,0%	81,2%
Sweden	23,6%	37,7%	10,0%	49,0%	78,4%
Continental European					
Belgium	23,2%	38,4%	10,8%	44,9%	74,4%
France	18,4%	27,6%	10,4%	46,3%	69,6%
Germany	14,8%	24,3%	6,9%	45,1%	74,3%
Netherlands	17,0%	24,7%	10,0%	47,4%	69,0%
Post-Socialist					
Hungary	11,0%	18,2%	2,8%	53,0%	88,1%
Russia	15,2%	23,3%	5,9%	53,8%	82,2%
North American					
Canada	18,0%	27,0%	9,5%	48,4%	72,7%
USA	12,2%	19,7%	5,2%	48,3%	77,9%
Transitional					
Mexico	12,3%	26,0%	5,8%	32,2%	67,9%
Taiwan	12,2%	19,0%	7,0%	43,1%	67,2%

Table 2a. Men's Weighted Means, Standard Deviations, and Sample Size for Twelve Countries, by Care Sector Employment

	Scandinavian				Continental European								Post-Socialist			
	Finland		Sweden		Belgium		France		Germany		Netherlands		Hungary		Russia	
	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care
	N=4990	N=336	N=6387	N=712	N=1181	N=143	N=4600	N=533	N=4454	N=330	N=1862	N=207	N=630	N=18	N=1059	N=66
Human Capital & Labor Supply																
Low Education	0,22	0,05	0,18	0,09	0,31	0,06	0,29	0,18	0,13	0,02	0,19	0,03	0,59	0,04	0,18	0,03
	0,42	0,23	0,39	0,29	0,46	0,23	0,46	0,38	0,33	0,15	0,39	0,18	0,49	0,21	0,38	0,17
Medium Education	0,48	0,27	0,63	0,40	0,35	0,09	0,48	0,33	0,56	0,31	0,54	0,23	0,26	0,39	0,49	0,21
	0,50	0,44	0,48	0,49	0,48	0,29	0,50	0,47	0,50	0,46	0,50	0,42	0,44	0,50	0,50	0,41
High Education	0,30	0,68	0,18	0,51	0,33	0,83	0,22	0,50	0,29	0,67	0,26	0,74	0,15	0,57	0,34	0,76
	0,46	0,47	0,38	0,50	0,47	0,38	0,42	0,50	0,46	0,47	0,44	0,44	0,36	0,51	0,47	0,43
Ann. Weeks Wrkd	48,04	48,81			49,88	42,89			45,46	42,38	48,06	48,87	49,65	52,00	52,00	52,00
	10,15	9,93			9,22	18,97			15,97	19,13	12,86	11,78	8,58	0,00	0,00	0,00
Part-time	0,05	0,09	0,10	0,14	0,01	0,05	0,04	0,14	0,03	0,11	0,08	0,21	0,03	0,14	0,01	0,04
	0,21	0,28	0,30	0,35	0,10	0,21	0,19	0,35	0,18	0,31	0,27	0,41	0,16	0,35	0,10	0,19
Job Characteristics																
Ln Annual Wage (local curr.)	11,67	11,88	12,19	12,20	13,49	13,49	11,50	11,54	10,76	10,74	10,79	10,85	13,07	13,22	9,71	9,74
	0,83	0,71	0,70	0,62	0,39	0,47	0,62	0,71	0,74	0,82	0,78	0,78	0,81	0,73	0,90	0,67
Non-Professional	0,75	0,36	0,88	0,67	0,79	0,31	0,85	0,57	0,80	0,57	0,75	0,27	0,87	0,54	0,87	0,45
	0,44	0,48	0,32	0,47	0,41	0,46	0,36	0,50	0,40	0,50	0,43	0,44	0,34	0,51	0,34	0,50
Public Sector			0,09	0,80	0,24	0,69	0,20	0,72	0,17	0,81	0,19	0,63	0,29	0,41	0,36	0,88
			0,28	0,40	0,43	0,46	0,40	0,45	0,37	0,40	0,39	0,48	0,46	0,51	0,48	0,33
% Female Occupation	0,27	0,73	0,43	0,52	0,29	0,70	0,29	0,48	0,25	0,54	0,28	0,53	0,22	0,54	0,19	0,44
	0,26	0,11	0,18	0,12	0,23	0,05	0,22	0,30	0,24	0,29	0,25	0,24	0,27	0,41	0,26	0,31
% Female Industry	0,31	0,66	0,31	0,75	0,30	0,69			0,33	0,66	0,32	0,60	0,42	0,72		
	0,20	0,19	0,20	0,12	0,19	0,09			0,20	0,15	0,21	0,15	0,19	0,20		
Self-Employed	0,10	0,03	0,02	0,03	0,08	0,09	0,04	0,01	0,01	0,05	0,02	0,02	0,03	0,07	0,00	0,00
	0,30	0,18	0,13	0,16	0,27	0,29	0,20	0,09	0,11	0,21	0,13	0,13	0,17	0,27	0,04	0,00
Agricultural Sector	0,02	0,00	0,02	0,00	0,01	0,00	0,01	0,00	0,01	0,00	0,03	0,00	0,09	0,00	0,01	0,00
	0,15	0,00	0,13	0,00	0,11	0,00	0,08	0,00	0,12	0,00	0,17	0,00	0,29	0,00	0,10	0,00
Demographic & Family Characteristics																
Age	39,76	41,12	39,54	42,78	39,87	42,40	38,98	38,40	39,12	40,59	38,53	41,82	37,96	37,02	38,40	35,66
	10,53	9,69	11,28	10,36	9,24	10,09	10,20	10,83	10,66	9,80	10,74	10,48	10,25	11,01	10,48	10,13
Immigrant	0,05	0,06	0,12	0,13	0,10	0,10	0,10	0,14	0,05	0,02					0,09	0,14
	0,21	0,24	0,32	0,33	0,30	0,31	0,31	0,34	0,22	0,13					0,28	0,35
Disability	0,03	0,01	0,01	0,01	0,13	0,11			0,06	0,06	0,11	0,12	0,01	0,00		
	0,16	0,11	0,11	0,11	0,34	0,31			0,24	0,23	0,31	0,33	0,07	0,00		
Married/Cohab	0,52	0,65	0,42	0,51	0,76	0,78	0,59	0,59	0,66	0,65	0,57	0,58	0,73	0,83	0,82	0,88
	0,50	0,48	0,49	0,50	0,43	0,41	0,49	0,49	0,47	0,48	0,50	0,49	0,45	0,39	0,38	0,33
Parent	0,51	0,60	0,41	0,45	0,70	0,69	0,69	0,60	0,59	0,51	0,55	0,51	0,73	0,60	0,78	0,74
	0,50	0,49	0,49	0,50	0,46	0,47	0,46	0,49	0,49	0,50	0,50	0,50	0,45	0,50	0,42	0,44
Preschooler	0,19	0,23	0,18	0,16	0,18	0,18	0,24	0,27	0,16	0,14	0,18	0,16	0,19	0,30	0,19	0,24
	0,39	0,42	0,38	0,37	0,39	0,39	0,43	0,44	0,36	0,35	0,39	0,37	0,39	0,47	0,40	0,43

Table 2a. Men's Weighted Mea

	Liberal				Transitional			
	Canada		USA		Mexico		Taiwan	
	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care
	N=14426	N=1518	N=27802	N=1529	N=6201	N=384	N=7967	N=602
Human Capital & Labor Suppl								
Low Education	0,16	0,04	0,13	0,02	0,77	0,23	0,34	0,10
	0,37	0,19	0,33	0,15	0,42	0,42	0,47	0,31
Medium Education	0,35	0,24	0,54	0,15	0,14	0,23	0,36	0,18
	0,48	0,43	0,50	0,35	0,35	0,42	0,48	0,38
High Education	0,49	0,73	0,33	0,83	0,09	0,54	0,30	0,72
	0,50	0,45	0,47	0,37	0,29	0,50	0,46	0,45
Ann. Weeks Wrkd	43,23	39,90	46,02	44,82				
	17,40	20,79	14,59	15,86				
Part-time	0,19	0,20	0,06	0,08	0,03	0,28	0,05	0,05
	0,39	0,40	0,24	0,27	0,17	0,45	0,22	0,21
Job Characteristics								
Ln Annual Wage (local curr.)	10,16	10,29	10,18	10,34	10,23	10,75	13,09	13,33
	0,96	0,97	0,89	0,83	0,81	0,66	0,46	0,46
Non-Professional	0,86	0,67	0,75	0,11	0,90	0,34	0,88	0,44
	0,34	0,47	0,43	0,31	0,30	0,48	0,32	0,50
Public Sector	0,11	0,62	0,11	0,44	0,11	0,67	0,13	0,37
	0,31	0,49	0,31	0,50	0,31	0,47	0,34	0,48
% Female Occupation	0,32	0,58	0,30	0,58	0,24	0,55	0,34	0,45
	0,24	0,23	0,23	0,25	0,19	0,17	0,20	0,12
% Female Industry	0,39	0,61	0,36	0,71	0,23	0,63	0,37	0,63
	0,18	0,15	0,20	0,12	0,18	0,14	0,14	0,00
Self-Employed	0,03	0,05	0,05	0,04	0,02	0,03	0,01	0,00
	0,18	0,21	0,21	0,21	0,15	0,16	0,11	0,03
Agricultural Sector	0,02	0,00	0,01	0,00	0,15	0,00	0,03	0,00
	0,14	0,00	0,11	0,00	0,36	0,00	0,17	0,00
Demographic & Family Charac								
Age	37,11	39,52	37,47	40,14	33,73	38,58	37,34	39,54
	11,11	10,53	11,13	11,10	10,52	9,72	9,83	9,99
Immigrant	0,13	0,11	0,15	0,14				
	0,34	0,31	0,35	0,35				
Disability	0,11	0,10	0,02	0,01	0,00	0,00		
	0,32	0,30	0,16	0,12	0,00	0,00		
Married/Cohab	0,60	0,64	0,60	0,65	0,71	0,81	0,67	0,73
	0,49	0,48	0,49	0,48	0,46	0,40	0,47	0,44
Parent	0,60	0,59	0,61	0,57	0,91	0,89	0,79	0,76
	0,49	0,49	0,49	0,50	0,29	0,31	0,41	0,43
Preschooler	0,16	0,19	0,21	0,18	0,45	0,38	0,26	0,24
	0,37	0,39	0,41	0,39	0,50	0,49	0,44	0,43

Table 2b. Women's Weighted Means, Standard Deviations, and Sample Size for Twelve Countries, by Care Sector Employment

	Scandinavian				Continental European								Post-Socialist			
	Finland		Sweden		Belgium		France		Germany		Netherlands		Hungary		Russia	
	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care
	N=3481	N=1450	N=4255	N=2578	N=686	N=415	N=3201	N=1221		N=955	N=1403	N=460	N=598	N=133	N=1004	N=305
Human Capital & Labor Supply																
Low Education	0,23	0,09	0,16	0,09	0,21	0,06	0,29	0,28	0,16	0,06	0,24	0,02	0,47	0,12	0,13	0,04
	0,42	0,28	0,37	0,28	0,41	0,24	0,45	0,45	0,37	0,24	0,42	0,14	0,50	0,33	0,33	0,19
Medium Education	0,41	0,37	0,60	0,48	0,41	0,24	0,46	0,27	0,62	0,50	0,52	0,45	0,40	0,25	0,35	0,12
	0,49	0,48	0,49	0,50	0,49	0,43	0,50	0,44	0,49	0,50	0,50	0,50	0,49	0,44	0,48	0,33
High Education	0,36	0,54	0,23	0,43	0,38	0,69	0,26	0,45	0,19	0,43	0,24	0,53	0,13	0,62	0,52	0,84
	0,48	0,50	0,42	0,50	0,49	0,46	0,44	0,50	0,39	0,49	0,43	0,50	0,34	0,49	0,50	0,36
Ann. Weeks Wrkd	44,67	44,83			36,10	30,89			29,56	28,85	36,33	40,24	50,20	51,85	52,00	52,00
	15,09	14,30			23,36	25,14			24,99	25,06	23,30	21,20	7,61	1,59	0,00	0,00
Part-time	0,13	0,11	0,30	0,42	0,24	0,31	0,18	0,33	0,29	0,28	0,50	0,52	0,05	0,22	0,05	0,10
	0,34	0,32	0,46	0,49	0,43	0,46	0,39	0,47	0,45	0,45	0,50	0,50	0,21	0,41	0,22	0,30
Job Characteristics																
Ln Annual Wage (local curr.)	11,51	11,61	11,78	11,90	13,11	13,18	11,22	11,04	10,15	10,37	10,05	10,42	12,87	12,89	9,37	9,18
	0,67	0,61	0,89	0,70	0,51	0,48	0,73	0,94	0,98	0,84	1,02	0,77	0,79	0,81	0,88	0,78
Non-Professional	0,81	0,69	0,92	0,86	0,89	0,49	0,88	0,60	0,86	0,72	0,86	0,49	0,85	0,46	0,83	0,41
	0,39	0,46	0,27	0,35	0,32	0,50	0,32	0,49	0,35	0,45	0,35	0,50	0,36	0,50	0,38	0,49
Public Sector			0,25	0,88	0,29	0,61	0,32	0,51	0,20	0,65	0,21	0,54	0,29	0,43	0,42	0,93
			0,43	0,33	0,46	0,49	0,47	0,50	0,40	0,48	0,41	0,50	0,46	0,50	0,49	0,26
% Female Occupation	0,64	0,80	0,52	0,61	0,51	0,72	0,59	0,78	0,64	0,81	0,63	0,74	0,77	0,91	0,80	0,90
	0,22	0,10	0,12	0,16	0,16	0,05	0,23	0,16	0,24	0,15	0,22	0,16	0,23	0,09	0,23	0,16
% Female Industry	0,57	0,84	0,54	0,78	0,49	0,73			0,52	0,75	0,58	0,72	0,57	0,82		
	0,23	0,13	0,21	0,07	0,21	0,08			0,20	0,09	0,22	0,14	0,17	0,05		
Self-Employed	0,05	0,03	0,01	0,01	0,03	0,03	0,02	0,01	0,02	0,00	0,02	0,03	0,02	0,00	0,00	0,00
	0,23	0,17	0,10	0,09	0,18	0,17	0,13	0,08	0,12	0,07	0,12	0,18	0,15	0,00	0,06	0,00
Agricultural Sector	0,01	0,00	0,01	0,00	0,01	0,00	0,00	0,00	0,01	0,00	0,02	0,00	0,07	0,00	0,00	0,00
	0,10	0,00	0,11	0,00	0,10	0,00	0,04	0,00	0,10	0,00	0,14	0,00	0,26	0,00	0,00	0,00
Demographic & Family Characteristics																
Age	40,80	42,24	39,04	42,07	37,71	39,43	38,56	40,39	39,14	39,74	36,24	37,55	40,15	37,96	39,37	38,18
	10,74	9,74	11,51	10,63	8,85	8,91	10,04	10,40	11,08	10,45	10,79	10,25	10,33	9,62	9,98	10,08
Immigrant	0,05	0,07	0,13	0,12	0,07	0,07	0,08	0,11	0,05	0,05					0,08	0,12
	0,21	0,25	0,34	0,32	0,25	0,26	0,27	0,32	0,23	0,22					0,27	0,32
Disability	0,02	0,01	0,03	0,04	0,10	0,11			0,05	0,04	0,11	0,11	0,02	0,00		
	0,15	0,12	0,17	0,19	0,30	0,32			0,22	0,20	0,32	0,31	0,15	0,00		
Married/Cohab	0,51	0,64	0,44	0,53	0,72	0,77	0,53	0,62	0,62	0,61	0,52	0,54	0,67	0,72	0,67	0,70
	0,50	0,48	0,50	0,50	0,45	0,42	0,50	0,49	0,49	0,49	0,50	0,50	0,47	0,45	0,47	0,46
Parent	0,48	0,58	0,45	0,50	0,68	0,74	0,64	0,64	0,51	0,52	0,51	0,51	0,68	0,74	0,75	0,78
	0,50	0,49	0,50	0,50	0,47	0,44	0,48	0,48	0,50	0,50	0,50	0,50	0,46	0,44	0,44	0,42
Preschooler	0,12	0,15	0,18	0,17	0,19	0,22	0,19	0,20	0,07	0,09	0,16	0,19	0,10	0,20	0,15	0,17
	0,32	0,36	0,39	0,38	0,39	0,41	0,40	0,40	0,25	0,28	0,37	0,40	0,30	0,40	0,36	0,37

Table 2b. Women's Weighted M

	Liberal				Transitional			
	Canada		USA		Mexico		Taiwan	
	Not Care	Care	Not Care	Care	Not Care	Care	Not Care	Care
	N=10921	N=4039	N=21997	N=5388	N=2316	N=814	N=5257	N=1231
Human Capital & Labor Suppl								
Low Education	0,13	0,05	0,10	0,04	0,73	0,51	0,31	0,16
	0,34	0,21	0,30	0,20	0,45	0,50	0,46	0,37
Medium Education	0,39	0,17	0,58	0,31	0,19	0,16	0,41	0,29
	0,49	0,37	0,49	0,46	0,39	0,36	0,49	0,45
High Education	0,48	0,78	0,31	0,65	0,09	0,33	0,28	0,55
	0,50	0,41	0,46	0,48	0,28	0,47	0,45	0,50
Ann. Weeks Wrkd	34,95	33,33	39,27	37,72				
	22,74	23,94	20,71	21,24				
Part-time	0,37	0,36	0,16	0,18	0,08	0,36	0,02	0,02
	0,48	0,48	0,36	0,38	0,27	0,48	0,14	0,12
Job Characteristics								
Ln Annual Wage (local curr.)	9,68	9,95	9,73	9,90	10,07	10,03	12,76	12,94
	0,96	1,01	1,00	0,95	0,95	1,06	0,44	0,56
Non-Professional	0,88	0,59	0,75	0,36	0,88	0,52	0,97	0,51
	0,32	0,49	0,44	0,48	0,32	0,50	0,17	0,50
Public Sector	0,14	0,58	0,13	0,40	0,20	0,44	0,11	0,30
	0,35	0,49	0,33	0,49	0,40	0,50	0,31	0,46
% Female Occupation	0,60	0,78	0,63	0,83	0,42	0,68	0,54	0,51
	0,22	0,15	0,24	0,16	0,17	0,19	0,19	0,10
% Female Industry	0,51	0,74	0,55	0,78	0,42	0,72	0,45	0,63
	0,17	0,14	0,19	0,09	0,17	0,14	0,11	0,00
Self-Employed	0,03	0,04	0,03	0,01	0,02	0,01	0,00	0,00
	0,16	0,19	0,16	0,10	0,14	0,08	0,07	0,07
Agricultural Sector	0,02	0,00	0,00	0,00	0,02	0,00	0,02	0,00
	0,12	0,00	0,06	0,00	0,15	0,00	0,13	0,00
Demographic & Family Charac								
Age	36,80	38,25	37,24	39,26	31,96	36,41	35,44	34,74
	11,20	10,56	11,29	10,85	9,77	9,73	9,90	10,09
Immigrant	0,14	0,10	0,12	0,09				
	0,35	0,30	0,32	0,29				
Disability	0,11	0,12	0,03	0,03	0,00	0,00		
	0,32	0,32	0,18	0,16	0,00	0,00		
Married/Cohab	0,61	0,64	0,56	0,65	0,39	0,60	0,60	0,56
	0,49	0,48	0,50	0,48	0,49	0,49	0,49	0,50
Parent	0,64	0,62	0,62	0,64	0,90	0,91	0,79	0,79
	0,48	0,49	0,49	0,48	0,30	0,29	0,41	0,41
Preschooler	0,15	0,18	0,21	0,20	0,35	0,33	0,22	0,21
	0,36	0,39	0,40	0,40	0,48	0,47	0,41	0,41

Table 3. Effect of Care Sector Employment on Earnings, Net of Human Capital, Labor Supply, Demographic Characteristics, and Job Characteristics, by Gender

	Men	Women	Sig. Diff.?
Scandinavian			
Finland	1,1%	1,1%	n
Sweden	**12,5%**	**23,4%**	y
Continental European			
Belgium	0,9%	0,9%	n
France	**-13,4%**	**-25,3%**	y
Germany	**-10,9%**	**7,8%**	y
Netherlands	**-13,8%**	**10,9%**	y
Post-Socialist			
Hungary	**-23,9%**	**-24,1%**	n
Russia	4,5%	**-17,2%**	y
Liberal			
Canada	**-17,3%**	**-3,0%**	y
USA	**-10,1%**	2,0%	y
Transitional			
Mexico	**-33,1%**	**-33,1%**	n
Taiwan	**-8,8%**	**-8,8%**	n

Notes: Significant effects ($p < .05$, two-tailed tests) are bolded. Full regression results can be found in tables A-2 and A-3.

Table 4a. Effect of Care Sector Employment on Men's Earnings, with Additional Sets of Control Variables

	Model 1	Model 2	Model 3	Model 4	Model 5
Scandinavian					
Finland	**18,0%**	4,9%	**-11,2%**	-2,6%	NA
Sweden	-3,8%	**-12,3%**	1,1%	**7,1%**	**8,3%**
Continental European					
Belgium	-3,4%	**-13,0%**	-5,0%	-2,0%	-2,0%
France	3,9%	-5,0%	**-10,5%**	**-8,3%**	**-10,6%**
Germany	-7,5%	**-20,3%**	-7,1%	-3,9%	-6,4%
Netherlands	-3,5%	**-15,0%**	**-10,5%**	**-9,7%**	**-15,6%**
Post-Socialist					
Hungary	12,6%	-11,3%	-14,2%	-12,5%	-11,9%
Russia	0,9%	**-15,3%**	-8,4%	-4,9%	-2,6%
Liberal					
Canada	3,1%	**-5,4%**	**-7,1%**	3,9%	-2,8%
USA	**6,0%**	**-16,5%**	**-16,8%**	**-8,8%**	**-9,7%**
Transitional					
Mexico	**46,9%**	-1,7%	**-9,2%**	**-15,6%**	**-21,2%**
Taiwan	**21,5%**	**4,9%**	**-6,6%**	**-6,9%**	**-7,4%**

Notes: Significant effects ($p \leq .05$, two-tailed tests) are bolded. Model 1 includes family structure and demographic characteristics, model 2 adds human capital measures, model 3 adds all job characteristics except for percent female in occupation/industry, model 4 adds percent female in occupation/industry, and model 5 adds percent public sector in occupation.

Table 4b. Effect of Care Sector Employment on Women's Earnings, with Additional Sets of Control Variables

	Model 1	Model 2	Model 3	Model 4	Model 5
Scandinavian					
Finland	**8,9%**	1,7%	**-4,1%**	2,5%	NA
Sweden	**8,1%**	**2,5%**	**19,4%**	**23,8%**	**30,0%**
Continental European					
Belgium	5,4%	**-7,1%**	**-5,0%**	-3,9%	-2,4%
France	**-20,4%**	**-32,0%**	**-32,9%**	**-29,0%**	**-29,0%**
Germany	**21,5%**	**8,1%**	1,0%	**16,1%**	**9,3%**
Netherlands	**31,5%**	**14,4%**	**10,5%**	**15,9%**	**11,8%**
Post-Socialist					
Hungary	9,3%	**-16,9%**	**-24,9%**	**-20,9%**	**-21,2%**
Russia	**-18,3%**	**-30,2%**	**-19,3%**	**-14,8%**	-11,0%
Liberal					
Canada	**23,3%**	**11,3%**	-1,0%	1,9%	**-15,0%**
USA	**12,0%**	**-8,0%**	**-9,3%**	-1,2%	0,9%
Transitional					
Mexico	-7,1%	**-36,5%**	**-38,6%**	**-48,2%**	**-43,7%**
Taiwan	**18,3%**	**4,8%**	**-12,0%**	**-14,6%**	**-15,8%**

Notes: Significant effects ($p \leq .05$, two-tailed tests) are bolded. Model 1 includes family structure and demographic characteristics, model 2 adds human capital measures, model 3 adds all job characteristics except for percent female in occupation/industry, model 4 adds percent female in occupation/industry, and model 5 adds percent public sector in occupation.

Table 5a. Effect of Care Sector Employment on Men's Earnings, Net of Human Capital, Labor Supply, Demographic Characteristics, and Job Characteristics

	Private Sect. Care	**Public Sect. Care**	**Prof.-Man Care**	**Non-Prof. Care**	**Full-Time Care**	**Part-Time Care**	**Native**	**Immigrant**	***% of Pop. that is Immigrant****
Scandinavian									
Finland	na	na	-2,6%	-2,6%	-2,6%	-2,6%	-2,6%	-2,6%	*5,7%*
Sweden	**7,1%**	**7,1%**	-2,0%	**11,0%**	2,4%	**35,4%**	**7,1%**	**7,1%**	*4,3%*
Continental European									
Belgium	-2,0%	-2,0%	-2,0%	-2,0%	-3,5%	**31,7%**	-2,0%	-2,0%	*4,8%*
France	**-18,0%**	**-3,2%**	**-10,6%**	**-10,6%**	**-10,6%**	**-10,6%**	**-12,6%**	1,8%	*7,5%*
Germany	**-43,6%**	**7,4%**	**-20,9%**	**4,6%**	-6,4%	-6,4%	-6,4%	-6,4%	*9,3%*
Netherlands	**-22,1%**	-1,0%	**-15,6%**	**-15,6%**	**-15,6%**	**-15,6%**	na	na	*na*
Post-Socialist									
Hungary	-11,9%	-11,9%	-11,9%	-11,9%	-11,9%	-11,9%	na	na	*na*
Russia	**-49,6%**	2,1%	**-24,6%**	**20,7%**	-2,6%	-2,6%	4,7%	**-45,0%**	*16,9%*
Liberal									
Canada	-6,1%	**13,2%**	**-16,2%**	**-2,1%**	**-7,3%**	**13,0%**	-2,8%	-2,8%	*6,2%*
USA	**-9,7%**	**-9,7%**	**-11,3%**	1,2%	**-11,2%**	**8,0%**	**-13,1%**	**10,3%**	*16,2%*
Transitional									
Mexico	**-6,9%**	**-6,9%**	**-29,1%**	**-11,3%**	**-25,2%**	**-4,5%**	na	na	*na*
Taiwan	-2,0%	**-17,1%**	**-11,6%**	**-3,2%**	**-8,4%**	**16,6%**	na	na	*na*

Notes: Significant effects ($p < .05$, two-tailed tests) are bolded. Coefficients presented are calculated from models with interaction terms.

* Percentage of Population that is Immigrant is offered as a descriptive statistic, and is not a variable in the regression models.

Table 5b. Effect of Care Sector Employment on Women's Earnings, Net of Human Capital, Labor Supply, Demographic Characteristics, and Job Characteristics

	Priv. Sect. Care	Pub. Sect. Care	Prof.-Man Care	Non-Prof. Care	Full-Time Care	Part-Time Care	Native	Immigrant	*% of Pop. that is Immigrant**
Scandinavian									
Finland	na	na	-3,3%	**4,8%**	2,5%	2,5%	**3,5%**	**-13,6%**	*5,7%*
Sweden	**9,0%**	**28,9%**	1,9%	**26,6%**	**12,4%**	**43,3%**	**23,8%**	**23,8%**	*4,3%*
Continental European									
Belgium	-2,4%	-2,4%	-2,4%	-2,4%	-6,7%	**6,1%**	-2,4%	-2,4%	*4,8%*
France	**-37,8%**	**-17,4%**	**-13,3%**	**-34,5%**	**-29,0%**	**-29,0%**	**-31,7%**	**-5,5%**	*7,5%*
Germany	**9,3%**	**9,3%**	-10,2%	**13,6%**	3,4%	**21,7%**	**9,3%**	**9,3%**	*9,3%*
Netherlands	**15,9%**	**15,9%**	**-10,1%**	**25,1%**	3,0%	**25,8%**	na	na	*na*
Post-Socialist									
Hungary	**-21,2%**	**-21,2%**	**-21,2%**	**-21,2%**	**-27,7%**	**23,9%**	na	na	*na*
Russia	**-47,3%**	**-10,9%**	-11,0%	-11,0%	**-14,6%**	**25,8%**	-11,0%	-11,0%	*16,9%*
Liberal									
Canada	**-15,0%**	**-15,0%**	**-48,7%**	**-15,2%**	**-15,0%**	**-15,0%**	**-15,0%**	**-15,0%**	*6,2%*
USA	1,7%	**-7,6%**	-1,3%	**3,1%**	0,9%	0,9%	-0,1%	**13,3%**	*16,2%*
Transitional									
Mexico	**-66,9%**	**-30,7%**	**-55,5%**	**-32,5%**	**-49,9%**	**-17,1%**	na	na	*na*
Taiwan	**-15,8%**	**-15,8%**	**-31,3%**	**-12,6%**	**-15,8%**	**-15,8%**	na	na	*na*

Notes: Significant effects ($p < .05$, two-tailed tests) are bolded. Coefficients presented are calculated from models with interaction terms.

* Percentage of Population that is Immigrant is offered as a descriptive statistic, and is not a variable in the regression models.

Table 6a. Effect of Specific Care Occupations on Men's Earnings, by Country

	Doctors	Nurses	Doctor/Nurse	Teachers	Professors	Teacher/Professor	Other Care Occ.
Scandinavian							
Finland						-3,4%	-0,5%
Continental European							
Belgium			-4,9%			-10,3%	5,2%
France				**-13,1%**			**-7,2%**
Germany	-30,5%	**18,5%**		**-15,1%**	**-36,9%**		-2,3%
Netherlands				**-15,9%**			-14,9%
Post-Socialist							
Hungary	38,6%	**-43,6%**				-36,6%	-2,5%
Russia	-16,4%	NA		**-38,2%**	-31,6%		19,4%
North American							
Canada			-18,8%			-12,2%	-1,3%
USA	**24,2%**	4,1%		**-19,2%**	-4,2%		**-18,3%**
Transitional							
Mexico						**-19,3%**	**-12,0%**

Notes: From full models with all control variables, significant results ($p < .05$, two-tailed tests) are bolded.

Table 6b. Effect of Specific Care Occupations on Women's Earnings, by Country

	Doctors	Nurses	Doctor/Nurse	Teachers	Professors	Teacher/Professor	Other Care Occ.
Scandinavian							
Finland						**-6,4%**	**6,2%**
Continental European							
Belgium			3,2%			-9,1%	-2,4%
France						**-16,4%**	**-33,7%**
Germany	24,3%	**27,3%**		-6,7%	14,2%		7,8%
Netherlands						-8,9%	**15,7%**
Post-Socialist							
Hungary	**56,9%**	-24,0%				-7,8%	**-32,1%**
Russia	-16,4%	-10,6%		-4,0%	-0,2%		-15,7%
North American							
Canada			**-83,2%**			**-35,6%**	**-19,2%**
USA	**40,7%**	**26,8%**		**-18,1%**	**-29,6%**		**-5,7%**
Transitional							
Mexico						**-35,5%**	**-54,6%**

Notes: From full models with all control variables, significant results ($p < .05$, two-tailed tests) are bolded.

Table A-2. Effect of Care Work Employment on Earnings with Gender Interactions, Coefficients, Standard Errors, and Standardized Coefficients

	Finland		**Sweden**		**Belgium**		**France**		**Germany**		**Netherlands**		**Hungary**		**Russia**	
	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.
Constant	##### ***	.	##### ***	.	12,295 ***	.	##### ***	.	9,305 ***	.	8,944 ***	.	11,373 ***	.	9,573 ***	.
	0,057		0,030		0,095		0,049		0,062		0,089		0,252		0,112	
Care Work																
Care Emply	0,011	0,005	0,164 ***	0,088	0,009	0,008	-0,134 ***	#####	-0,109 **	-0,045	-0,139 **	-0,055	-0,239 ***	-0,090	0,045	0,018
	0,018		0,028		0,031		0,029		0,052		0,058		0,083		0,101	
Female* Care Emp.			0,111 ***	0,055			-0,119 ***	#####	0,187 ***	0,068	0,248 ***	0,083			-0,218 **	-0,078
			0,028				0,036		0,061		0,064				0,100	
Human Capital & Labor Supply																
Age (potent exp.)	0,008 ***	0,117	0,010 ***	0,141	0,016 ***	0,304	0,020 ***	0,276	0,014 ***	0,172	0,021 ***	0,239	0,004 **	0,051	0,002	0,028
	0,001		0,001		0,001		0,001		0,001		0,001		0,002		0,002	
Med. Educ.	0,069 ***	0,045	0,149 ***	0,100	0,118 ***	0,116	0,156 ***	0,106	0,274 ***	0,154	0,196 ***	0,104	0,263 ***	0,153	0,193 ***	0,105
	0,019		0,021		0,023		0,016		0,032		0,034		0,047		0,060	
High Educ.	0,209 ***	0,133	0,285 ***	0,165	0,259 ***	0,267	0,320 ***	0,196	0,396 ***	0,203	0,280 ***	0,138	0,479 ***	0,233	0,461 ***	0,258
	0,020		0,025		0,024		0,022		0,038		0,043		0,077		0,060	
Part-time	0,067 **	0,025	-0,562 ***	-0,301	0,009	0,006	-0,743 ***	#####	-0,284 ***	-0,114	-0,471 ***	-0,227	-0,158 *	-0,044	-0,709 ***	-0,150
	0,033		0,016		0,067		0,026		0,047		0,039		0,094		0,090	
Annual Weeks	0,018 ***	0,295			0,010 ***	0,421			0,019 ***	0,487	0,021 ***	0,420	0,033 ***	0,315		
	0,001				0,001				0,001		0,001		0,004			
Job Characteristics																
Agric. Industry	-1,601 ***	-0,259	-0,280 ***	-0,039	0,079	0,015	-0,712 ***	#####	-0,439 ***	-0,050	0,079	0,012	-0,153 **	-0,050	-0,660 ***	-0,051
	0,134		0,070		0,089		0,165		0,112		0,080		0,071		0,221	
Self-Employed	-1,394 ***	-0,484	-2,417 ***	-0,361	-0,166 ***	-0,080	-0,148 **	#####	-1,009 ***	-0,131	-1,345 ***	-0,195	-1,448 ***	-0,277	-0,099	-0,005
	0,063		0,109		0,056		0,066		0,163		0,323		0,207		0,262	
% Female Occ.	-0,051 *	-0,021	0,032	0,007	-0,012	-0,006	-0,239 ***	#####	0,077 *	0,028	-0,014	-0,004	-0,204 ***	-0,095	-0,276 ***	-0,122
	0,028		0,030		0,045		0,027		0,040		0,059		0,080		0,072	
% Female Ind.	-0,202 ***	-0,074	-0,285 ***	-0,096	-0,137 ***	-0,068			-0,424 ***	-0,116	-0,157 **	-0,043	0,023	0,006		
	0,033		0,034		0,046				0,053		0,069		0,123			
Public Sector			0,059 *	0,035	-0,005	-0,004	0,138 ***	0,087	0,096 ***	0,048	0,056 **	0,026	0,079 *	0,045	-0,231 ***	-0,129
			0,035		0,020		0,018		0,027		0,025		0,043		0,042	
% Public Sect. Occ.			-0,197 ***	-0,107	-0,038	-0,018	0,084 ***	0,039	0,162 ***	0,055	0,178 ***	0,046	-0,034	-0,010	-0,054	-0,017
			0,043		0,055		0,027		0,045		0,054		0,128		0,088	
Non-Professional	-0,254 ***	-0,145	-0,332 ***	-0,139	-0,116 ***	-0,106	-0,418 ***	#####	-0,245 ***	-0,111	-0,112 ***	-0,053	-0,132 *	-0,063	-0,208 ***	-0,096

Table A-2. Effect of Care Work Employment on Earnings with Gender Interactions, Coefficients, Standard Errors, and Standardized Coefficients

	Finland		**Sweden**		**Belgium**		**France**		**Germany**		**Netherlands**		**Hungary**		**Russia**	
	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.
	0,016		0,013		0,023		0,018		0,027		0,034		0,078		0,043	
Demographic & Family Characteristics																
Female	-0,117 ***	-0,077	-0,201 ***	-0,128	-0,173 ***	-0,179	-0,120 ***	#####	-0,138 ***	-0,078	-0,176 ***	-0,094	-0,177 ***	-0,109	-0,195 ***	-0,109
	0,015		0,016		0,021		0,015		0,026		0,035		0,060		0,058	
Disability	-0,071	-0,014	-0,703 ***	-0,132	-0,015	-0,010			-0,069 *	-0,018	0,021	0,007	-0,736 **	-0,100		
	0,044		0,067		0,022				0,039		0,032		0,340			
Immigrant	-0,013	-0,004	-0,078 ***	-0,033	0,020	0,012	-0,087 ***	#####	-0,094 ***	-0,023					0,066	0,021
	0,032		0,017		0,032		0,022		0,029						0,066	
Married	0,022 *	0,015	0,063 ***	0,040	0,063 ***	0,057	0,075 ***	0,051	0,083 ***	0,045	0,082 ***	0,043	0,055	0,031	0,060	0,029
	0,013		0,014		0,024		0,015		0,021		0,026		0,046		0,042	
Parent	-0,003	-0,002	0,026 *	0,016	0,018	0,017	-0,065 ***	#####	-0,011	-0,006	-0,162 ***	-0,086	-0,027	-0,015	0,133 ***	0,063
	0,013		0,013		0,020		0,015		0,019		0,027		0,044		0,042	
Preschooler	0,061 ***	0,030	-0,141 ***	-0,069	0,047 **	0,038	0,105 ***	0,060	0,035	0,013	0,311 ***	0,126	-0,229 ***	-0,102	-0,073	-0,031
	0,016		0,019		0,023		0,018		0,028		0,043		0,072		0,049	
R-Squared	0,555		0,396		0,444		0,420		0,585		0,621		0,301		0,155	

Notes: * is p < .05, ** is p < .01, and *** is p < .001, two-tailed tests.

Table A-2. Effect

	Canada		**USA**		**Mexico**		**Taiwan**	
	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.	Coef. Std. Err.	Stand. Coeff.
Constant	9,319 *** 0,047	.	8,559 *** 0,027	.	10,054 *** 0,058	.	12,723 *** 0,023	.
Care Work								
Care Emply	-0,173 *** 0,040	-0,066	-0,101 *** 0,020	-0,034	-0,331 *** 0,040	-0,119	-0,088 *** 0,012	#####
Female* Care Emp	0,143 *** 0,036	0,047	0,121 *** 0,022	0,037				
Human Capital &								
Age (potent exp.)	0,016 *** 0,001	0,173	0,014 *** 0,000	0,162	0,008 *** 0,001	0,089	0,008 *** 0,000	0,173
Med. Educ.	0,206 *** 0,020	0,098	0,343 *** 0,012	0,178	0,256 *** 0,031	0,107	0,217 *** 0,008	0,214
High Educ.	0,369 *** 0,019	0,186	0,641 *** 0,013	0,321	0,587 *** 0,034	0,222	0,407 *** 0,009	0,392
Part-time	-0,609 *** 0,023	-0,275	-0,302 *** 0,023	-0,098	-0,608 *** 0,046	-0,187	-0,084 *** 0,021	#####
Annual Weeks	0,009 *** 0,001	0,200	0,023 *** 0,000	0,430				
Job Characteristic								
Agric. Industry	-0,603 *** 0,064	-0,074	-0,357 *** 0,040	-0,031	-0,786 *** 0,034	-0,274	-0,261 *** 0,032	#####
Self-Employed	-0,843 *** 0,062	-0,149	-0,243 *** 0,026	-0,046	-0,938 *** 0,104	-0,158	-1,080 *** 0,064	#####
% Female Occ.	-0,200 *** 0,028	-0,057	-0,133 *** 0,016	-0,041	0,098 0,068	0,025	-0,181 *** 0,016	#####
% Female Ind.	-0,291 *** 0,036	-0,060	-0,257 *** 0,019	-0,062	-0,072 0,068	-0,019	0,046 * 0,026	0,014
Public Sector	0,198 *** 0,014	0,080	0,002 0,011	0,001	0,139 *** 0,028	0,060	0,224 *** 0,009	0,162
% Public Sect. Occ	0,412 *** 0,048	0,090	-0,029 * 0,018	-0,007	0,794 *** 0,070	0,200	0,165 *** 0,024	0,044
Non-Professional	-0,192 ***	-0,073	-0,301 ***	-0,144	-0,212 ***	-0,087	-0,228 ***	#####

Table A-2. Effect

	Canada			**USA**			**Mexico**			**Taiwan**		
	Coef.		Stand.	Coef.		Stand.	Coef.		Stand.	Coef.		Stand.
	Std. Err.		Coeff.	Std. Err.		Coeff.	Std. Err.		Coeff.	Std. Err.		Coeff.
	0,017			0,008			0,034			0,009		
Demographic & F												
Female	-0,224	***	-0,113	-0,181	***	-0,094	-0,276	***	-0,148	-0,261	***	#####
	0,016			0,008			0,029			0,007		
Disability	-0,118	***	-0,038	-0,348	***	-0,059						
	0,019			0,027								
Immigrant	-0,020		-0,007	-0,062	***	-0,022						
	0,021			0,009								
Married	0,113	***	0,056	0,143	***	0,073	0,135	***	0,075	0,124	***	0,122
	0,013			0,007			0,025			0,008		
Parent	-0,062	***	-0,031	-0,043	***	-0,022	-0,061	**	-0,020	-0,040	***	#####
	0,013			0,007			0,031			0,008		
Preschooler	0,096	***	0,036	0,058	***	0,024	0,017		0,009	0,052	***	0,046
	0,017			0,009			0,022			0,008		
R-Squared	0,459			0,556			0,415			0,495		

Notes: * is p < .05,

Table A-3a. Effect of Specific Care Occupations on Men's Earnings, by Country

	Doctors	Nurses	Doctor/Nurse	Teachers	Professors	Teacher/Professor	Domestic	Other Care Occ.
Scandinavian								
Finland						-3,4%	NA	-0,5%
Continental European								
Germany	-30,6%	**18,2%**		**-15,3%**	**-37,0%**		-35,2%	-2,4%
North American								
Canada			**-36,2%**			**-16,3%**	**27,2%**	**-9,5%**
USA	**24,2%**	4,1%		**-19,2%**	-4,2%		10,7%	**-18,3%**
Transitional								
Mexico						**-35,5%**	-20,3%	-7,9%

Notes: From full models with all control variables, significant results ($p < .05$, two-tailed tests) are bolded. "NA" indicates there were too few cases to analyze.

Table A-3b. Effect of Specific Care Occupations on Women's Earnings, by Country

	Doctors	Nurses	Doctor/Nurse	Teachers	Professors	Teacher/Professor	Domestic	Other Care Occ.
Scandinavian								
Finland						**-6,4%**	**-40,8%**	**6,3%**
Continental European								
Germany	25,3%	**28,0%**		-5,8%	15,2%		-12,5%	**10,2%**
North American								
Canada			**-37,8%**			**-73,4%**	**-44,1%**	**-13,9%**
USA	**40,2%**	**26,0%**		**-18,4%**	**-29,5%**		**-17,7%**	**-6,5%**
Transitional								
Mexico						**-62,4%**	**-69,8%**	**-8,1%**

Notes: From full models with all control variables, significant results ($p < .05$, two-tailed tests) are bolded.

Figure 1: Percentage of All Workers Who Are in Care Employment, by Country

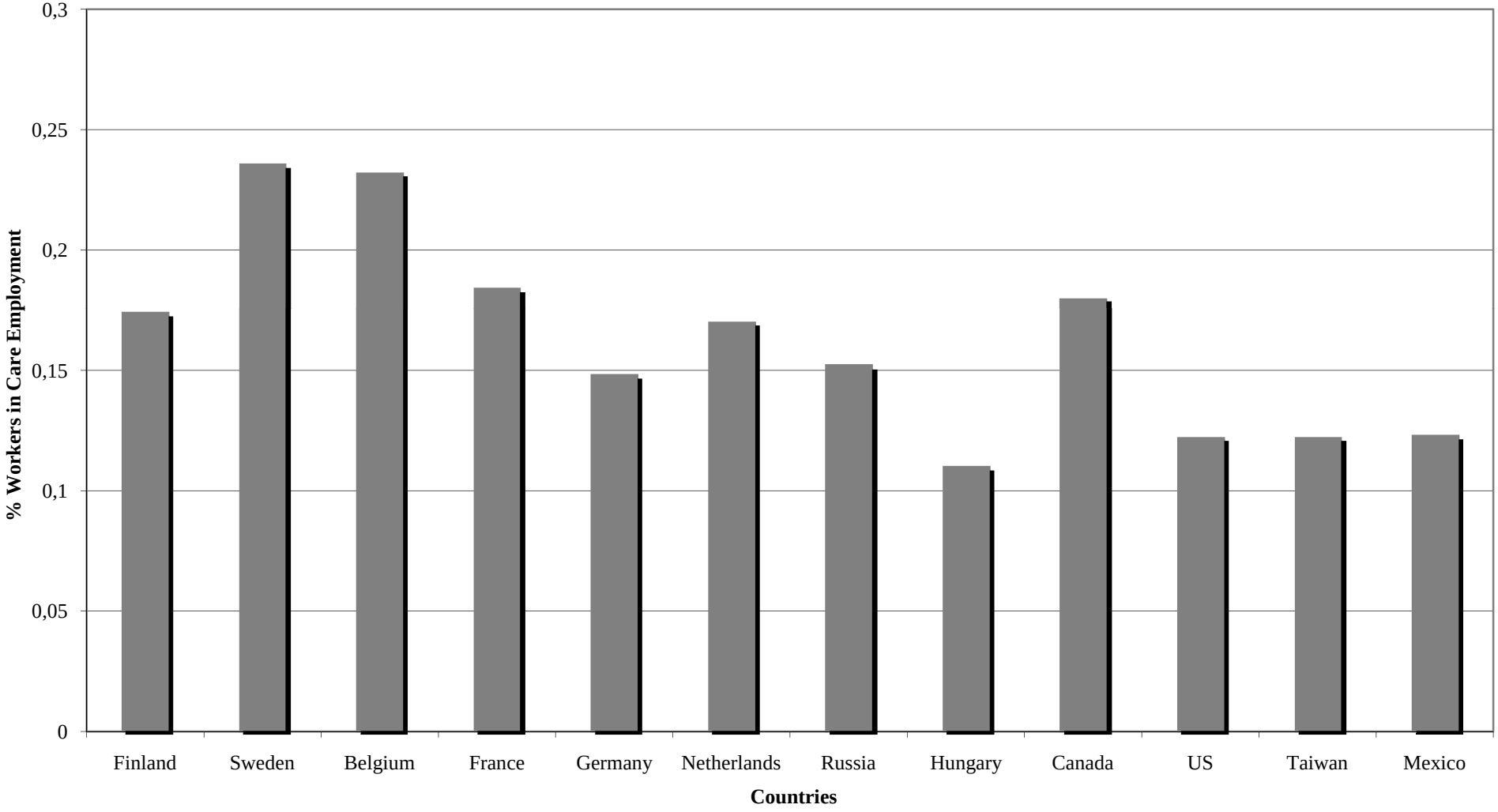

Figure 2: Percentage of Workers Who Are Women, by Care Work Employment, All Employment, and Country

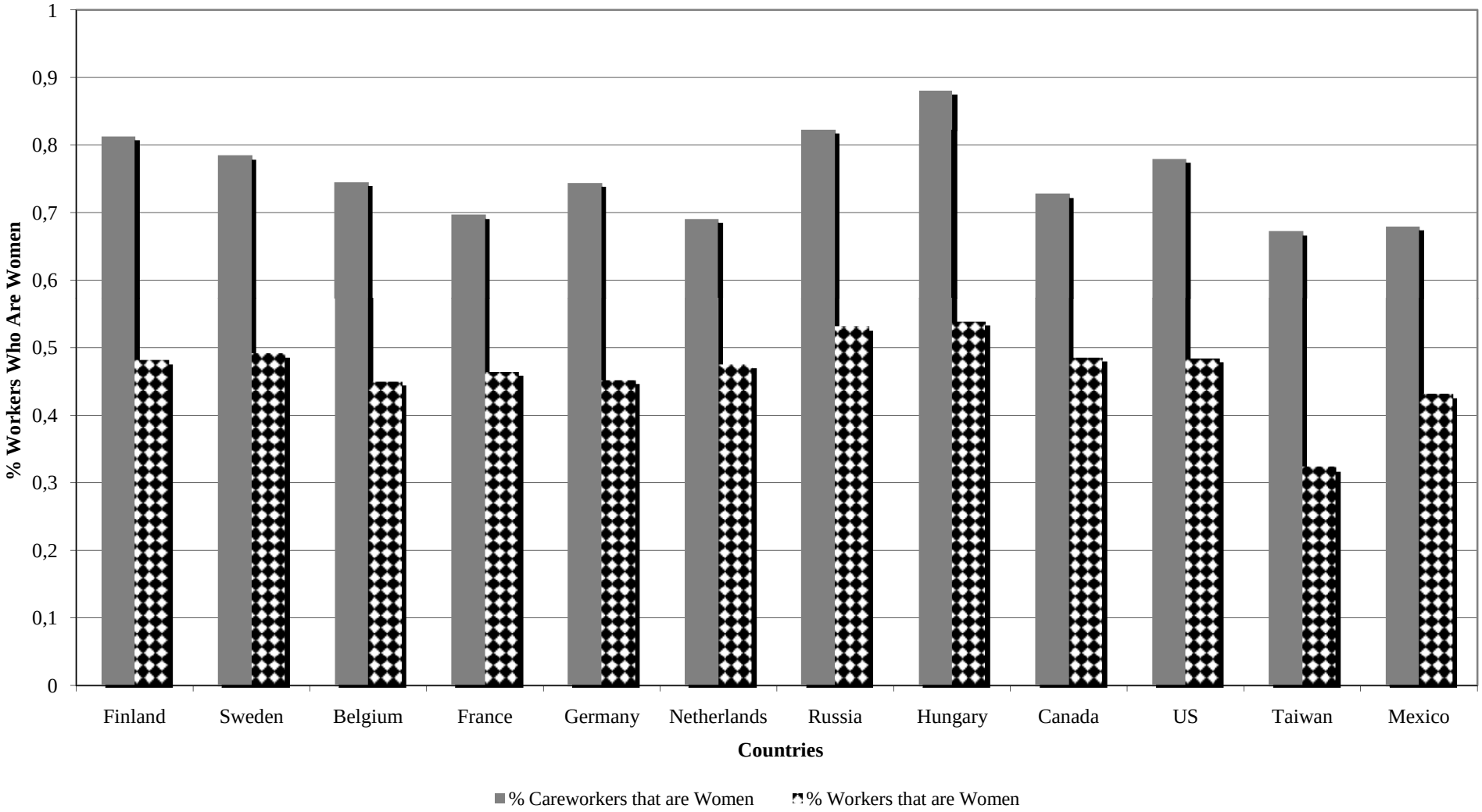

Figure 3a: Effect of Care Sector Employment on Men's Earnings in Relation to Income Inequality Measured by the Gini Coefficient

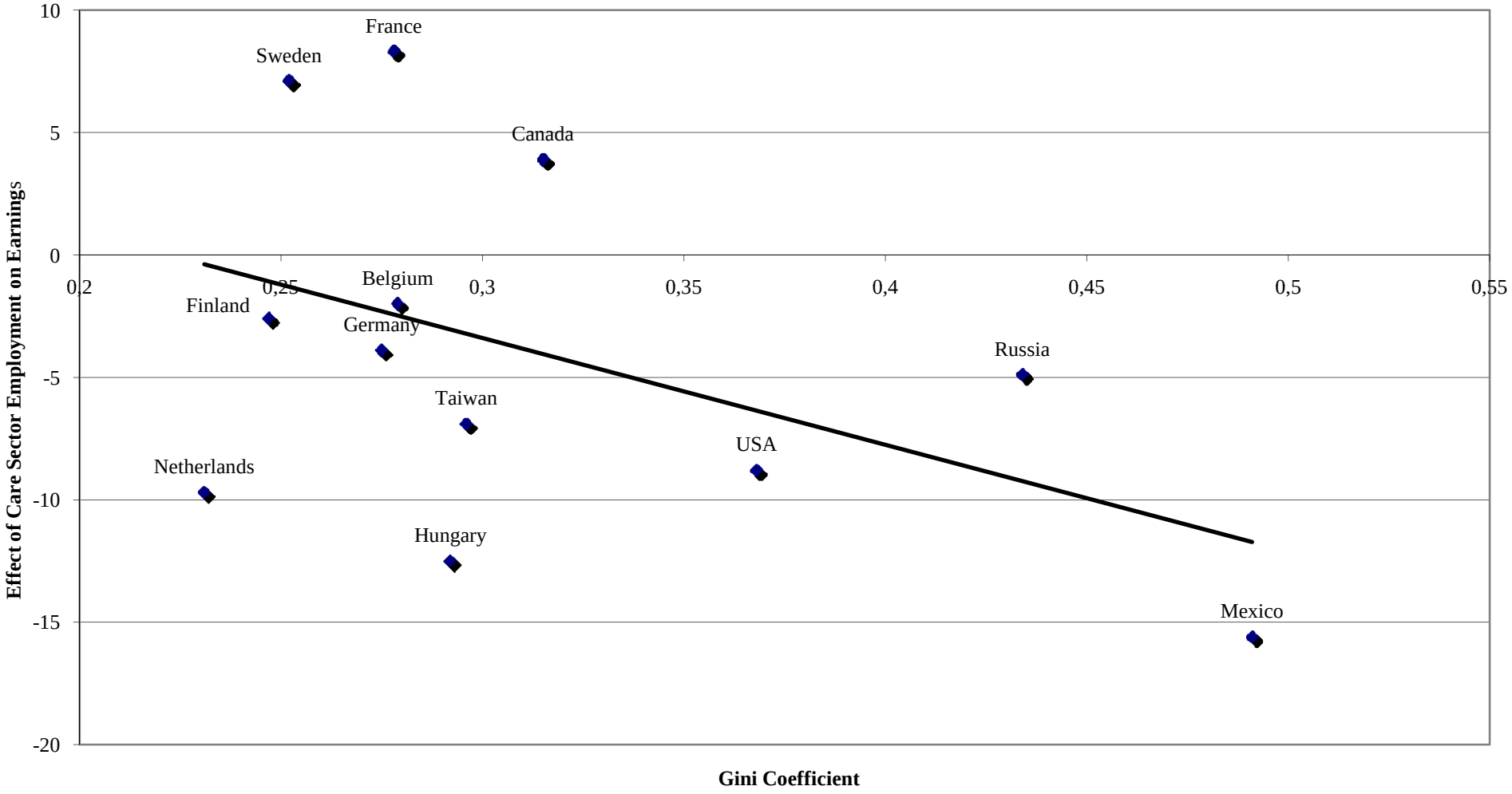

Figure 3b: Effect of Care Sector Employment on Women's Earnings in Relation to Income Inequality Measured by the Gini Coefficient

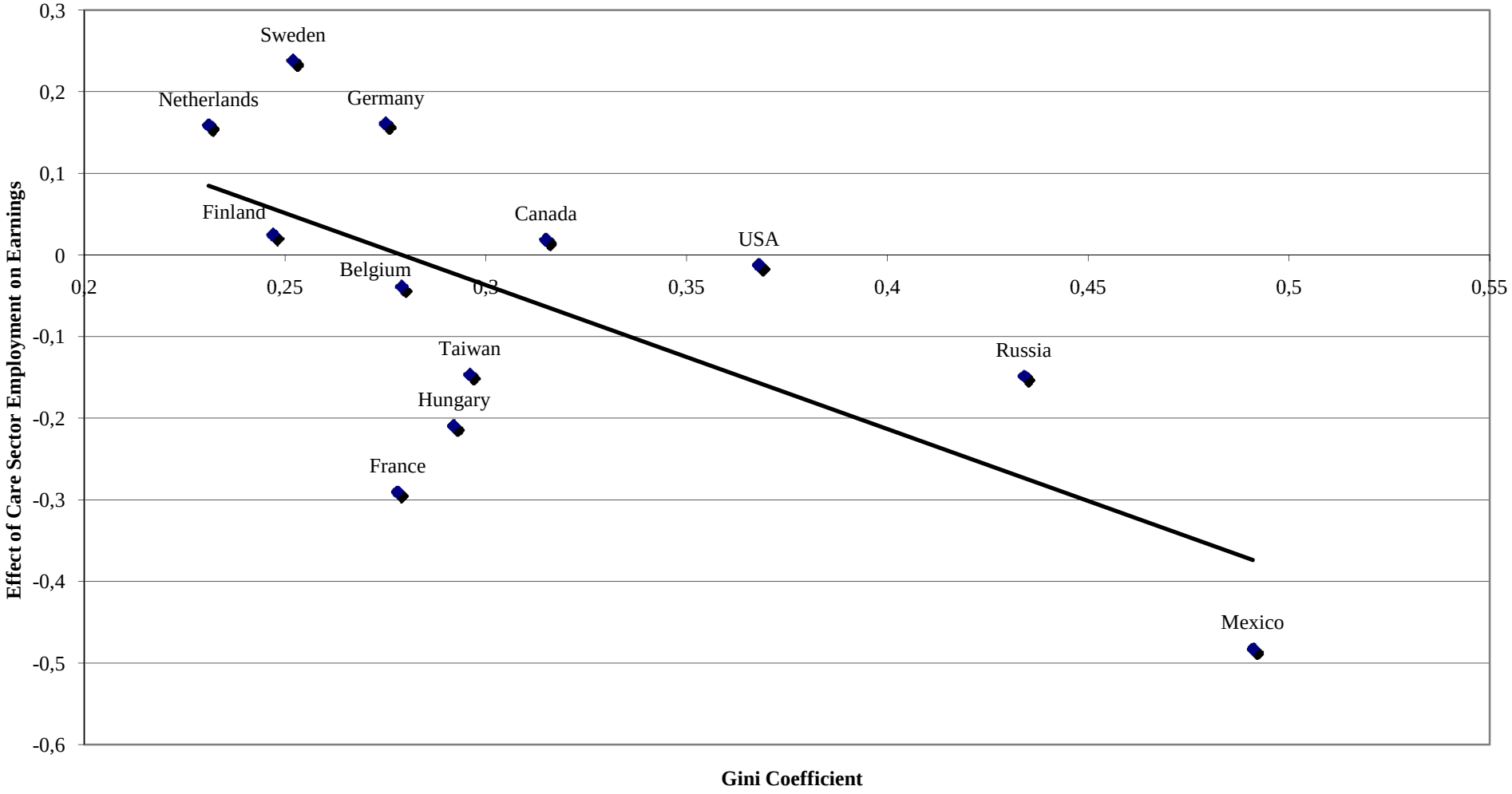

Figure 4a: Effect of Care Sector Employment on Men's Earnings in Relation to Income Inequality Measured by the 90-10 Ratio

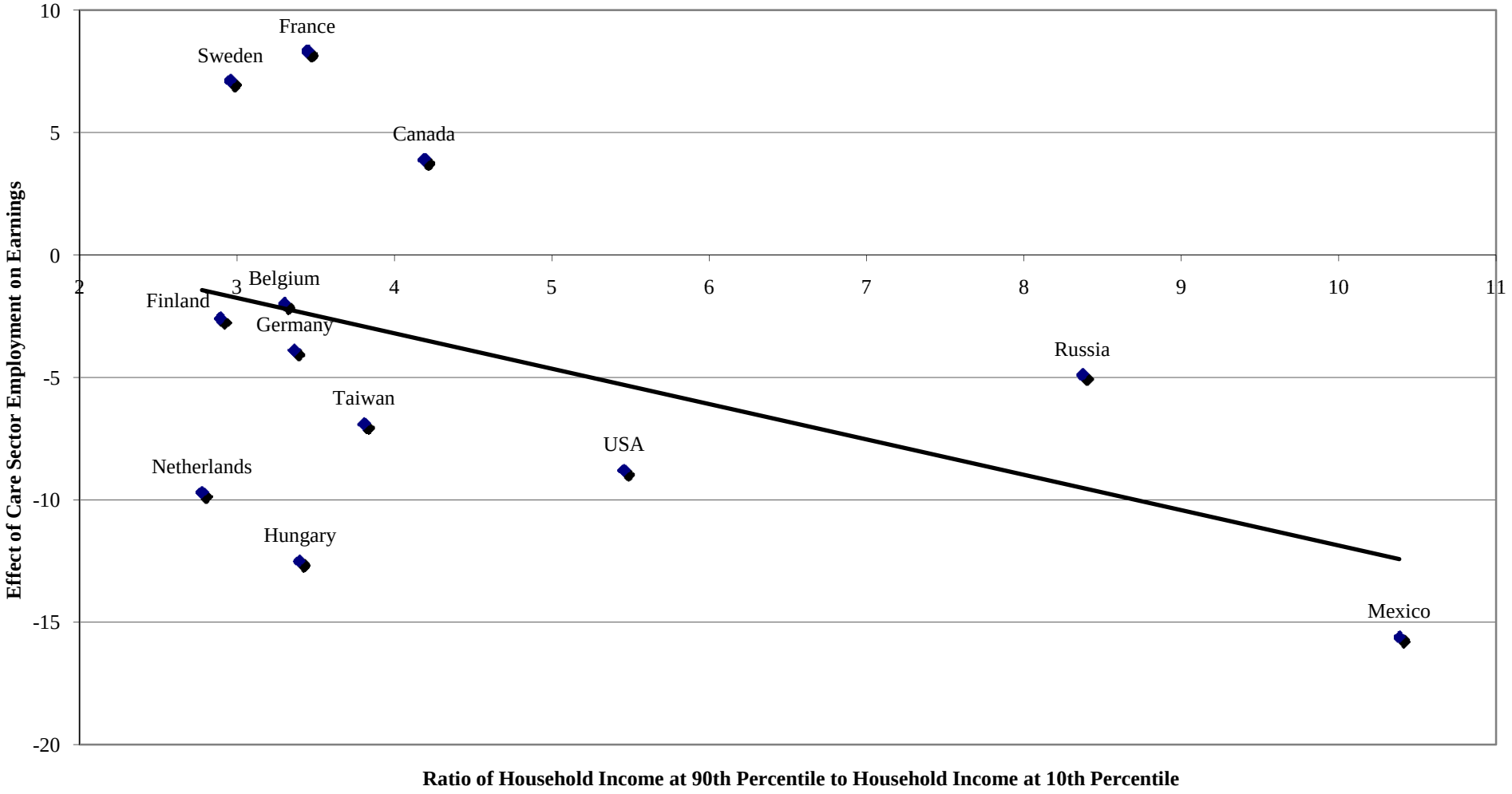

Figure 4b: Effect of Care Sector Employment on Women's Earnings in Relation to Income Inequality Measured by the 90-10 Ratio

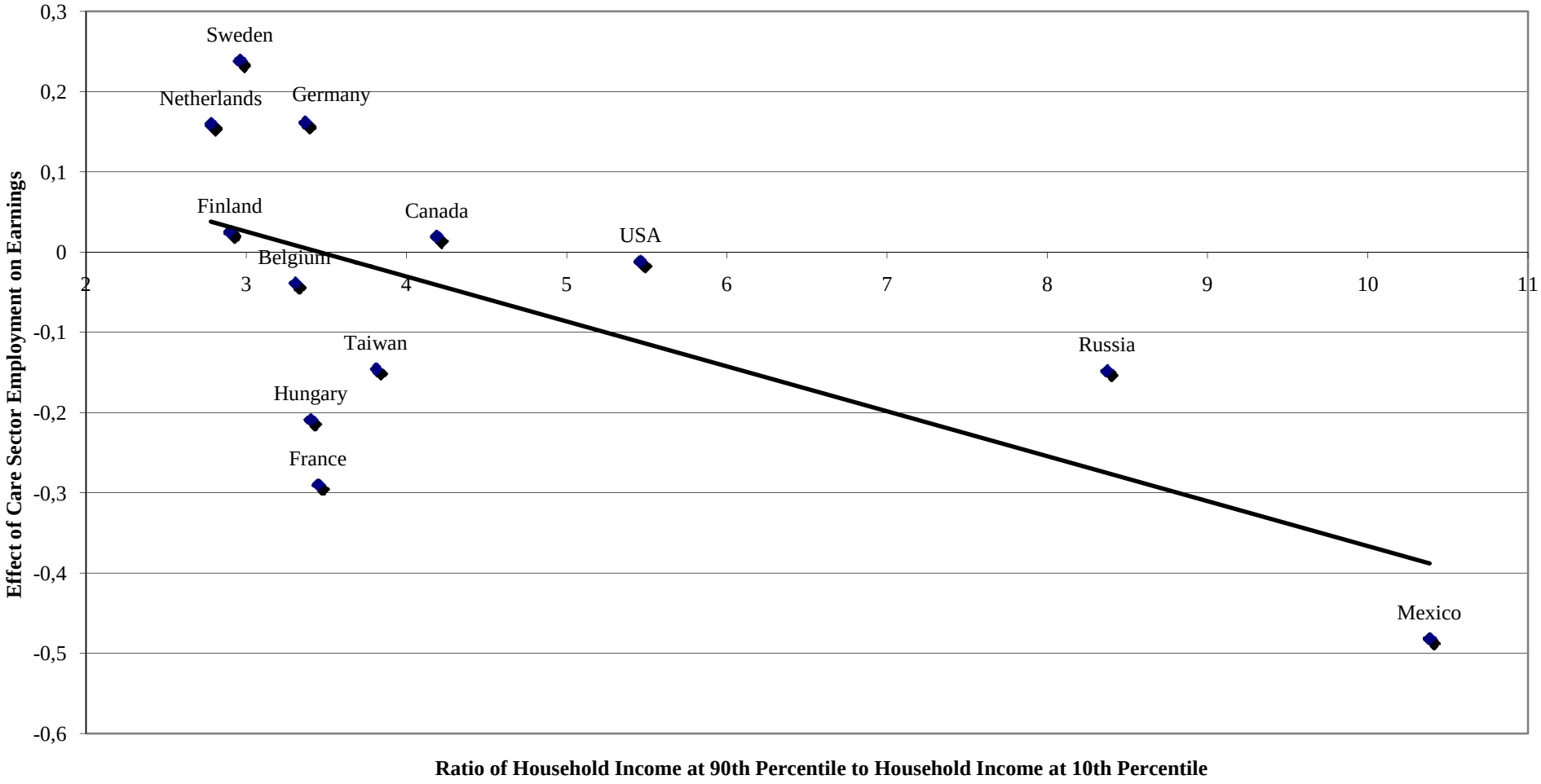

Figure 5a: Effect of Care Sector Employment on Men's Earnings in Relation to Union Density

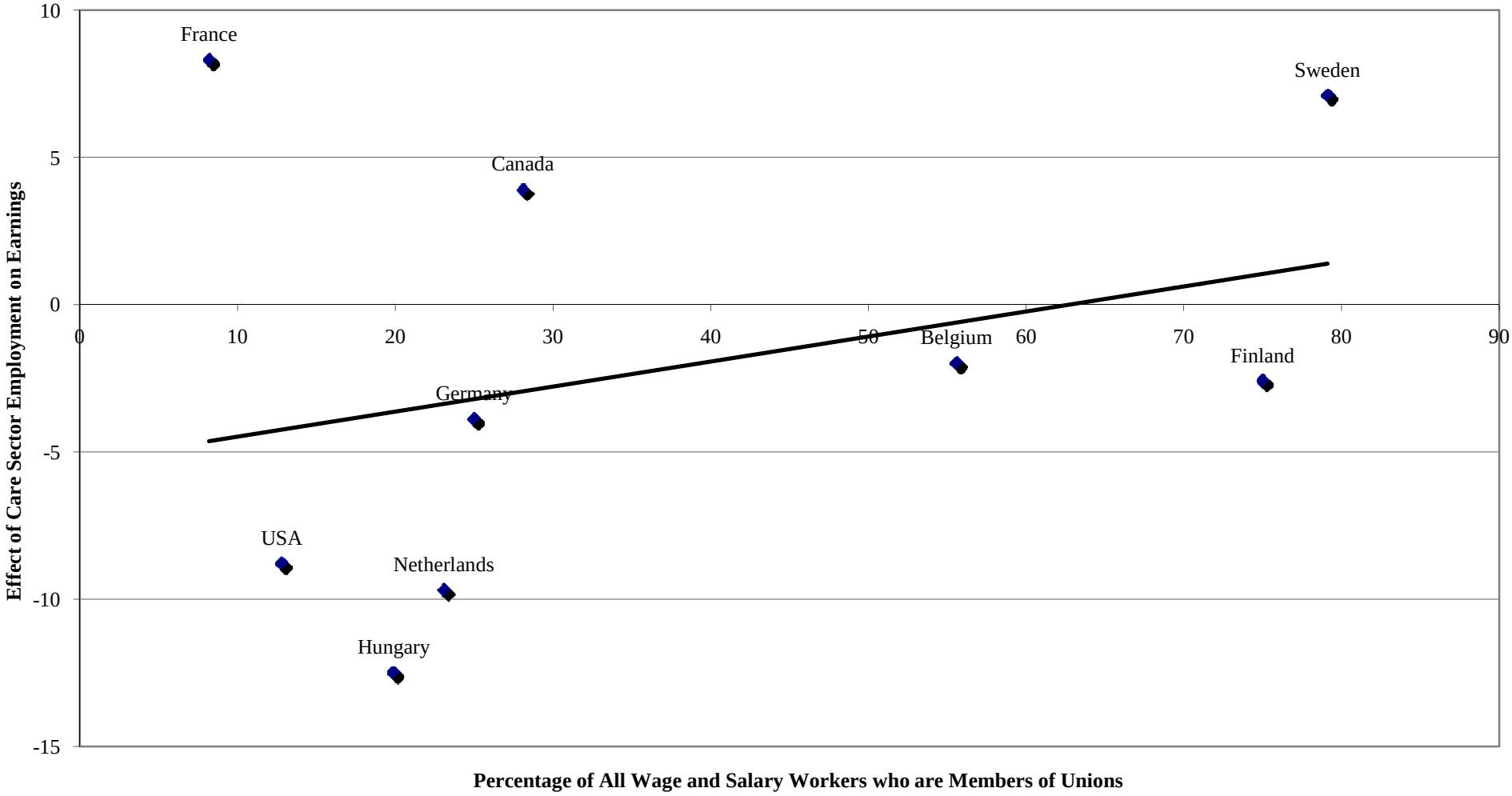

Figure 5b: Effect of Care Sector Employment on Women's Earnings in Relation to Union Density

Figure 6a: Effect of Care Sector Employment on Men's Earnings in Relation to Percent of Care Work Occupations Performed in the Public Sector

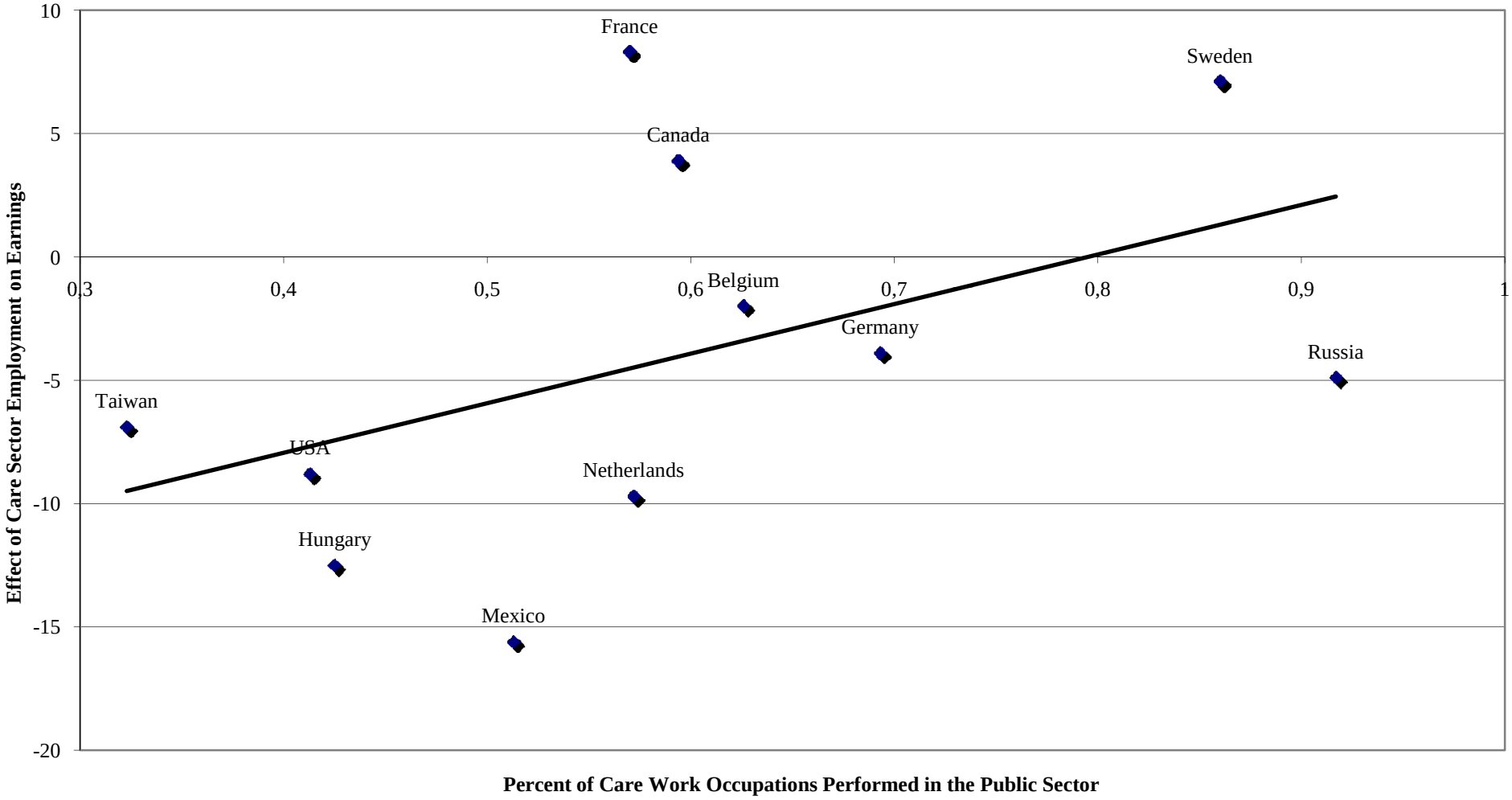

Figure 6b: Effect of Care Sector Employment on Women's Earnings in Relation to Percent of Care Work Occupations Performed in the Public Sector