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Gender Norms and Income Misreporting within Households

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Gender Norms and Income Misreporting within Households

Abstract

We revisit the prominent finding that women's incomes are disproportionately often observed just below the income of their partner. So far, this bunching has been explained by couple formation or couples' labor market decisions. We propose an additional mechanism: income misreporting in surveys. Drawing on survey and administrative data, we show that income misreporting accounts for the discontinuity in the distribution of women's relative incomes just below the point where a woman outearns her partner. This misreporting is best explained by the role of gender norms in individuals' self-portrayals and self-perception.

JEL-Codes: D100, J010, J160.

Keywords: gender norms, women's relative income shares, combination survey and administrative data.

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1 Introduction

Norms are understood as an important driver of human behavior. This has been acknowledged by economists not least since the seminal work of Akerlof and Kranton (2000). In the last decade, gender norms have received increased interest and economists have been striving to understand the extent to which they impact economic agents' behavior (see, e.g., Fernández et al., 2004; Fortin, 2005; Alesina et al., 2013; Fernández and Fogli, 2009; Teso, 2018). However, the empirical identification of norms remains a challenge.

We show that a comparison of surveyed and actual outcomes offers the potential to shed light on norms. If survey responses are affected by norms, this results in systematic deviation between surveyed and actual outcomes. Since there is little incentive to systematically misreport in surveys other than norms, such deviations are a promising and novel way to quantify norms.¹ In applying this strategy, we document that women systematically underreport their income in order not to outearn their partner.

We use this strategy and revisit the findings in recent work by Bertrand et al. (2015). They study women's income as a share of total couple income. They document that the distribution of female income shares features a distinct discontinuity just above 50 percent, the point after which a woman would outearn her partner. The peculiar bunching below this unwritten margin cannot be explained by standard models of the marriage market. Bertrand et al. (2015) argue that it is rather an expression of traditional gender norms prescribing that women must not earn more than their partner. Two mechanisms, couple formation complying with this norm and women actively adapting their labor income in order not to outearn their partner have so far been the primary explanations for this discontinuity. We concur that the discontinuity and the mass point at 50 percent of relative income are driven by gender identity, and show that strategic misreporting is essential in explaining the discontinuity in female income shares in survey data.

Empirical evidence building on the results of Bertrand et al. (2015) is in line with this result, with more distinct discontinuities found in studies using survey data. Wieber and Holst (2015), e.g., find a strong discontinuity in the relative income distribution in Germany of roughly 60 percent, i.e., the mass just above the threshold is 60 percent lower than below. Studies drawing on administrative data, on the other hand, rather conclude that the discontinuity is less distinct (Eriksson and Stenberg (2015), 22.5 percent in Sweden; Binder and Lam (2018), 12.4 percent in the US). However, other potential explanations for these differences might lie in the institutional framework of a country. Collective agreements, minimum wages, or a progressive income tax schedule with individual taxation may amplify incentives for couples to bunch at exactly fifty percent, which is reflected in a large spike at this point of the distribution. Binder and Lam (2018), Eriksson and Sten-

¹Gil and Mora (2011), for example, document that social norms play a role in the misreporting of individuals' weight. Martinelli and Parker (2009) relatedly find that misreporting in self-reported program eligibility surveys is not only driven by underreporting due to material incentives but also by overreporting of goods with 'status' value. Furthermore, Funk (2016) documents for Switzerland that socially acceptable norms are an important driver of responses to post-vote surveys.

berg (2015), and Zinovyeva and Tverdostup (2018) indicate that the spike at the point where spouses earn the exact same income consists mainly of couples working in the same sector or for the same employer. We argue that an additional factor is whether the used data is subject to reporting biases. Descriptive evidence for the US is also in line with the hypothesis that misreporting might be an important factor in explaining the differences, finding that women’s deviation between surveyed and actual incomes is higher in couples where the woman earns more than her husband than in couples where the woman earns less than her husband (Murray-Close and Heggeness, 2018).

We draw on data for Switzerland, which offers the opportunity to compare reported and administrative incomes for the interviewed person. The survey also includes information on the reported income of a respondent’s partner, which is provided by the surveyed individual. In a first step, we show that there is a discontinuity in the distribution of reported relative incomes in Swiss survey data. We find that, irrespective of the gender of the respondent, there is a sharp drop of about 70 percent at the threshold where a woman would outearn her partner. In a second step, we evaluate whether some of the discontinuity is due to systematic income misreporting around the threshold value. Even though there is no economic incentive to systematically misreport one’s income at this margin, we find that women seem to underreport their income to fall just below the threshold of 50 percent. We bolster our finding that misreporting around the threshold is indeed related to gender norms using four different strategies: We use the sex composition of children, within couple age difference, inherited norms of migrants, and gender norms in the municipality of residence as proxies to identify groups who we suspect to hold more traditional gender norms. Our results show that women in groups with more traditional gender norms underreport their incomes to a larger extent than women with more liberal gender norms. For men, misreporting behavior around the margin is less conclusive.

Simulating the distribution of relative incomes by correcting for misreporting of own incomes, we find that the discontinuity vanishes and thus that misreporting can account for the bunching mass just below the threshold. An in-depth analysis of male responses strongly suggests that males follow mixed strategies to circumvent a norm violation, compared to females who follow a clear strategy of misreporting at the margin. Men either underreport the income of their partner such that she earns substantially less, they misreport her income at the margin, or they overreport their own income at the margin.

We document that the discontinuity in the distribution of females’ relative incomes in survey data is indeed driven by gender norms materializing in systematic income misreporting. The question whether misreporting of incomes is equally relevant in other countries and different institutional settings is up for future research. However, our evidence clearly reveals that potential survey bias has to be considered when working with survey items that are prone to distortions through social norms. Furthermore, we demonstrate that the combination of survey and administrative data may be a novel approach to measuring norms.

2 Data

Our analysis draws on the largest Swiss labor market survey (Schweizerische Arbeitskräftererhebung, SAKE), which is enriched with information from different social insurance registers. This combined data set is called social security and labour market (SESAM). The survey is based on telephone interviews where the respondent within a household is randomly chosen.

Our main analysis is based on the survey years 2002, 2005, 2008, 2012, and 2015. In these years, the special questionnaire "Social Security", including questions about partner income, was administered in addition to the basic questionnaire. Based on this data, we can determine the relative income share of women, and in addition know the surveyed individual's actual labor income. Our main sample consists of couples with Swiss citizenship or permanent residence permit, and where both partners are in paid employment.² Survey income can be stated as either hourly, monthly, or yearly gross or net income. The category most commonly chosen is monthly gross income, picked by 36% of individuals. In order to avoid biases from approximations, we focus on individuals who report both their own as well as their partner's income as monthly gross or net income. We restrict the sample to individuals employed in the twelve months prior to the interview. We exclude all individuals who work shift since for them, some part of their income is varying from month to month. We also exclude couples where any one partner is self-employed as administrative income may be distributed between partners such that taxes are minimized. We further exclude all same sex couples and proxy interviews, as well as couples where one or both partners are above the retirement age of 65. Finally, we exclude individuals for whom the difference between surveyed and administrative income exceeds the 90th percentile or falls below the 10th percentile. This leaves us with a sample of 9,316 couples for the analysis.

The main variables of interest are:

- *Administrative income*: Measures an individual's actual earnings as recorded in social insurance registers. The variable reports total monthly gross income from employment in the month of the interview.
- *Survey income*: Measures the reported income of the surveyed individual and of their partner, stated by the surveyed individual.³
- *Relative income*: Measures the relative income share of women in the household of the respondent based on surveyed income. We define it as
$$[Survey\ income\ woman / (Survey\ income\ man + Survey\ income\ woman)] \times 100.$$

²Foreigners with temporary residence permit are exposed to a special tax scheme, which among other things entails taxation at source. They might thus report their income differently (see, e.g., Schmidheiny and Slotwinski, 2018).

³ The original questions are displayed in Appendix A.3.

- *Income deviation*: Captures an individual’s deviation of their own income and is defined as

$$[(Administrative\ income - Survey\ income)/Administrative\ income] \times 100.$$

3 Results

Our empirical results are presented in four steps: In a first step, we test for a discontinuity in the distribution of females’ relative incomes. In a second step, we analyze whether there is systematic misreporting of individuals’ incomes at the margin where a woman would outearn her partner. In a third step, we reinforce the finding that systematic misreporting around the threshold where a woman would outearn her partner is linked to traditional gender norms. In a last step, we assess the extent to which the observed discontinuity can be explained by systematic misreporting around the threshold and whether systematic misreporting leads to biases in the distribution of relative incomes more generally.

3.1 Distribution of surveyed female relative income

To test for a discontinuity in the density of surveyed relative income shares at the 50 percent threshold, we apply the empirical likelihood-based test by Otsu et al. (2013), which has several advantages over the previously proposed approach by McCrary (2008).⁴ In a nutshell, it estimates the discontinuity in separate local (linear) likelihood density estimates (LLD) to both sides of the threshold. Consistently, for graphical evidence, we plot two LLD estimates to both sides of the threshold of a relative income of women of 50 percent.⁵

Figure 1 presents the overall distribution. The distribution visually features a clear spike just below the 50 percent margin and a clear discontinuity. This suggests the presence of a discontinuity in relative incomes, just as in other countries investigated earlier. We observe rather similar and systematic discontinuities no matter if women or men are surveyed, as shown in Figure A.1 and Table A.1 in Appendix A.2.⁶

The overall discontinuity amounts to about 4 percentage points. The relative size of the discontinuity is about 4. In other words, the point estimate just below the threshold is about 4 times as high as the estimate just above the threshold. Or to put it differently, the mass drops by about 70 percent at the threshold.⁷ As this bunching is a local phenomenon, the relative size becomes even larger, about 8 or 88 percent, if we use half the bandwidth, i.e., 3.5 percent (see Table A.2 in Appendix A.2).

⁴Please see Otsu et al. (2013) for more details about the approach.

⁵More precisely we use the local likelihood implementation (locfit) in the Chronux software package for Matlab (Bokil et al., 2010) to fit LLDs to our data.

⁶We choose the bandwidth to be 7 percent, as this is the optimal bandwidth for the later RDD estimates, and we prefer to base the evidence on the same sample. The optimal bandwidth following McCrary (2008) would be 12.89 and that proposed by Cattaneo et al. (2018) would be 5 percent. Table A.2 in the appendix repeats the density estimates for half the bandwidth, i.e., 3.5 percent.

⁷The conventional McCrary type approach is less precise would, however, lead to the same conclusions. See Figure A.2 in the Appendix.

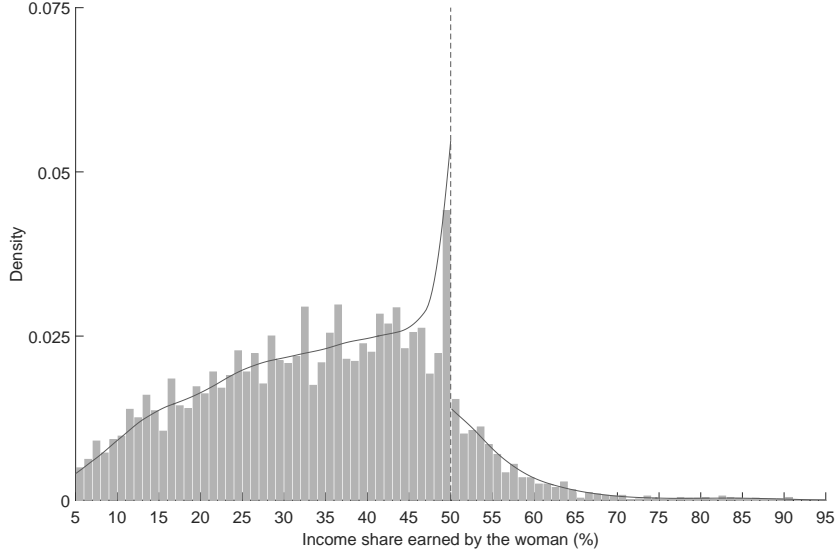


Figure 1: Overall LLD fit of the income share earned by the woman in the household. The solid line represents the LLD fit on both sides of the threshold using a bandwidth of 7 percent. The shaded area represents the histogram of the underlying data in 1 percent bins. The corresponding density discontinuity estimates can be found in row (1) of Table A.1 in Appendix A.2.

3.2 Income misreporting

In this section, we investigate whether some part of the established discontinuity arises as a consequence of systematic misreporting in surveys. If misreporting reflects gender norms, we should observe women underreporting their own or overreporting their partner's wage around the 50 percent threshold of women's relative incomes. If a woman earning slightly more than her partner underreports her income such that it is below her partner's, this will result in two changes: First, the percentage difference between administrative and reported income will increase in absolute terms. Second, since based on surveyed incomes, the woman now earns less than her partner, the couple will find themselves below 50 percent in the distribution of relative income shares. A man whose partner earns just more and who wants to conform with the social norm that a woman should earn less would, respectively, overreport his income. Such behavior would result in a strong selection of individuals around the threshold, where those conforming with the norm are placed just below and those not conforming above the 50 percent margin.

We observe both actual and reported incomes of the surveyed individual and can test the hypothesis that income misreporting is related to the discontinuity. However, we only observe if individuals misreport their own wages, and not if they misreport their partner's wage. If traditional gender norms are reflected in the reporting of the partner's income, this would lead to a shift in relative income to below 50 percent, with no change in misreporting. As we do not observe the partner's actual income, this shift is indistinguishable from a real response to us. In the last section, we propose a strategy that might still help to learn about the manipulation of partner earnings.

The upper panel of Figure 2 shows the graphical representation of income misreporting for women and men in a RDD graph, delineating two local linear smooths from both sides of the threshold. Misreporting is calculated as the deviation between administrative and surveyed incomes, corrected for the overall average deviation, as well as for the mode of reporting (gross, net).⁸ For the remainder of the paper, the terms misreporting, underreporting, or overreporting refer to a divergence from the average deviation between actual and reported incomes. Due to the definition of misreporting, positive values indicate underreporting and negative ones overreporting. The graphs reveal visually that there is a sharp drop in misreporting of women just at 50 percent. In other words, women who would otherwise outearn their partners are more likely to underreport their own income, shifting it to equal or fall slightly below the income of their partner. For men, we see no clear pattern in misreporting around the threshold.

While the RDD nicely visualizes the data, it might not be the right strategy to investigate the particular selection, as it essentially compares the selection of individuals to the left with the selection to the right. The relevant comparison, however, is how misreporting of the selection of individuals around the threshold differs from income misreporting of individuals outside this narrow window. We calculate this divergence using OLS and dummifying out the six percentiles around the margin with the reference category being individuals with a relative income share between 30 percent and 70 percent outside the interval between 47 percent and 53 percent, as presented in Equation 1.

$$\Delta y_i = \alpha + \sum_{k=48}^{53} \delta_k \cdot dk_i + \rho_g + u_i \quad (1)$$

Δy_i is the percentage difference between administrative and survey income. Variables $d48$ to $d53$ indicate whether the reported income share earned by the woman in the couple falls into one of the six percentiles around the threshold, where $d48$ is set to one if relative income is larger than 47 percent and smaller or equal to 48 percent and zero otherwise. The same applies for the remaining indicator variables. Coefficient estimate α shows the average difference between administrative and survey incomes of all couples where the income share earned by women lies between 30 percent and 70 percent and ρ_g indicates whether income is reported as net. The estimates of δ_k measure misreporting for couples with relative incomes around the threshold of 50 percent.

The OLS estimates for women and men are presented in the second panel of Figure 2. They confirm what the RDD graphs suggest: Women in the percentile just below 50 percent underreport their income by about 1.03 percentage points more than the average woman. This estimate is statistically significant and also significantly different from the

⁸The average deviation between administrative and survey income is 11 percent for both men and women if incomes are reported as gross incomes. The average deviation is 21 percent for women and 19 percent for men if incomes are reported as net incomes. Most respondents report income as gross. The overall deviation can be explained by the fact that the wage bill does not correspond to the bank transfer since social security contributions are deducted directly by the employer. Taxes, on the other hand, are not deducted at the source.

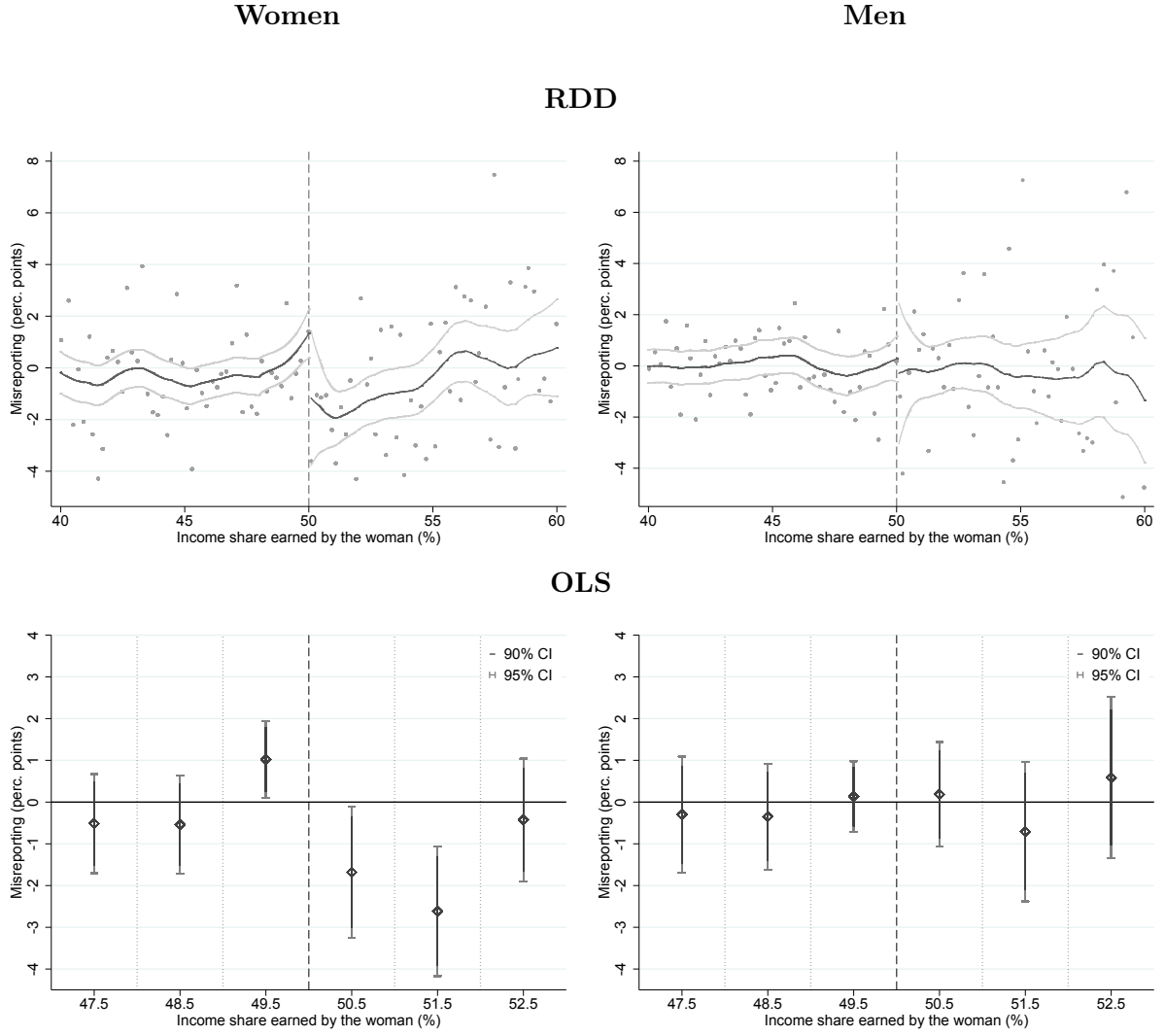


Figure 2: Income misreporting by women and men around the threshold. The graphs in the first panel show local linear smooths of individuals' income misreporting, using a bandwidth of 2 percent. The light gray lines indicate the 95 percent point wise confidence bands and the gray dots raw averages of the dependent variable in 0.2 percent bins. The corresponding RDD estimates can be found in columns (3) and (6) of Table A.3.

The graphs in the second panel show OLS estimates of individuals' income misreporting, i.e., the deviation from the average between actual and stated income, for the three percentiles below and above 50 percent of household income earned by women. The corresponding estimates can be found in row (1) of Tables A.4 and A.6 in Appendix A.2.

estimate for the group just above 50 percent, with a difference between both of 2.71 percentage points. This approximately corresponds to the RDD estimate. The results suggest that many women in the 50th percentile of the distribution of reported income shares would outearn their partner based on actual incomes, but shift their incomes below those of their partner in surveys to comply with traditional gender norms. The observation that women who stay just above the threshold show systematically lower misreporting is reasonable given that this represents a selection of women not conforming to traditional gender norms. It is conceivable that these women are more conscious about their income

and that their reporting is therefore closer to their actual earnings. Moving further below the threshold, the estimates become insignificant. This is in line with the argument that traditional gender norms state that a woman should not outearn her partner. Once this is achieved, there is no reason to further understate the income.⁹ The OLS results confirm that there is no systematic misreporting of their own income by men around the threshold.

4 Norms and income misreporting

In this section, we provide additional support for the conclusion that misreporting is driven by gender norms. We use four proxies for gender norms to test whether groups which we would expect to be more traditional indeed misreport to a larger extent. We use gender composition of children, age differentials within a couple, the cultural background of immigrants, and regional variation in gender norms as measured by the share of full-time working women in the municipality of residence as proxies to validate that the documented income misreporting is indeed related to traditional gender norms. We estimate an interaction model, as outlined in equation 2, including all individuals for whom we are able to identify the relevant norm proxy.

$$\Delta y_i = \nu + \beta \cdot \text{traditional}_i + \sum_{k=48}^{53} \theta_k \cdot dk_i + \sum_{k=48}^{53} \gamma_k (dk_i \cdot \text{traditional}_i) + \rho_g + \epsilon_i \quad (2)$$

In addition to the variables included in equation 1, we allow average misreporting to differ for the more traditional group by adding a group indicator traditional_i . To capture deviations from average misreporting for this group, we include a full set of interaction terms for the percentile dummies around the threshold in relative incomes. The γ_k coefficients allow us to determine whether strategic misreporting in order to fall below the 50 percent margin is more pronounced for individuals whom we expect to hold more traditional gender norms.

Gender norms proxied by the sex composition of children

As a first test, we turn to the sex composition of children as a proxy for parents' gender norms and examine how this is related to misreporting around the threshold. Social scientists have long demonstrated that parents of only daughters are more likely to be in favor of public policies supporting gender equity than parents of only sons or of both sons and daughters (see e.g., Warner 1991, Warner and Steel 1999, Washington 2008). Applying this argument to our setting, we expect that parents with only daughters have more liberal gender norms than parents with both sons and daughters or only sons. Furthermore, child gender can be considered exogenous in the current setting. We restrict

⁹The number of observations further up the distribution becomes very scarce, contributing to the wide confidence intervals.

our sample to parents and define parents who only have daughters as the reference group which parents with either only sons or with children of both genders are compared to.¹⁰

As indicated in the first panel of Figure 3, mothers of only daughters do not misreport their income, whereas mothers of only sons or of sons and daughters underreport their income. This finding is in line with previous literature and gives further indication that misreporting around the 50 percent threshold is a good measure of the strength of gender norms. For fathers, there is no difference in misreporting around the threshold.

Gender norms proxied by the within couple age difference

The second strategy is based on within couple age differences. Following Folke and Rickne (2016), we use the within couple age difference as a proxy of an individual’s gender norms when entering the relationship. Couples where the man is older than the woman are on average more compliant with traditional gender norms. In our sample, men are at the median two years older than their partner. We divide the sample at the median and define couples where the man is more than two years older than the woman as being more traditional when it comes to gender norms.

The results of the interaction model are shown in the second panel of Figure 3. They confirm the results of the previous analysis: Women in couples where the man is more than two years older underreport their income while there is no strategic misreporting of incomes by women in less traditional couples. Again, there is no clear pattern for men.

Gender norms proxied by individuals’ inherited norms

In a third step, we test whether systematic income misreporting around the threshold is linked to inherited cultural norms in the origin countries of migrants. We approximate cultural norms by responses to relevant questions in the World Value Survey (WVS).

We exploit the fact that Switzerland has a comparatively high share of immigrants and apply the epidemiological approach suggested in Fernández and Fogli (2009). We approximate an individual’s norms by gender norms in the country of their ancestry. The basic idea is that individuals take part of the culture (through socialization) with them when emigrating. These norms are to some extent also transmitted intergenerationally. As these individuals live and partly grow up in the same country and institutional setting, any difference in their behavior should emerge through these transmitted gender norms. Traditional gender norms are proxied by average agreement of all employed women with the statement “When jobs are scarce, men should have more right to a job than women” at the country level, as measured in the WVS. Splitting countries at the sample median, we define two types of origin countries: Countries where average agreement is lower, which

¹⁰Parents are defined through the household structure. Only couples where either their common children or one of the partner’s children live in the same household are defined as parents.

we would expect to hold less traditional gender norms, and countries where agreement is higher, which we expect to hold more traditional gender norms.¹¹

The results presented in panel 3 of Figure 3 show that women with origins in more gender equal countries do not misreport their income around the threshold, while women from more unequal countries in terms of gender norms do. This again supports the proposition that women’s misreporting is related to traditional gender norms. For men, however, we again do not see any strategic misreporting around the threshold.

Gender norms proxied by municipality characteristics

In a last step, we test whether systematic income misreporting around the threshold is linked to an individual’s environment. We consider norms in the municipality of residence and explore whether living in more traditional municipalities is related to misreporting. As shown by Lalive and Stutzer (2010), individual attitudes towards appropriate wages of women are strongly affected by gender norms in the municipality of residence. We measure a municipality’s norms by average female full-time employment, defining municipalities with a full-time share below the sample median (25.8 percent) as traditional.¹² As the fourth panel in Figure 3 shows, we find that there is no significant difference in misreporting of women by municipality type. On the other hand, men’s income reporting seems to be related to the norms prevailing in the municipality of residence: Men living in an environment where women work to a lesser extent seem to hold more traditional gender norms themselves. They overreport their own income, which shifts their income just above their partner’s. This difference might either measure the effect of living in such a municipality or capture a specific selection of individuals choosing to live in more traditional municipalities.

The findings of the four sub-analyses are consistent with gender norms as the primary driver of misreporting around the threshold where the woman and the man in a couple have equal earnings. Especially misreporting of women is closely aligned with more traditional gender norms, with only mothers of just daughters, women choosing a partner that is approximately the same age or younger, and women with origins in more gender equal countries not strategically underreporting their incomes in order not to outearn their partner. For men, the picture is less conclusive. While overall they do not manipulate their own earnings, we find overreporting for those residing in traditional municipalities.

¹¹Detailed information on how we determine an individual’s ancestry and the definition of equal and unequal countries can be found in Appendix A.1.

¹²The female full-time participation share per municipality is calculated from the Swiss Structural Survey (Strukturerhebung) between 2011 and 2015.

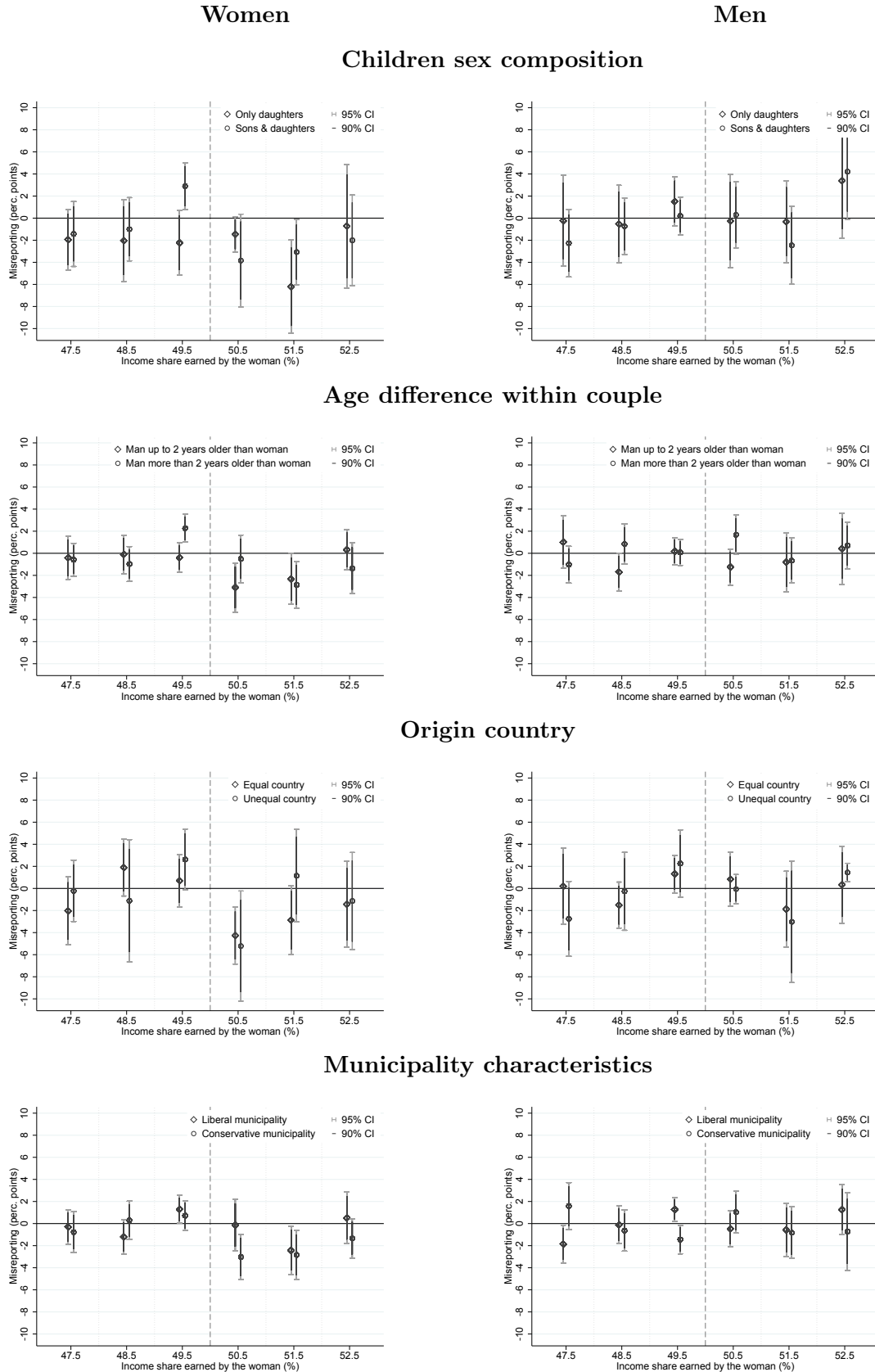


Figure 3: Income misreporting around 50 percent of household income earned by women for different child gender compositions, couple age compositions, origin countries, and municipality characteristics. The graphs present the OLS estimates of the interacted model of individuals' income misreporting for the three percentiles below and above 50 percent of household income earned. The model distinguishes between individuals in couples with a value of the proxy variable suggesting less traditional vs. more traditional gender norms. The corresponding estimates can be found in rows 2 to 4 in Tables A.4 and A.6, as well as Tables A.5 and A.7, in Appendix A.2.

5 Discussion

This section assesses the extent to which the documented systematic misreporting can account for the discontinuity in the distribution of women’s income shares in our sample and provides a more in depth discussion of men’s income reporting behavior.

5.1 Distribution controlling for misreporting

We apply a back of the envelope simulation to shed light on the extent to which misreporting drives the discontinuity found. We simulate the *corrected* distribution of women’s relative incomes by adding, respectively subtracting, misreporting exceeding the average deviation of surveyed to actual incomes for each individual in the sample.¹³ We then recalculate females’ relative income shares using this *corrected income* and re-estimate the distribution of women’s relative incomes. This allows us to approximate the distribution were there no systematic differences in misreporting of respondents’ income across the distribution of income shares.

The simulated density accounts for misreporting of one’s own income around the threshold. It does not account for misreporting of the partner’s income. The simulated density, visualized in Figure A.3 (a), shows that there is considerable reshuffling of mass around the threshold in the sample of female respondents, with the mass above growing. While the relative size of the discontinuity estimate before was about 4, in the corrected data it is only about 1.16 and no longer significant (row (4) in Table A.1 in Appendix A.2). This suggests that in the sample at hand, norm driven misreporting at the margin can account for the observed spike just below 50 percent in the female sample. Comparing this to the changes in the distribution of relative incomes reported by men presented in Figure A.3 (b), we find that there is less change overall. What we observe is a mass shift to the right just around the threshold, which cancels the discontinuity and the spike at exactly 50 percent (see Table A.1 row 5 in Appendix A.2).

The finding that the discontinuity is completely explained by misreporting might, however, not be fully applicable to other countries. In Switzerland there are, for instance, no particular tradition of collective wage agreements applying to whole sectors and no general minimum wage. This makes it less likely for couples to earn exactly the same income, even if working in the same sector. Additionally, married couples are taxed jointly and there is no tax incentive to equalize earnings. Lastly, in contrast to all other studies we are aware of, we do not restrict our sample to married couples only but include cohabitating couples into our analysis. They probably exhibit a lower relationship tenure than married couples on average, making it less likely that they have fully completed the

¹³Average deviations are 12 percent if a women reports her income as gross and 21 percent if she reports as net. The corresponding values for the male sample are 11 percent and 18 percent respectively.

wage adjustment process.¹⁴ There are thus good reasons to expect that some spike due to real labor market responses would persist in different institutional settings.

5.2 Income misreporting by men

As documented above, we do not observe the same overall stable pattern in income misreporting around the threshold by men as we see by women. In fact, men overall do not seem to systematically misreport their income in order to earn slightly more than their partner, the exception being men who live in a municipality with a below median share of female full-time workers. While this can account for the spike in the distribution just below the threshold, as becomes evident in the section above, the moved mass is considerably lower. At the same time, we observe that the shape of the overall relative income distribution reported by men differs strongly from the one reported by women. This indicates that men follow multiple strategies in order to circumvent norm violation.

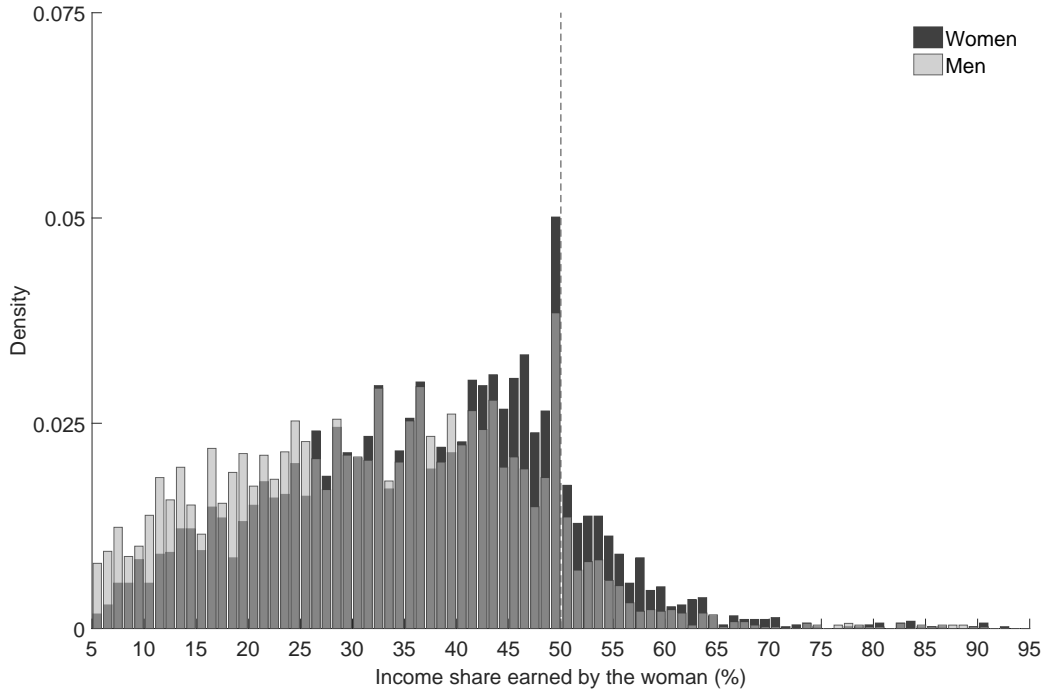


Figure 4: Overall histogram of the relative income distribution for surveyed men and women. The lighter bars represent the distribution reported by men, the darker bars the one reported by women.

Figure 4 presents a direct comparison of the distribution of relative incomes when these are reported by men vs. when incomes are reported by women. It reveals that the fraction of women earning less than 25 percent of household incomes is much higher when incomes are reported by men than when they are reported by women. Furthermore, the

¹⁴In line with this argument, there is a small remaining discontinuity in the distribution of relative incomes in the simulated density of women when we restrict our sample to married couples. All other results remain qualitatively the same.

distribution reported by women is higher between 40 and 65 percent of women’s income shares. In the survey, however, the respondent within a household is chosen randomly. Consequently, the *true* distribution should be the same irrespective of the respondent’s gender. The fact that they differ suggests that one or both groups misreport their own or their partner’s income, which positions them in different regions of the distribution. Based on the results for women, whose strategy of misreporting seems to be to misreport marginally around the threshold, it is to be expected that their distribution is closer to the actual one as we move away from the threshold. This suggests that the excess mass at the lower tail of the distribution reported by men is due to men underreporting their partner’s income to the extent that pushes them to not only slightly below the threshold, but much further down in the distribution. This shift would not be visible in the analyses above, where we concentrate on the percentiles just around the threshold. It should, however, be reflected in the level of female wages reported by men across relative incomes when compared to wages reported by women with a similar relative income share, as shown in Figure 5.¹⁵

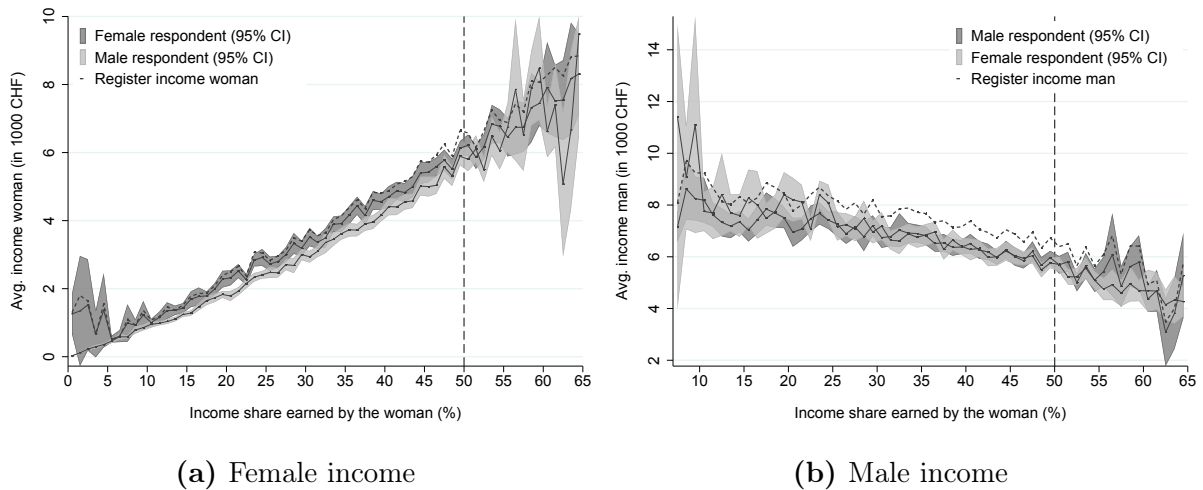


Figure 5: Average female and male incomes by whether the respondent is male or female. The relative income share on the horizontal axis corresponds to the income share based on the respective reported incomes. The graph on the left shows the comparison of female incomes depending on whether they are reported by women or men. Those reported by women are marked by the darker confidence bounds, and female incomes reported by men are marked by the lighter confidence bounds. The graph on the right shows the respective comparison for male incomes. In this case the lighter confidence bounds mark the incomes reported by females and the darker ones the ones reported by men.

Figure 5 (a) visualizes average reported and actual incomes for each percentile of the distributions of relative incomes. It shows that below the 40th percentile, female wages reported by men are systematically and significantly below female wages reported

¹⁵To calculate average incomes for each percentile of the distribution, we first regress log incomes on an indicator *net*, set to one if incomes are reported as net, and calculate residual incomes in order to correct for the percentage difference brought about by the response mode. We then calculated average reported own income, reported partner income, and actual incomes for each percentile of the distribution of relative incomes.

by women for the same percentile.¹⁶ The pattern suggests that men place the couple below the 40th percentile of the distribution of relative incomes, even though they would lie somewhere else in terms of actual wages. The fact that for this group, the reported earnings of a woman to achieve an income share of say 20 percent is lower than in the women’s reported distribution points to the conclusion that men, at this point of the distribution, also have lower incomes than the partners of women who are placed at the same point of the distribution based on their own reporting. The closer to the 50 percent threshold, the more incomes reported by men and women converge, while reported wages diverge from actual wages. Knowing from the analysis above that women at this point of the distribution systematically underreport their incomes, the convergence suggests that men are underreporting the incomes of their partners here, too. Men thus, to a large extent, manipulate the reported income of their partner instead of their own earnings, and this manipulation is not concentrated around the threshold.

When considering the level of men’s earnings reported by men vs. women presented in Figure 5 (b), we observe that the incomes reported by men and women are more in line with each other across the distribution, while both lie below the actual earnings’ levels. It is only at the lower tail that this difference is noisy.

Overall the evidence shows that women follow a straight forward and rather homogeneous strategy to circumvent norm violation, while men follow mixed strategies, which are to a large extent driven by misreporting of their partner’s income.

6 Conclusion

We show that individuals’ survey responses are prone to the influence of social norms. A comparison of surveyed and actual outcomes allows us to identify the latter. Drawing on prior work by Bertrand et al. (2015), we introduce misreporting in survey data as an additional mechanism behind the discontinuity in relative income shares of women at the point where the woman would outearn her partner.

Based on Swiss survey data combined with administrative information on respondents’ incomes, we document that bunching below the threshold where a woman outearns her partner is related to strategic misreporting in survey data in order to conform with traditional gender norms. The impact of gender norms is potentially not only confined to survey responses, but also to the perspective which individuals take on in their self-perception and social interactions. However, the discontinuity in the share women contribute to couple income is not necessarily driven by actual economic choices.

From a broader perspective, our evidence contributes to the knowledge on the reliability of survey information on issues that involve strong social norms.

¹⁶The continually increasing divergence between female reported and actual incomes is simply due to the fact that incomes are misreported by the same percentage across the distribution.

Data Statement

The confidential individual-level data (SESAM) were obtained under contract Nr. 180262 from the Swiss Statistical Office. The data from the Swiss Structural Survey (Strukturerhebung) were obtained under contract Nr. 170334. Access is granted for scientific research projects after review of a detailed application.¹⁷

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¹⁷See <https://www.bfs.admin.ch/bfs/de/home/statistiken/arbeit-erwerb/erhebungen/sesam.html>

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A Appendix

A.1 Data

Definition of an individual's ancestry

In order to gain a comprehensive picture of individuals' migration background, we exploit information on the respondents' nationality and their parents' country of birth. Information on the individuals' nationality or their second nationality if they hold dual citizenship (Swiss and any foreign country) have been part of the regular SAKE survey since 2003, which means this information is available for all years we use for the analysis except for 2002. The fact that the SAKE survey was a rotating panel before 2010, with individuals being surveyed in five consecutive years, allows us to link the 2002 and 2003 surveys in order to retrieve an individual's nationality. Applying these strategies, we have a sample of 2,837 individuals with information on migratory background. The information on an individual's background is supplemented with data on norms persisting in their country of ancestry, as reflected in the World Value Surveys.¹⁸ We use average approval rates of full-time or part-time employed women with the statement "When jobs are scarce, men should have more right to a job than women" as a measure of gender norms. If a person has a nationality besides Swiss, we use approval rates in the country of their origin. If this information is not available or if an individual has no nationality other than Swiss, we use approval rates in the mother's country of birth as a proxy for norms, and if this is not available, we proxy norms through average approval rates in the father's country of birth. Norms for the countries Bosnia and Herzegovina, Kosovo, Serbia and Montenegro and Central Serbia (Country names defined by the BFS (<https://www.bfs.admin.ch/bfs/de/home/grundlagen/stgb.assetdetail.6166613.html>) are proxied by values for Serbia. Based on this information, we generate a binary variable indicating whether an individual's country of origin shows average approval rates above or equal to the sample median or below the sample median. The within sample median is set by Germany (represents 18 percent of the sample) where 12 percent of surveyed women who work either full- or part-time agree with the statement that "When jobs are scarce, men should have more right to a job than women." The largest fraction of individuals with a background in a country with average approval below the median are from Italy (36 percent) and the largest fraction of individuals from a country with average approval above the median having migration background in countries with norms proxied by Serbia (21 percent).

This results in two types of origin countries:

- **Equal countries:** Australia, Brazil, Canada, Dominican Republic, Finland, Germany, Italy, Montenegro, Netherlands, Norway, Peru, Slovenia, Spain, Sweden, United States

¹⁸Data link: <http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp>.

- **Unequal countries:** Albania, Algeria, Argentina, Belarus, Bosnia and Herzegovina, Bulgaria, Chile, China, Colombia, Croatia, Czechia, Ecuador, Egypt, France, Hungary, India, Indonesia, Iran, Iraq, Japan, Kosovo, Lebanon, Lithuania, Macedonia, Malaysia, Mexico, Morocco, Philippines, Poland, Russia, Serbia, Singapore, Slovakia, South Africa, South Korea, Thailand, Tunisia, Turkey, Ukraine, United Kingdom, Vietnam

A.2 Tables & Figures

Discontinuity in density estimates

In the following two tables with density discontinuity estimates, c refers to the used threshold (the lowest value of relative incomes exceeding 50 percent in order to only fit the density between realized values), h refers to the bandwidth, \hat{f}_l reports the fit of the density coming from the left and \hat{f}_r coming from the right respectively, $\hat{\theta}$ is the estimate of the discontinuity, \hat{lr} is the value of the local likelihood ratio statistic under the null¹⁹, and \hat{f}_l/\hat{f}_r measures the relative size of the discontinuity.

Table A.1: Density discontinuity estimates

	c	h	\hat{f}_l	\hat{f}_r	$\hat{\theta}$	\hat{lr}	\hat{f}_l/\hat{f}_r	p-value	N
Overall									
(1)	50.0905	7	0.0547	0.0139	-0.0408	235.1028	3.9290	0.0000	9,316
Female									
(2)	50.0905	7	0.0641	0.0163	-0.0478	137.8014	3.9338	0.0000	4,530
Male									
(3)	50.1182	7	0.0458	0.0120	-0.0338	93.1386	3.8130	0.0000	4,786
Simulated: Female									
(4)	50.0118	7	0.0319	0.0274	-0.0044	1.8991	1.1616	0.1682	4,530
Simulated: Male									
(5)	50.0287	7	0.0238	0.0219	-0.0020	0.4505	1.0894	0.5021	4,786

Notes: Rows (1) to (3) present local likelihood ratio results for the discontinuity in the distribution of females' relative income. Row (4) and (5) presents the local likelihood ratio result for the discontinuity in the distribution of individuals' *simulated* relative incomes.

N stands for the number of observations with regard to the observations available for estimating the whole density in the sample.

¹⁹The null hypothesis $H_0 : \theta_0 = \theta$ for some θ can be tested by $lr(\theta)$ using $\chi^2(1)$ critical values. We test against $H_0 : \theta_0 = 0$.

Table A.2: Density discontinuity estimates, half of bandwidth

	c	h	\hat{f}_l	\hat{f}_r	$\hat{\theta}$	\hat{l}_r	\hat{f}_l/\hat{f}_r	p-value	N
Overall									
(1)	50.0905	3.5	0.109 3	0.012 9	−0.096 4	333.116 0	8.486 7	0.000 0	9,316
Female									
(2)	50.0905	3.5	0.120 7	0.014 8	−0.106 0	181.341 3	8.179 4	0.000 0	4,530
Male									
(3)	50.1182	3.5	0.099 2	0.011 7	−0.087 5	145.205 5	8.487 0	0.000 0	4,786
Simulated: Female									
(4)	50.0118	3.5	0.030 9	0.025 2	−0.005 7	1.799 8	1.224 7	0.179 7	4,530
Simulated: Male									
(5)	50.0287	3.5	0.026 9	0.021 9	−0.005 0	1.509 2	1.229 7	0.219 3	4,786

Notes: Rows (1) to (3) present local likelihood ratio results for the discontinuity in the distribution of females' relative income. Row (4) and (5) presents the local likelihood ratio result for the discontinuity in the distribution of individuals' *simulated* relative incomes.

N stands for the number of observations with regard to the observations available for estimating the whole density in the sample.

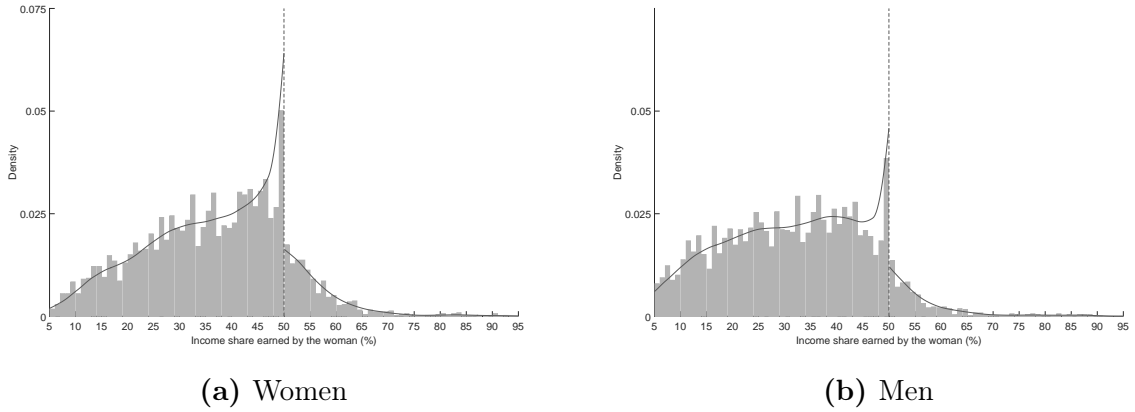


Figure A.1: Overall LLD fit of the income share earned by a woman in the couple separately for surveyed men and women. The solid line represents the LLD fit on both sides of the threshold using a bandwidth of 7 percent. The shaded area represents the histogram of the underlying data in 1 percent bins. The corresponding density discontinuity estimates can be found in rows (2) and (3) of Table A.1.

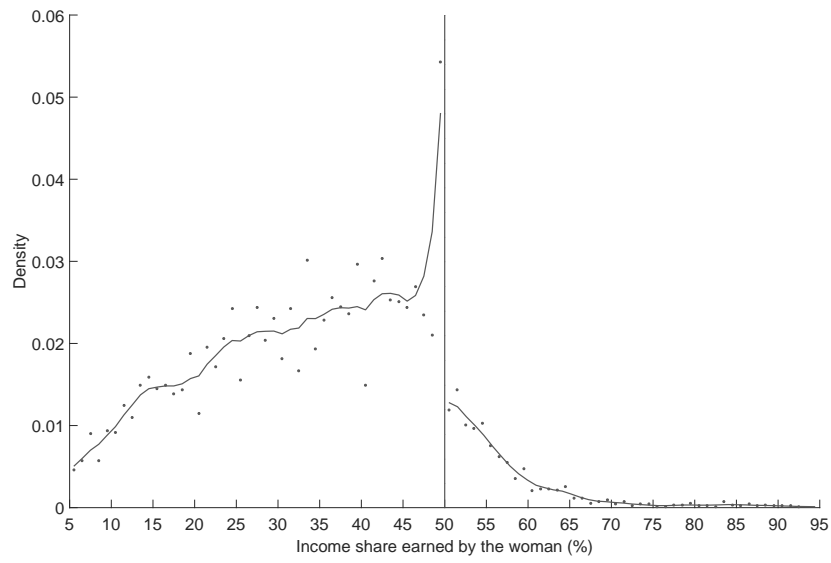


Figure A.2: Overall distribution of womens' relative income estimate using smoothed binned counts as in McCrary (2008). The smooth is a local linear smooth using a triangular kernel and the bandwidth of 3.5%. The bin size is 1%. The automated procedure in McCrary (2008) proposes a binsize of 0.299 and a bandwidth of 12.89. It renders a point estimate of log difference in height of 0.467 with a p-value of 0.057. The manipulation test provided in the rddensity package in stata (Cattaneo et al., 2018) proposes an optimal bandwidth of 5 percent and also indicates a clear discontinuity with p-values<0.01.

Misreporting estimates

Table A.3: Discontinuity in income misreporting at the 50 percent margin

	Female			Male		
	(1)	(2)	(3)	(4)	(5)	(6)
Estimate	-3.122*** (0.803)	-3.113*** (1.034)	-2.399* (1.260)	-0.258 (0.741)	-0.675 (0.972)	-0.587 (1.379)
Bandwidth	7	3.5	2	7	3.5	2
N left	3912	3912	3912	4407	4407	4407
N right	618	618	618	379	379	379
N eff. left	1056	606	395	813	436	307
N eff. right	396	225	143	257	154	102

Notes: Local linear sharp regression discontinuity estimates for three bandwidths. A bandwidth of seven corresponds to the optimal bandwidth. Standard errors are reported in parenthesis. They are estimated using the `rdrobust` package for `stata` (Calonico et al., 2017). *N left* stands for the number of observations available to the left of the threshold, *N right* for the number of observations available to the right of the threshold. *N eff. left* and *N eff. right* refer to the number of observations used to estimate the RDD estimate.

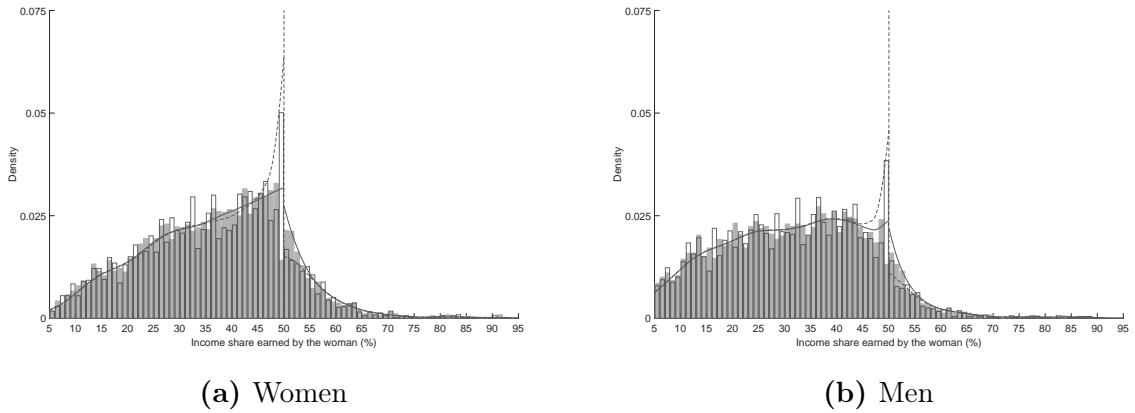


Figure A.3: Comparison of original surveyed distribution of relative incomes and the simulated distribution accounting for misreporting. The solid line represents the LLD fit of the simulated distribution using a bandwidth of 7 percent, the dashed line represents the LLD fit of the original distribution, the dark shaded area represents the histogram of the simulated data and the transparent bars represent the original data in 1 percent bins. The respective discontinuity in density estimates for the simulated distributions are presented in rows (4) and (5) of Table A.1.

Table A.4: OLS estimates of female misreporting

	Overall	Child gender	Age difference	Origin	Municip. characteristics
	(1)	(2)	(3)	(4)	(5)
Constant	11.410*** (0.192)	11.970*** (0.456)	11.603*** (0.265)	12.807*** (0.406)	11.281*** (0.238)
<i>Traditional</i>		0.035 (0.480)	-0.329 (0.311)	-1.611*** (0.553)	0.276 (0.307)
$47\% < ri \leq 48\%$	-0.515 (0.607)	-1.950 (1.400)	-0.406 (0.990)	-2.033 (1.570)	-0.308 (0.798)
$48\% < ri \leq 49\%$	-0.541 (0.600)	-2.038 (1.879)	-0.090 (0.889)	1.897 (1.317)	-1.207 (0.802)
$49\% < ri \leq 50\%$	1.027** (0.469)	-2.236 (1.490)	-0.387 (0.673)	0.695 (1.202)	1.296** (0.641)
$50\% < ri \leq 51\%$	-1.681** (0.803)	-1.466* (0.812)	-3.100*** (1.134)	-4.255*** (1.320)	-0.145 (1.189)
$51\% < ri \leq 52\%$	-2.617*** (0.793)	-6.215*** (2.156)	-2.327** (1.176)	-2.877* (1.599)	-2.424** (1.109)
$52\% < ri \leq 53\%$	-0.426 (0.749)	-0.725 (2.854)	0.321 (0.937)	-1.428 (1.981)	0.521 (1.192)
$47\% < ri \leq 48\% \cdot Traditional$		0.517 (2.056)	-0.179 (1.249)	1.813 (2.110)	-0.461 (1.228)
$48\% < ri \leq 49\% \cdot Traditional$		1.035 (2.376)	-0.881 (1.199)	-3.013 (3.120)	1.502 (1.192)
$49\% < ri \leq 50\% \cdot Traditional$		5.133*** (1.842)	2.657*** (0.932)	1.925 (1.855)	-0.580 (0.943)
$50\% < ri \leq 51\% \cdot Traditional$		-2.377 (2.293)	2.598* (1.579)	-0.964 (2.867)	-2.881* (1.583)
$51\% < ri \leq 52\% \cdot Traditional$		3.144 (2.630)	-0.532 (1.592)	4.030 (2.678)	-0.416 (1.584)
$52\% < ri \leq 53\% \cdot Traditional$		-1.280 (3.538)	-1.685 (1.498)	0.292 (2.991)	-1.860 (1.499)
Net	9.812*** (0.268)	9.274*** (0.404)	9.817*** (0.269)	9.051*** (0.498)	9.808*** (0.270)
N	3042	1457	3042	970	3042
R-squared	0.311	0.280	0.314	0.275	0.312

Notes: OLS estimates of misreporting around the 50 percent margin, within the female sample and for different subsamples. The estimates of indicator variables around the threshold of 50 percent indicate the deviation from the average difference between actual and stated income for the three percentiles below and above 50 percent of household income earned by women. The interaction terms indicate the difference in misreporting for the groups holding more traditional gender norms. Heteroskedasticity robust standard errors are reported in parentheses. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.5: Linear combinations of female misreporting

	Overall	Child gender	Age difference	Origin	Municip. characteristics
	(1)	(2)	(3)	(4)	(5)
Constant	11.410*** (0.192)	11.970*** (0.456)	11.603*** (0.265)	12.807*** (0.406)	11.281*** (0.238)
<i>Traditional</i>		0.035 (0.480)	-0.329 (0.311)	-1.611*** (0.553)	0.276 (0.307)
$47\% < ri \leq 48\% - Liberal$	-0.515 (0.607)	-1.950 (1.400)	-0.406 (0.990)	-2.033 (1.570)	-0.308 (0.798)
$48\% < ri \leq 49\% - Liberal$	-0.541 (0.600)	-2.038 (1.879)	-0.090 (0.889)	1.897 (1.317)	-1.207 (0.802)
$49\% < ri \leq 50\% - Liberal$	1.027** (0.469)	-2.236 (1.490)	-0.387 (0.673)	0.695 (1.202)	1.296** (0.641)
$50\% < ri \leq 51\% - Liberal$	-1.681** (0.803)	-1.466* (0.812)	-3.100*** (1.134)	-4.255*** (1.320)	-0.145 (1.189)
$51\% < ri \leq 52\% - Liberal$	-2.617*** (0.793)	-6.215*** (2.156)	-2.327** (1.176)	-2.877* (1.599)	-2.424** (1.109)
$52\% < ri \leq 53\% - Liberal$	-0.426 (0.749)	-0.725 (2.854)	0.321 (0.937)	-1.428 (1.981)	0.521 (1.192)
$47\% < ri \leq 48\% - Traditional$		-1.434 (1.501)	-0.585 (0.765)	-0.219 (1.417)	-0.769 (0.936)
$48\% < ri \leq 49\% - Traditional$		-1.003 (1.458)	-0.971 (0.807)	-1.116 (2.827)	0.295 (0.884)
$49\% < ri \leq 50\% - Traditional$		2.897*** (1.085)	2.269*** (0.644)	2.620* (1.411)	0.716 (0.691)
$50\% < ri \leq 51\% - Traditional$		-3.842* (2.146)	-0.502 (1.101)	-5.220** (2.544)	-3.025*** (1.048)
$51\% < ri \leq 52\% - Traditional$		-3.072** (1.508)	-2.859*** (1.072)	1.153 (2.137)	-2.840** (1.129)
$52\% < ri \leq 53\% - Traditional$		-2.006 (2.093)	-1.364 (1.168)	-1.137 (2.240)	-1.338 (0.909)
Net	9.812*** (0.268)	9.274*** (0.404)	9.817*** (0.269)	9.051*** (0.498)	9.808*** (0.270)
N	3042	1457	3042	970	3042

Notes: OLS estimates and the linear combinations of the interactions of misreporting around the 50 percent margin, within the female sample and for different subsamples. The estimates of indicator variables around the threshold of 50 percent indicate the deviation from the average difference between actual and stated income for the three percentiles below and above 50 percent of household income earned by women and for the groups holding more liberal or more traditional gender norms respectively. Heteroskedasticity robust standard errors are reported in parentheses. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.6: OLS estimates of male misreporting

	Overall	Child gender	Age difference	Origin	Municip. characteristics
	(1)	(2)	(3)	(4)	(5)
Constant	10.590*** (0.148)	10.787*** (0.363)	10.772*** (0.215)	11.229*** (0.318)	10.601*** (0.191)
<i>Traditional</i>		0.081 (0.414)	-0.300 (0.271)	-0.429 (0.512)	-0.029 (0.270)
$47\% < ri \leq 48\%$	-0.302 (0.709)	-0.237 (2.097)	1.013 (1.217)	0.199 (1.762)	-1.850** (0.873)
$48\% < ri \leq 49\%$	-0.348 (0.647)	-0.535 (1.786)	-1.701** (0.867)	-1.504 (1.062)	-0.103 (0.880)
$49\% < ri \leq 50\%$	0.131 (0.431)	1.510 (1.136)	0.174 (0.628)	1.312 (0.871)	1.275** (0.548)
$50\% < ri \leq 51\%$	0.184 (0.641)	-0.269 (2.157)	-1.243 (0.835)	0.837 (1.250)	-0.482 (0.830)
$51\% < ri \leq 52\%$	-0.708 (0.853)	-0.316 (1.895)	-0.802 (1.360)	-1.872 (1.743)	-0.567 (1.221)
$52\% < ri \leq 53\%$	0.586 (0.985)	3.397 (2.672)	0.411 (1.647)	0.344 (1.779)	1.264 (1.146)
$47\% < ri \leq 48\% \cdot Traditional$		-2.030 (2.612)	-2.038 (1.486)	-2.947 (2.464)	3.440** (1.390)
$48\% < ri \leq 49\% \cdot Traditional$		-0.206 (2.210)	2.542** (1.269)	1.243 (2.095)	-0.533 (1.297)
$49\% < ri \leq 50\% \cdot Traditional$		-1.308 (1.428)	-0.101 (0.864)	0.944 (1.782)	-2.720*** (0.858)
$50\% < ri \leq 51\% \cdot Traditional$		0.567 (2.646)	2.919** (1.231)	-0.899 (1.427)	1.521 (1.280)
$51\% < ri \leq 52\% \cdot Traditional$		-2.144 (2.616)	0.141 (1.709)	-1.152 (3.312)	-0.260 (1.708)
$52\% < ri \leq 53\% \cdot Traditional$		0.817 (3.463)	0.297 (1.973)	1.101 (1.827)	-1.982 (2.126)
Net	8.352*** (0.284)	7.388*** (0.390)	8.319*** (0.284)	7.565*** (0.534)	8.362*** (0.284)
N	2619	1209	2619	889	2619
R-squared	0.274	0.246	0.277	0.221	0.279

Notes: OLS estimates of misreporting around the 50 percent margin, within the male sample and for different subsamples. The estimates of indicator variables around the threshold of 50 percent indicate the deviation from the average difference between actual and stated income for the three percentiles below and above 50 percent of household income earned by women. The interaction terms indicate the difference in misreporting for the groups holding more traditional gender norms. Heteroskedasticity robust standard errors are reported in parentheses. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.7: Linear combinations of male misreporting

	Overall	Child gender	Age difference	Origin	Municip. characteristics
	(1)	(2)	(3)	(4)	(5)
Constant	10.590*** (0.148)	10.787*** (0.363)	10.772*** (0.215)	11.229*** (0.318)	10.601*** (0.191)
<i>Traditional</i>		0.081 (0.414)	-0.300 (0.271)	-0.429 (0.512)	-0.029 (0.270)
$47\% < ri \leq 48\% - Liberal$	-0.302 (0.709)	-0.237 (2.097)	1.013 (1.217)	0.199 (1.762)	-1.850** (0.873)
$48\% < ri \leq 49\% - Liberal$	-0.348 (0.647)	-0.535 (1.786)	-1.701** (0.867)	-1.504 (1.062)	-0.103 (0.880)
$49\% < ri \leq 50\% - Liberal$	0.131 (0.431)	1.510 (1.136)	0.174 (0.628)	1.312 (0.871)	1.275** (0.548)
$50\% < ri \leq 51\% - Liberal$	0.184 (0.641)	-0.269 (2.157)	-1.243 (0.835)	0.837 (1.250)	-0.482 (0.830)
$51\% < ri \leq 52\% - Liberal$	-0.708 (0.853)	-0.316 (1.895)	-0.802 (1.360)	-1.872 (1.743)	-0.567 (1.221)
$52\% < ri \leq 53\% - Liberal$	0.586 (0.985)	3.397 (2.672)	0.411 (1.647)	0.344 (1.779)	1.264 (1.146)
$47\% < ri \leq 48\% - Traditional$		-2.267 (1.557)	-1.025 (0.851)	-2.748 (1.731)	1.590 (1.082)
$48\% < ri \leq 49\% - Traditional$		-0.740 (1.303)	0.841 (0.926)	-0.261 (1.803)	-0.636 (0.953)
$49\% < ri \leq 50\% - Traditional$		0.202 (0.872)	0.073 (0.594)	2.256 (1.556)	-1.445** (0.661)
$50\% < ri \leq 51\% - Traditional$		0.298 (1.530)	1.676* (0.905)	-0.062 (0.677)	1.039 (0.975)
$51\% < ri \leq 52\% - Traditional$		-2.459 (1.803)	-0.661 (1.035)	-3.025 (2.810)	-0.826 (1.193)
$52\% < ri \leq 53\% - Traditional$		4.215* (2.201)	0.708 (1.087)	1.445*** (0.426)	-0.717 (1.789)
Net	8.352*** (0.284)	7.388*** (0.390)	8.319*** (0.284)	7.565*** (0.534)	8.362*** (0.284)
N	2619	1209	2619	889	2619

Notes: OLS estimates and the linear combinations of the interactions of misreporting around the 50 percent margin, within the male sample and for different subsamples. The estimates of indicator variables around the threshold of 50 percent indicate the deviation from the average difference between actual and stated income for the three percentiles below and above 50 percent of household income earned by women and for the groups holding more liberal or more traditional gender norms respectively. Heteroskedasticity robust standard errors are reported in parentheses. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

A.3 Survey questions

Personal income

77000	01	
77000	02	Könnten Sie mir Ihren MONATSLohn angeben ?
77000	03	Wenn's Ihnen leichter fällt, können Sie auch den Jahres- oder
77000	04	Stundenlohn angeben.
77000	05	-----
77000	06	
77000	07	
77000	08	o LOHN<*****>
77000	09	- Arbeitet ohne Entlohnung<0>
77000	10	-----
77000	11	- Weiss nicht<X>
77000	12	- Keine Antwort<Y>
77000	13	
77000	14	
77000	15	*****

Figure A.4: Survey question that defines personal income. Survey question 77000 (variable IW04) is translated as: "Could you tell me your monthly salary? If it is easier for you, you may also tell me your yearly or hourly salary." There are for response options: 1. Salary (numeric) 2. Works without compensation 3. Don't know 4. No answer

77100	01	
77100	02	==> INT: Sind die angegebenen Fr. X ...
77100	03	
77100	04	o BRUTTO (VOR Abzug der Sozialbeiträge): - pro Monat<1>
77100	05	- pro Jahr<2>
77100	06	- pro Stunde<3>
77100	07	o NETTO (NACH Abzug der Sozialbeiträge): - pro Monat<4>
77100	08	- pro Jahr<5>
77100	09	- pro Stunde<6>
77100	10	
77100	11	o weiss nicht<8>
77100	12	o keine Antwort<9>
77100	13	o der angegebene Betrag von Fr. X ist falsch<0>
77100	14	
77100	15	

Figure A.5: Survey question that specifies personal income declaration. Survey question 77004 asks whether the income is net or gross; hourly, monthly, or yearly. The exact question is "Are the declared amount CHF X: 1. Gross (per month / per year / per hour), 2. Net (per month / per year / per hour)". Additional answer options are "3. "I don't know" 4. No answer 5. "The above amount of CHF X is wrong."

Partner's income

77900	01	Sie haben mir vorher gesagt, dass Ihre Ehe-/Lebenspartnerin
77900	02	erwerbstätig ist. Könnten Sie mir den MONATSLOHN von Ihrer Ehe-/
77900	03	Lebenspartnerin angeben?
77900	04	Wenn's Ihnen leichter fällt, können Sie auch den Jahres- oder
77900	05	Stundenlohn angeben.
77900	06	-----
77900	07	
77900	08	
77900	09	
77900	10	o MONATSLOHN <*****>
77900	11	o Arbeitet ohne Entlohnung <0>
77900	12	-----
77900	13	- Weiss nicht <X>
77900	14	- Keine Antwort <Y>
77900	15	*****

Figure A.6: Survey question that defines partner's income. Survey question 77900 (variable IW20) is translated as: "You have told me before that your spouse / partner is employed. Could you tell me the monthly salary of your spouse / partner? If it is easier for you, you may also tell me your yearly or hourly salary." There are for response options: 1. Salary (numeric) 2. Works without compensation 3. Don't know 4. No answer

77950	01	
77950	02	Sind die angegebenen#bFr. X.-#e...
77950	03	
77950	04	o BRUTTO (VOR Abzug der Sozialbeiträge): - pro Monat<1>
77950	05	- pro Jahr<2>
77950	06	- pro Stunde<3>
77950	07	o NETTO (NACH Abzug der Sozialbeiträge): - pro Monat<4>
77950	08	- pro Jahr<5>
77950	09	- pro Stunde<6>
77950	10	
77950	11	o weiss nicht<8>
77950	12	o keine Antwort<9>
77950	13	o der angegebene Betrag von Fr. X ist falsch<0>
77950	14	
77950	15	FORMAT !

Figure A.7: Survey question that specifies partner's income declaration. Survey question 77950 asks whether the income is net or gross; hourly, monthly, or yearly. The exact question is "Are the declared amount CHF X: 1. Gross (per month / per year / per hour), 2. Net (per month / per year / per hour)". Additional answer options are "3. "I don't know" 4. No answer 5. "The above amount of CHF X is wrong."