# Who brings home the bacon? The influence of context

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# Introduction

In many developed countries today, dual-earners couples are widespread and in an increasing number of couples women contribute the largest share of their household income (Winkler et al. 2005, Wang et al. 2013). European countries differ in the observed prevalence of dual-earner families and families where women out-earn their partners (Vitali and Mendola 2014). This paper shows that sensible differences also exist within countries and it contributes to our understanding of the drivers behind the emergence of women as main earners. We study the influence that contexts may have on the probability of observing different earning regimes (men as main earners, equal earners, women as main earners). Drago et al. (2005) identified, for Australia, a typology of female-breadwinner families that distinguished families where women are the main income provider because of an economic reason, i.e. due to a failure of the male partner in the labour market, from families where the main earner status of women is mainly driven by an ideology of gender equity. We test the hypotheses developed in Drago et al. (2005) using a regression approach and for the European context, which offers a unique testing opportunity, given the cross-country heterogeneity in both economic outcomes and gender attitudes.

# Hypotheses

As gender equity increases, it becomes more acceptable for couples to adopt a female-breadwinner model. So, we test the following hypothesis:

H1: Equal-earner and female-breadwinner families are more likely to be observed in those areas where gender equitable attitudes are more widespread.

According to Drago et al. (2005), a second important driver behind the emergence of femalebreadwinner families is male unemployment. In Europe, during the 2008 economic recession, the construction, manufacturing and financial sectors where men are more often employed, were the most heavily hit and male unemployment rate rose more than female unemployment rate (Choand and Newhouse 2012; Harkness 2013). Therefore, we test a second hypothesis:

H2: Equal-earner and female-breadwinner families are more likely to be observed in those areas where male unemployment rates are higher.

Also, it may be that the gender equity assumption is able to explain the emergence of women as main earners in some areas of Europe, whereas the assumption related to male unemployment is able to explain its emergence in other areas. Similarly, the association between gender equity/ economic difficulties and the prevalence of women who out-earn their partners is expected to vary across regions but is expected to be similar in neighbouring areas. We expect to find confirmation of this hypothesis in particular in the areas of Europe mostly affected by the recession (South and East Europe). Our third hypothesis is as follows:

H3: Countries and regions differ in the underlying reasons that drive the likelihood of observing equal-earner and female-breadwinner families.

## Data

We use micro-level data from the European Social Survey (ESS) round 5 (collected in 2010-2011). The dependent variable identifies the earning model of the family and distinguishes families where the man is the main earner (i.e. he provides more than half or all of the household income), equalearner families (i.e. the partners provide about the same) and families where the woman is the main earner (i.e. she provides more than half or all). Our choice of explanatory variables follows the discussion presented in the introduction: male unemployment rate (age 25-64) in the region gathered from the Eurostat Regional Database and an indicator of gender equity constructed from the ESS data by averaging across regions attitudes towards gender equity as measured by the survey question "when jobs are scarce, men should have more right to jobs than women" and reported by respondents of any age (to avoid endogeneity). We also include an interaction between the two contextual variables. We restrict our attention the sub-sample of individuals aged between 25 and 54 years old (prime earning age), who are currently co-residing with a heterosexual spouse or partner.

## Method

This contribution will make use of geographical maps and multilevel models to highlight the existing spatial heterogeneity in the prevalence of women who out-earn their partners (as opposed to equalearner and male-breadwinner families) across and within European countries. We assess to what extent the prevalence of the three different earning models is linked to gender equity and/or economic difficulties by implementing a series of three-level multinomial logistic regression models were individuals are nested into regions within countries.

#### **Preliminary Results**

Figure 1 shows that for some countries (Switzerland, Denmark, Estonia) we find very little withincountry variation in the proportion of women who are main earners across regions. For the majority of countries, however, the prevalence of couples with women who out-earn their partners varies substantially across regions. For instance, in Spain and France the percentage of couples where women are main earners ranges from less than 5% in some regions to more than 20% in others. However, it is possible to detect some clusters of regions sharing a high prevalence of women who are main earners. Interestingly, we find a remarkable difference between East and West Germany. In some cases, these clusters are formed by neighbouring regions which belong to different countries. This is the case, e.g. of Norway and Sweden, or Ukraine, Hungary and Poland.

Figure 1. Proportion of women who earn more than half of the household income by region (quintiles), 2010



Estimates from the multilevel model (not shown) confirm the expected sign for the usual individuallevel correlates of being in a couple where the woman is the main earner (male respondents tend to under-report that their partner is an equal/the main earner; when the woman achieved high education and higher education than her partner it is more likely that she earns the same or more income while there is a negative association with the number of children in the household). We find that the context where the couple lives is associated with the likelihood of being in one of the earning models, as summarized by the contour plots (Figure 2). Male-breadwinner families are more likely to be found in areas with low unemployment rate for males and with low gender equity (Figure 2, upper left panel). Both gender equity and male unemployment rate in the region of residence show a positive association with the probability of being equal-earners as opposed to a male-breadwinner family: the predicted probability of being equal earners increases with both male unemployment and gender equal attitudes in the region of residence (Figure 2, upper right panel). We find a significant negative interaction between male unemployment and gender equity in this case, meaning that the effect of one of the two contextual variables is somehow "mitigated" by the other. For example, in areas where gender equity is lower, the effect of male unemployment is higher and vice versa. Male unemployment rate results to be positively and significantly associated with the probability of being in a female-breadwinner family, while gender equity results unimportant and not statistically significant in this case (Figure 2, bottom panel).

# Conclusions

Female-breadwinner families are mainly driven by economic reasons, while the diffusion of equalearner families, in addition to being associated with economic reasons, is also positively associated with the diffusion of gender equity. Hence, gender equity encourages equality among partners in the contribution to the household income but it fails to explain the emergence of women as main earners. In the final paper we will present results related to H3 and hence discuss more the random effects of our model, i.e. we will present how individuals in different countries and regions deviate from the average marginal effects that we have presented using the contour plots.



**Figure 2**: Contour plots showing the predicted probability of being in an equal-earner (left), female-breadwinner (right), and male-breadwinner (bottom) family by level of male unemployment and gender equity in the region.

**Note**: Predicted probabilities are estimated from a 3-level multinomial logistic regression where y=male breadwinner family (ref.), equal earners, female-breadwinner families. Individual-level explanatory variables: gender of respondent (male=ref.), woman's educational attainment (low=ref.), education differential between partners (women achieved lower education=ref.), n. children in the household. Regional-level explanatory variables: male unemployment rate, gender equity, male unemployment rate \* gender equity.

#### References

- Cho, Y. and Newhouse, D. 2012. How Did the Great Recession Affect Different Types of Workers? Evidence from 17 Middle Income Countries. *World Development*, 41: 31–50.
- Drago, R., Black, D. and Wooden, M. 2005. Female breadwinner families. Their existence, persistence and sources. *Journal of Sociology*, 41(4): 343–362.
- Harkness, S. (2013). Women, families and the 'great recession' in the UK. In: Ramia, G., Farnsworth, K. and Irving, Z., eds. Social Policy Review 25: Analysis and Debate in Social Policy. Bristol: Policy Press.
- Vitali, A. and Mendola, D. 2014. The emergence of women as main earners in Europe. Paper presented at Population Association of America 2014, Boston.

Wang, W., Parker, K. and Taylor, P. 2013. Breadwinner Moms. Pew Research Center: 1-28.

Winkler, A. E., McBride, T. D., and Andrews, C. (2005). Wives who outearn their husbands: A transitory or persistent phenomenon for couples? *Demography*, 42(3): 523–535.