ERASMUS UNIVERSITY ROTTERDAM
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"The impact of traditional gender norms on the gender earnings gap of self-employed workers"

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Abstract

There is a gender earnings gap, which is larger for self-employed workers compared to employed workers. Differences in work-life balance and occupational segregation are two main factors that generate the gender earnings gap. Additionally, empirical evidence shows that traditional gender norms directly and indirectly impact the gender earnings gap of employed workers. However, this is not empirically tested for self-employed workers. Here, I examine the impact of traditional gender norms on the gender earnings gap of self-employed workers, and whether this impact differs between employed and self-employed workers. I show with a multiple linear regression analysis that the gender earnings gap is statistically significantly smaller in countries with traditional gender norms. Additionally, by comparing employed and self-employed workers, I found that traditional gender norms negatively impact the gender earnings gap of employed workers, whereas they positively impact the gender earnings gap of self-employed workers. I suggest that a sorting effect of successful females in self-employment in traditional countries causes the positive impact of traditional gender norms. With the findings, I suggest that policy should focus on other factors to decline the gender earnings gap.

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1. Introduction

"Women work for free for nearly two months a year", concludes the Trade Union congress after founding a gender earnings gap of 15% (Neate & Topping, 2023). While the gender earnings gap declined over the last decades, there still remains a difference between the payment of males and females. This gender earnings gap not only exists for employed workers but also for self-employed workers. The latter group experiences an even larger gender earnings gap (Hundley, 2001). Not only does the gender earnings gap still persist, but traditional gender norms also continue to exist. These norms prescribe women to stay at home and take care of children and housework, while men are expected to work and earn money. Traditional gender norms contribute to the gender earnings gap not only on their own, but also by affecting other factors which affect the gender earnings gap (Roethlisberger et al., 2022).

While Roethlisberger et al. (2022) mainly focus on the impact of traditional gender norms on the gender earnings gap for employed workers, the impact of traditional gender norms on the gender earnings gap of self-employed workers is not empirically proven, nor is the difference in impact of traditional gender norms between employed and self-employed workers. Therefore, this paper addresses two questions: 'Does traditional gender norms impact the gender earnings gap of self-employed workers?' and 'Is the impact of traditional gender norms on the gender earnings gap larger for self-employed workers?'

These question test whether traditional gender norms impact the gender earnings gap of self-employed workers. If the findings show that traditional gender norms increase the gender earnings gap for self-employed workers, the importance of a transition to more gender-egalitarian norms is highlighted. Thus, policymakers should consider this effect. Additionally, if there is a difference in impact between employed and self-employed workers, policymakers should differentiate their strategies between the two groups to decline the gender earnings gap for both groups.

There remains a gender earnings gap in most countries. This can be explained by many factors, such as differences in the number of hours worked, differences in work-life balance, occupational segregation, differences in the propensity for bargaining, and discrimination (Lechmann & Schnabel, 2012; Piazzalunga, 2018). This gender earnings gap not only exists for employed workers but also for self-employed workers, where the gender earnings gap is even larger (Lechmann & Schnabel, 2012). This can be explained by the absence of wage regulations,

consumer or buyer discrimination, and limited access to credit for self-employed females (Eastough & Miller, 2004; Leung, 2006; Walker, 2009; Morazzoni & Sy, 2022). Furthermore, the impact of work-life balance on the gender earnings gap is larger for self-employed workers (Hundley, 2001). Since the drivers of the gender earnings gap differ between employed and self-employed workers, it is important to examine the difference in the impact of traditional gender norms.

To analyze the relationship between the gender earnings gap and traditional gender norms, I use The Family and Changing Gender Role IV survey from The International Social Survey Programme (ISSP). It contains statements about traditional gender norms, which I use to classify a country as traditional if its mean is below the median of the means of all countries. As a second dataset, I use the European Working Conditions Survey (EWCS). This dataset provides information on earnings, whether someone is self-employed, and demographic characteristics. To examine the impact of traditional gender norms on the gender earnings gap, I use multiple linear regression analysis. The dependent variable is the logarithm of the net monthly earnings (given in Euros). The independent variables are $Female$ and $Traditional$ which take a value of 1 if a worker is a female or lives in a country with traditional gender norms, respectively. I use an interaction term between $Female$ and $Traditional$ to examine the potential impact of traditional gender norms on the gender earnings gap. First, I focus only on self-employed workers. Then, I expand the analysis to include all workers to explore whether the impact of traditional gender norms differ between employed and self-employed workers. To account for this distinction, I include the variable $SelfEmployed$ and interaction terms with $SelfEmployed, Female,$ and $Traditional$. To address potential endogeneity issues, I include country-specific and person-specific control variables. Since I will use two years of observations, I also add time fixed effects.

The findings show that countries with traditional gender norms have a smaller gender earnings gap for self-employed workers. On the contrary, the gender earnings gap does not appear to be smaller in traditional countries for employed workers. A possible explanation for the observed effect among self-employed workers is a sorting effect. It is likely that more successful women sort into self-employment in traditional countries, whereas this sorting effect is not as prevalent in non-traditional countries. However, I does not test this explanation empirically. These findings suggest that policymakers should shift their focus towards addressing other factors that contribute to the

gender earnings gap of self-employed workers, rather than solely concentrating on changing traditional gender norms.

Additionally, heterogeneous effects show that the gender earnings gap for self-employed workers in traditional countries is only smaller for self-employed workers without children. Whereas there is no statistically significant difference in the gender earnings gap between traditional and non-traditional countries for self-employed workers with children. Besides that, the gender earnings gap is only statistically significantly smaller in traditional countries for self-employed that work in the occupations Managers, Professionals, or Service and sales workers.

The research questions determine the following approach. In Section 2 I review the existing literature on traditional gender norms and the gender earnings gap. Then, I describe and summarize the data in Section 3. Next, in Section 4, I outline the methodology and give the specification I use in the analysis. In Section 5 I present the results. Following in Section 6, I describe the possible mechanisms that explain the results of Section 5. In section 7, I do some heterogeneity tests, where I compare self-employed workers with and without children. Additionally, I check whether traditional gender norms impact the gender earnings gap for each occupation. Afterwards, I discuss the results and the assumptions which have to be held for multiple linear regression analysis in Section 8. Lastly, in Section 9 I give an overall conclusion and offer some suggestions for future research.

2. Literature review

2.1. Traditional gender norms

Social norms can be defined as the distinct roles that are ascribed to males and females by the social context (Roethlisberger et al., 2022). These social norms are reflected in the thoughts, personal values, and beliefs of people. Closely related is 'identity', which is a sense of belonging to a social category coupled with a view on how people in that category should behave (Bertrand et al., 2015). The two relevant social categories are male and female, both associated with behavioral prescriptions (Bertrand, 2011). These prescriptions can be seen in traditional gender norms, which are associated with the 'male breadwinner model' (Roethlisberger et al., 2022). In this model, a career is associated with males, while childcare and household duties are attributed to females. The origins of these traditional gender norms and the existence of the differences in the behavior of males and females lie either in 'nature' or in 'nurture' (Fortin, 2005; Blau & Kahn, 2017). Gender

norms are mostly developed in youth, where factors such as religion, parental education, and the presence of a working mother contribute to this development (Fortin, 2005; Blau & Kahn, 2017). Traditional gender norms strongly impact choices, opportunities, and outcomes in the labor market (Roethlisberger et al., 2022). This is also shown in the labor force participation, occupational segregation, and the difference in tenure in any single occupation (Akerlof & Kranton, 2010; Bertrand, 2011). Additionally, gender norms impact the gender earnings gap, as they positively affect male wages and negatively affect female wages (Roethlisberger et al., 2022).

2.2.   Gender earnings gap

Multiple papers provide evidence that the gender earnings gap still exists (França et al., 2010; Lechmann & Schnabel, 2012; Bishu & Alkadry, 2017; Blau & Kahn, 2017; Piazzalunga, 2018; Roethlisberger et al., 2022). In 2014, full-time female employers earned, on an annual basis, about 79% of males' annual wage (Blau & Kahn, 2017). Part of this gender earnings gap is unexplained (Blau & Kahn, 2017; Roethlisberger et al., 2022). However, a variety of factors can explain a large share of the gender earnings gap, such as differences in productive characteristics, occupations and sectors, the number of hours worked, work flexibility, the organization at the workplace, education, experience, the division of housework and care responsibilities, attitudes towards competition, the propensity for bargaining and discrimination (Lechmann & Schnabel, 2015; Piazzalunga, 2018). As mentioned before, traditional gender norms are also considered to be a direct and indirect driver of the gender earnings gap (Roethlisberger et al., 2022). Fortin (2005) found an increase in the gender wage gap of almost a half-point when 1% more men than women believe that 'scarce jobs should go to men'.

2.2.1. Work-life balance

There are multiple factors which drive the gender earnings gap and are affected by traditional gender norms. One main factor is the work-life balance. Women are supposed to move in and out of the labor force due to getting and raising children (Bertrand et al., 2015). Additionally, the existing 'child penalty' closely relates to persisting gender norms (Kleven et al., 2019). The causal relationship between getting or having children and the gender earnings gap can be ascribed to several factors, such as the birth of a child may cause the mother to stop working or to switch to a 'child-friendly' job, anticipation effects may decline the number of firm-specific training for women, motherhood may decrease women's productivity and mothers may face statistical

discrimination (Blau & Kahn, 2017). Closely related to the 'child penalty' is 'mother's guilt', which means the thought that a working mother cannot establish a warm relationship with her child if she works (Fortin, 2005; Bertrand, 2011). This mother's guilt impacts the labor force participation of mothers and, hence, impacts the gender earnings gap. Not only do women have to take care of the children, but they also do the majority of the housework, regardless of their employment status (Akerlof & Kranton, 2010). This is in accordance with the fact that traditional gender norms are still present in the United States (Akerlof & Kranton, 2010). Overall, housework, work-life balance, labor force participation, number of hours worked, and family responsibilities can explain a large part of the gender earnings gap (Lechmann & Schnabel, 2015; Blau & Kahn, 2017; França et al., 2020; Roethlisberger et al., 2022). All mentioned factors are impacted by traditional gender norms.

2.2.2. Occupational segregation

The impact of traditional gender norms cannot only be found in work-life balance, but also in occupational segregation. There are occupational norms which prescribe males to work in professions such as construction, engineering, and accounting, while females should be nurses, teachers, and secretaries (Akerlof & Kranton, 2010). Women are underrepresented in science, technology, engineering, and mathematics (STEM), and in economic fields (Piazzalunga, 2018). To get an equal distribution of males and females in all occupations, nearly half of males and females would have to switch jobs (Akerlof & Kranton, 2010). Occupational segregation can be explained by gender differences in preferences, choices, and traits. For example, differences in valuing work flexibility, differences in investments in education and skills, women's stronger wish to contribute to society, women dislike of competition, and women being more risk averse (Akerlof & Kranton, 2010; Goldin, 2014; Blau & Kahn, 2017; Roethlisberger et al., 2022). One issue that arises is that certain firms and sectors place a high value on working long hours and have a non-linear pay structure based on hours worked (Goldin, 2014). As a result, females, who have a higher desire for work flexibility, may face 'penalization' through lower pay or sorting into lower-paid sectors (Goldin, 2014). One significant consequence of occupational segregation is that women sort themselves into lower-paid jobs (Bishu & Alkadry, 2017; Piazzalunga, 2018). As a consequence, occupational segregation is one of the largest factors that explain the gender earnings gap; it explains up to one-third of the gender earnings gap (Lechmann & Schnabel, 2012; Blau & Kahn, 2017; Bishu & Alkadry, 2017). Women do not only work in different sectors than men, but also at different hierarchy levels (Blau & Kahn, 2017). This is partly attributable to the fact that

women are less likely to be promoted (Cobb-Clark, 2001; Bishu & Alkadry, 2017). Which also affect the gender earnings gap.

2.3. Gender earnings gap for self-employed workers

The gender earnings gap not only exists for employed workers, but also for self-employed workers. The gap is even larger for self-employed workers (Hundley, 2001; Eastough & Miller, 2004; Leung, 2006; Álvarez et al., 2009; Walker, 2009; Lechmann & Schnabel, 2012). This can be explained by several mechanisms, such as the absence of wage regulations, consumer or buyer discrimination, as well as having less access to credit for females (Eastough & Miller, 2004; Leung, 2006; Walker, 2009; Morazzoni & Sy, 2022). However, similar to employed workers, occupational segregation explains a large part of the gender earnings gap of self-employed workers (Hundley, 2001; Álvarez et al., 2020). Self-employed females are underrepresented in more rewarding sectors, such as construction and technology-intensive sectors, while they are overrepresented in personal services, which are often human-intensive and less skillful (Hundley, 2001; França et al., 2020). Besides occupational segregation, work-life balance explains a part of the gender earnings gap of self-employed workers (Hundley, 2001; Walker, 2009; Lechmann & Schnabel, 2012). The impact of work-life balance is even larger for self-employed workers relative to employed workers (Hundley, 2000). The earnings of self-employed women decline with having children and hours of housework. Additionally, women are more likely to enter self-employment with the purpose to take care of a young child (Leung, 2006).

2.4. Hypothesis

As found in the literature, there is still a gender earnings gap for employed and self-employed workers. Traditional gender norms impact the gender earnings gap for employed workers by itself. Additionally, it affects other determinants of the gender earnings gap, such as occupational segregation and work-life balance which in turn impact the gender earnings gap for self-employed workers. Therefore, the first hypothesis is that the gender earnings gap is larger for self-employed workers in countries with traditional gender norms.

The gender earnings gap is larger for self-employed workers due to the fact that there are no wage regulations for self-employed workers (Eastough & Miller, 2004). Additionally, the impact of family responsibilities and number of hours worked is larger for self-employed workers (Hundley,

2000). Therefore, my second hypothesis is that the negative impact of traditional gender norms on the gender earnings gap is larger for self-employed workers than for employed workers.

3. Data

3.1. Sources

To study the impact of traditional gender norms on the gender earnings gap for self-employed workers, I make use of two datasets. The first dataset contains the fifth and sixth editions of the European Working Conditions Survey (EWCS), which is constructed by Eurofound. The second dataset is constructed with The Family and Changing Gender Role IV survey, which is constructed by The International Social Survey Programme (ISSP).

3.1.1. European Working Conditions Survey

The fifth and sixth editions of the EWCS were, respectively, held in 2010 and 2015 by the European Foundation for the Improvement of Living and Working Conditions (Eurofound). Eurofound is a European Union (EU) body set up by the European Council. Eurofound collects and quantifies the working conditions of workers to monitor trends and contribute to European policy. The EWCS contains a broad range of questions about working conditions, such as employment status, work-life balance, working time, and earnings. In cooperation with Ipsos, Eurofound interviewed in both the fifth and sixth editions approximately 43,000 workers across 34 and 35 countries, respectively. Their target population consists of all individuals who are at least 15 years old, live in a private household, and are in employment. They consider someone to be employed if they work at least one hour for pay or profit per week. Ipsos and Eurofound use several sampling principles to obtain a representative sample, such as using the best probability sampling design possible for each country, employing at least 50 primary sampling units (PSUs) per country with a maximum of 20 interviews per PSU, randomly selecting one household at an address and one eligible respondent per household, and avoiding substitutions of individuals at any stage of the sampling process. Each respondent is contacted by the interviewers via face-to-face methods or telephone calls. To minimize the risk of interviewer bias, each interviewer is limited to a maximum of 40 interviews.

3.1.2. ISSP 2012 – Family and Changing Gender Roles IV

ISSP is a cross-national collaboration between organizations that conduct annual surveys on various social science topics (GESIS, 2014). The survey "Family and Changing Gender Roles IV" was conducted in 2012 in 41 countries with respondents who were at least 18 years old. The ISSP

surveyed the topic of Family and Changing Gender Roles previously in 1988, 1994, and 2002. However, the survey in 2012 differed as ISSP choose to use only 43 of the old questions and add 20 new questions (GESIS, 2014). Additionally, ISSP de-emphasizes the narrow study of women and employment by focusing on both sexes. The questions, which are mostly statements, cover topics such as gender ideology, attitudes towards the employment of mothers, and the distribution of roles for men and women in occupations and household.

3.2. Data integration and adaption

3.2.1. European Working Conditions Survey

The fifth and sixth editions of the EWCS contain a total of 87,666 observations, but not all of them can be used for the analysis. First, I drop all the observations that are not from employed or self-employed workers. I define the working population as all workers being between 15 and 70 years old. Thus, I drop all the observations from workers older than 70 years. Then, I drop all the observations that do not have a value for net monthly earnings. I ended up with a sample of 64,806 observations. As indicated in Table 1, the largest difference between before and after dropping the observations is the percentage of workers who are self-employed. Before dropping the observations, 17.8% of all workers are self-employed, this reduces to 14.6% after dropping the observations. This difference can be attributed to the missing values for earnings.

Next, I generate several variables that are needed for the methodology. First, I generate the outcome variable, which is the logarithm of net monthly earnings. The interviewers asked the net monthly earnings in the local currency. If a respondent is unable to give the net monthly earnings, the interviewer give several income ranges and asks in which range the net monthly earnings fall. The median of this range is then used to impute the missing value of the net monthly earnings. The net monthly earnings are then converted into euros. For my analysis I use the logarithm of the net monthly earnings in euros. In my analysis I use the observations of the years 2010 and 2015. To compare them properly, it is necessary that the income is a real value. Since I use the integrated data file 1991-2015 of the EWCS, I assume that the income is the real value. However, this is not mentioned or explained by Eurofound.

Second, I generate the variable $selfEmployed$, which is equal to 1 if someone is self-employed and 0 otherwise. To check whether some is self-employed I use the question: *'Are you working as an employee or are you self-employed?'* for the sixth edition. For the fifth edition, I use the

question: *'Are you mainly ... 1 - Self-employed without employees; 2 - Self-employed with employees; 3 - Employed; 4 - Other?'* If someone answered 1 or 2, I equal $selfEmployed$ to 1. Otherwise, I equal $selfEmployed$ to 0. I ended up with 9,445 observations of self-employed workers.

The third, fourth, and fifth variables that I generate are $kids$, $numberKids$, and $partner$ which indicate whether someone has children, the number of children they have, and whether someone has a partner. I generate these variables using the household grid and the relationship to the specific worker. Other variables that I generate are $female, weeklyHours, occupation, age,$ $agesquared$ and $education$. In Section 4, I will explain why I choose to use these variables.

3.2.2.   ISSP 2012 – Family and Changing Gender Roles IV

I also adapt the ISSP dataset. The dataset contains observations for 41 countries, but I only use the observations for the 24 countries that are also in the EWCS dataset. I use the ISSP dataset to classify a country to have traditional or non-traditional gender norms. Countries with traditional gender norms will be referred to as traditional countries, while countries without traditional gender norms will be referred to as non-traditional countries. To define a country as (non-)traditional, I examine six different statements about attitudes towards family and gender roles. The statements are:

1) *'A working mother can establish just as warm and secure a relationship with her children as a mother who does not work';*
2) *'A preschool child is likely to suffer if his or her mother works';*
3) *'All in all, family life suffers when the woman has a full-time job';*
4) *'A job is all right, but what most women really want is a home and children';*
5) *'Both the man and woman should contribute to the household income';*
6) *'A men's job is to earn money, a women's job is to look after the home and family'.*

There are five possible responses to these statements: *1 - Strongly agree, 2 - Agree, 3 - Neither agree nor disagree, 4 - Disagree, 5 - Strongly disagree.* Since the respondents in Spain does not have the option '*Neither agree nor disagree',* I drop Spain from the analysis. For statements 2, 3, 4, and 6, responding with (Strongly) agree is considered a traditional answer, while responding with (strongly) disagree is considered a non-traditional answer. For statements 1 and 5 (strongly) disagree is considered a traditional answer and (strongly) agree is considered a non-traditional answer. Therefore, I reorder the answers for these two statements as follows: 5 - '*Strongly agree',*

4 - '*Agree*', 3 - '*Neither agree nor disagree*', 2 - '*Disagree*,' and 1 - '*Strongly disagree*'. Now, for all statements, a lower answer refers to a more traditional attitude.

For each statement, I generate a dummy variable $Traditional$, which is 1 for a traditional country and 0 for a non-traditional country. To classify the countries as traditional and non-traditional countries, I took for each statement the mean of all responses per country. Next, I took for each statement the median of the means of the 23 countries. If the mean of a country for a specific statement is below the median, a country is classified as traditional for that specific statement. If the mean is equal to or above the median, a country is marked as non-traditional for that specific statement. The classification of countries as a traditional or non-traditional country differs per statement, which is given in Table 3 in the Appendix. There are five countries which are always non-traditional: Denmark, Sweden, Germany, France, and Belgium. There are also five countries which are always traditional: Turkey, Latvia, Hungary, Lithuania, and Poland. For the other thirteen countries some statements classify the countries as traditional, while they are classified as non-traditional for other statements.

Next, I combine all the statements to generate a dummy variable, $Traditional$, to mark a country as traditional or non-traditional. Which I will also refer to as the combined mean dummy. To create this variable, I first averaged the means of all statements for each country. Then, I took the median across the 23 countries. Lastly, I classify a country as traditional if its mean is below the median, otherwise it is considered as non-traditional. This results in 11 countries with traditional gender norms and 12 countries without traditional gender norms. Traditional and non-traditional countries are listed in Table 2. For this combined mean dummy, Denmark is the most non-traditional country, whereas Turkey is considered the most traditional country.

3.3. Summary statistics

After dropping the observations that are not usable, I have a sample that consists of 46,096 observations across 23 countries, as shown in Table 4A in the Appendix. Nearly 50% of these observations are female, which also holds when considering traditional and non-traditional countries separately. Here, I use the combined mean dummy variable to classify a country as (non-)traditional. Focusing on self-employed workers, only 35.7% are female, as shown in Table 5 in the appendix. According to Table 4A, 12.1% (5,582 observations) of the workers are self-employed. In traditional countries, 15.5% (2,478) are self-employed, this is 10% (2,834) in non-

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traditional countries. On average, a worker earns 1,435 euros per month. However, workers in non-traditional countries earn on average 1,000 euros per month more than workers in traditional countries. The average earnings for workers in non-traditional countries are 1,831 euros, while it is 805 euros for workers in traditional countries. There is also a difference in earnings between traditional and non-traditional countries for self-employed workers. A self-employed worker in a non-traditional country earns, on average, 2,160 euros, while a self-employed worker in a traditional country earns 797 euros (Table 5). On average, a worker is 42 years old. However, a self-employed worker is older, namely 46 years old. Nearly 50% of all workers have children, which applies to both workers in non-traditional and traditional countries, as well as for self-employed workers.

The summary statistics also show differences between males and females. According to Table 4B, males have higher net monthly earnings than females in both traditional and non-traditional countries. Men in non-traditional countries earn, on average, 2,115 euros, while women only earn 1,557 euros. So, females earn 73.6% of the earnings of a male. In traditional countries men earn on average 920 euros, whereas females earn 689 euros. Thus, females earn 74.9% of males' average earnings. According to Table 5, self-employed males earn 2,437 euros in non-traditional countries, while self-employed females earn 1,670 euros. This means that females earn 68.5% of what males earn. In traditional countries this number is 80.6%, where self-employed men earn on average 856 euros and self-employed women earn 690 euros.

Besides the differences in earnings, I also observe a difference between men and women in the number of hours worked per week. Males in non-traditional countries work on average 39 hours, while females work on average 33 hours. In traditional countries, both men and women work more hours, with 44 and 38 hours, respectively. But in both cases, traditional and non-traditional countries, men work on average six hours more than women. The difference between men and women is larger for self-employed workers in both non-traditional and traditional countries, with a difference of eight and eleven hours, respectively.

3.4. Potential concerns with the data

There are some potential concerns with the dataset. A first potential concern relates to the observations I had to drop due to the missing value for net monthly earnings. I had to exclude approximately 5,500 self-employed workers, resulting in a decline in the percentage of self-

employed workers from 17% to 14%. As a consequence, it cannot be guaranteed that the remaining self-employed workers are a representative sample of all self-employed workers. Additionally, the accuracy of the reported net monthly earnings can be questioned. Respondents have to provide their earnings, but there is a possibility of unintentional or intentional reporting incorrect earnings. These errors can lead to inaccuracies in the estimations.

A second potential concern is the 'political correctness bias'. During the ISSP interviews, the respondents must provide answers on a strongly disagree – strongly agree scale. However, it is possible that respondents provide answers they believe the interviewer expects to hear, leading to biased responses. Additionally, respondents can avoid to use the strongly disagree and strongly agree answer and use instead disagree and agree, respectively. If the bias varies across countries, it can result in misclassifying a country as non-traditional when it is actually traditional, and vice versa. To address this issue, I will analyze every statement individually and also all statements combined. This approach will allow me to determine whether the impact of traditional gender norms holds across all cases.

4. Methodology

To analyze the impact of traditional gender norms on the gender earnings gap, I use multiple linear regression analysis. First, I examine the impact of traditional gender norms on the gender earnings gap among self-employed workers. Second, I examine whether the impact of traditional gender norms on the gender earnings gap differs between employed and self-employed workers.

4.1. Gender earnings gap of self-employed workers

First, I examine the impact of traditional gender norms on the gender earnings gap among self-employed workers. Therefore, I limit the analysis to the observations of self-employed workers. The dependent variable is the logarithm of the net monthly earnings in euros. The two independent variables are $Female_i$ and $Traditional_j$. $Female_i$ is equal to 1 if worker i is female and 0 if worker i is male. $Traditional_j$ is equal to 1 if the worker lives in traditional country j and 0 otherwise. As described in Section 3.2.2., there are seven options to classify a country as traditional or non-traditional:

a) Combined mean dummy, using all the statements;
b) Working mother can have a warm relationship with child;

c) Preschool child suffers through working mother;

d) Family life suffers through working mother;

e) Women's preference: home and children;

f) Both should contribute to household income;

g) Men's job is earn money, women's job household.

If the mean of the responses of a country is below the median of all country means, the country is classified as traditional. When the mean is equal to or above the median of all country means, the country is classified as non-traditional. I will do the analysis for each of the seven options separately. To answer the question of whether traditional gender norms impact the gender earnings gap, I include an interaction term between $Female_i$ and $Traditional_j$. This interaction term measures whether the gender earnings gap is different in traditional countries.

With the regression, I want to measure the impact of living in a traditional country and being female on earnings. However, the estimates could be affected by other factors that differ between traditional and non-traditional countries. To address this concern, I include three country-specific control variables to make the countries more comparable. First, I add GDP as a control for each country's wealth, as wealth can affect earnings and potentially influence attitudes towards traditional gender norms. Second, I include the percentage of people with tertiary education as a control for human capital, which can impact earnings and individuals' perspectives on traditional gender norms. Lastly, I add the net total social expenditure as a percentage of GDP, which measures governmental intervention that may affect the net monthly earnings. Therefore, I include $\bar{\omega}_j = \omega_1 GDP_j + \omega_2 Tertiary_j + \omega_3 Social_j$.

Besides differences between traditional and non-traditional countries, there are also differences between males and females that affect the gender earnings gap. To address potential selection bias, I include person-specific control variables. I choose to include the following person-specific control variables: number of hours worked per week, having children, age, age squared, level of education, having a partner, and occupation. The number of hours worked per week directly impacts earnings, and as discussed in Section 3, there is a clear difference in average weekly hours worked per week between males and females. Second, I include having children because having children can lower productivity which in turn can impact earnings. Third, I add age since older workers generally get paid more if they have more experience. I also add age squared, since

productivity increases over the years but from a certain age decline which can impact the earnings. Fourth, I include the level of education measured by the ISCED index, as higher education is associated with higher earnings. Fifth, I include having a partner because workers with partners may make different work choices and take on different levels of risk based on their partner's income or the division of household responsibilities. Lastly, I include occupation, using the two-digit code of the International Standard Classification of Occupations (ISCO) 2008. Certain occupations have higher earnings than others, and if there is a gender imbalance within higher-paying occupations, it can impact the gender earnings gap. Each of the person-specific control variables can differ between males and females, potentially affecting the estimates of the gender earnings gap and the impact of traditional gender norms. Hence, it is important to include these person-specific control variables to avoid over- or underestimation of the impact of traditional gender norms. Therefore, I include $\bar{\gamma}_i = \gamma_1 hoursWorked_i + \gamma_2 Kids_i + \gamma_3 Age_i + \gamma_4 AgeSquared_i + \gamma_5 Education_i + \gamma_6 Partner_i + \gamma_7 Occupation_i$.

The data includes two years of observations, namely 2010 and 2015. Therefore, I include time fixed effects (τ_t) to control for any trends in earnings that affect all self-employed workers in the sample equally.

This results in the following specification:

(1) $\log(Earnings_{ijt}) = \alpha + \beta_1 Female_i + \beta_2 Traditional_j + \beta_3 Female_i \times Traditional_j +$

$\quad \bar{\gamma}_i + \bar{\omega}_j + \tau_t + \varepsilon_{ijt}$

In specification (1), $\log(Earnings_{ij})$ represents the logarithm of the net monthly earnings of worker i in country j in year t. β_1 captures the gender earnings gap, β_2 represents the difference in earnings between traditional and non-traditional countries, and β_3 measures the difference in the gender earnings gap between traditional and non-traditional countries. $\bar{\gamma}_i$ controls for the impact of differences between persons on earnings. $\bar{\omega}_j$ controls for the impact of country differences on earnings. τ_t controls for differences over time.

4.2.   Gender earnings gap of employed workers vs. self-employed workers

In Section 4.1., I examine the impact of traditional gender norms on the gender earnings gap for self-employed workers. Therefore, I only consider the observations of self-employed workers. Next, I want to examine whether the impact of traditional gender norms differs between employed

and self-employed workers. Therefore, I consider all the observations in the dataset. Additionally, I include the dummy variable SE_i in the specification to measure the difference in earnings between employed and self-employed workers. SE_i is equal to 1 if worker i is self-employed and 0 otherwise. Furthermore, I include several interaction terms. First, I add an interaction term between $Female_i$ and SE_i to see whether the gender earnings gap differs between employed and self-employed workers. Second, I include an interaction term between $Traditional_j$ and SE_i to examine whether the difference in earnings between employed and self-employed workers is different in traditional countries. Lastly, I introduce an interaction term between $Female_i$, $Traditional_j$, and SE_i to check whether the gender earnings gap differs for self-employed workers in traditional countries. This results in the following specification:

(2) $\log(Earnings_{ijt}) = \alpha + \beta_1 Female_i + \beta_2 Traditional_j + \beta_3 Female_i \times Traditional_j +$

$\quad \theta_1 SE + \theta_2 Female_i \times SE_i + \theta_3 Traditional_j \times SE_i + \theta_4 Female_i \times Traditional_j \times SE_i +$

$\quad \bar{\gamma}_i + \bar{\omega}_j + \tau_t + \varepsilon_{ijt}$

In specification (2), the dependent variable is similar to specification (1), representing the logarithm of the net monthly earnings in euros. The coefficients in specification (2) have the following interpretations: β_1 represents the gender earnings gap, β_3 shows whether this gap differs for traditional countries, and β_2 indicates the earnings gap between traditional and non-traditional countries. θ_1 measures the difference in earnings between employed and self-employed workers, θ_3 shows whether this difference differs for traditional and non-traditional countries, θ_2 indicates the difference in the gender earnings gap between self-employed and employed workers, and θ_4 shows whether the difference in the gender earnings gap between self-employed and employed workers differs between traditional and non-traditional countries. $\bar{\gamma}_i$ controls for the impact of differences between workers on earnings, while $\bar{\omega}_j$ controls for the impact of country differences on earnings. τ_t controls for differences over time. The most important coefficient in specification (2) is θ_4, as it shows whether the impact of traditional gender norms on the gender earnings gap differs between self-employed and employed workers.

4.3.   Assumptions

By using multiple linear regression analysis, several assumptions have to be met. On which I will elaborate in this section.

4.3.1. Sample selection

The first assumption that needs to hold is that the sample is randomly selected from the population of interest, which includes all working-age males and females in Europe. However, individuals who choose not to work are excluded from the dataset, as the EWCS only includes those who work at least one hour per week for pay. Consequently, the sample consists only of people who choose to participate in the labor market and have earnings greater than 0 euros. This can lead to an underestimation of the gender earnings gap since females, in particular, may self-select out of the labor market and, therefore, out of the sample. Furthermore, if more females opt out of the labor market in traditional countries compared to non-traditional countries, it can result in an underestimation of the impact of traditional gender norms on earnings. Additionally, external validity cannot be guaranteed. Therefore, any conclusions drawn can only be based on individuals who are part of the working population and work at least one hour per week.

4.3.2. Missing values at random

As discussed in Section 3, I excluded observations of workers due to missing values for earnings. Multiple linear regression assumes that these values are missing completely at random, meaning that their absence is unrelated to the variable being measured and that the sample remains a good representation of the population. However, it is likely that the group of workers who choose not to disclose their earnings differs from those who are willing to provide this information. It is not possible to use observations from workers with missing earnings data. Dropping observations from workers with missing values can result in an unrepresentative sample of the (self-)employed population. Proving that the missing values are completely missing at random is challenging. However, when comparing the dataset before and after dropping the observations in Table 1, I do not observe large discrepancies between these two datasets. Therefore, I assume that this assumption holds.

4.3.3. Endogeneity assumption

A third assumption that must hold when using multiple linear regression analysis is that there is no correlation between the independent variables and the error term. So, there should be no relationship between *Female* and *Traditional* and factors that are not included in the model. This assumption is automatically met when the control and treatment group only differ in their treatment. I compare females and males and assume that these workers are similar except for their gender.

However, they can differ in observed and in unobserved factors. As a result, the estimated gender earnings gap may be a consequence of other factors that differ between males and females. To overcome this, I include seven control variables: $Hours\ worked\ per\ week,$ $Having\ Children, Age, AgeSquared, Level\ of\ education, Having\ a\ partner,$ and $Occupation$. Besides comparing males and females, I compare traditional and non-traditional countries to examine the impact of traditional gender norms on the gender earnings gap. As mentioned in Section 3.3., there are several disparities between workers in traditional and non-traditional countries. These differences may be caused by factors other than traditional gender norms. To address this concern, I control for these factors by including three country-specific control variables: GDP per capita, the percentage of the population with a tertiary education, and the net total social expenditure as a percentage of GDP. These values are obtained from the OECD. Additionally, the differences between males and females may vary between traditional and non-traditional countries. These differences between groups can potentially bias the results, leading to over- or underestimation of the true effect. However, since I include three country-specific control variables and seven person-specific control variables to address omitted variable bias, I assume that the endogeneity assumption holds.

4.3.4. No multicollinearity

The last assumption which have to be held is that the independent variables should not be perfectly correlated with each other. In particular, there should not be a perfect correlation between gender and living in a traditional country. When there is a high correlation among the independent variables, it can result in unstable and unreliable estimates. It is highly unlikely that there is multicollinearity between $Female$ and $Traditional$, as gender is given by nature and traditional gender norms are more or less given by culture. However, there might be some collinearity between certain person-specific control variables, such as number of hours worked per week and having children. However, this is of lesser importance since these are not directly used to answer the research question. Therefore, I assume that there is no multicollinearity, and thus that this assumption holds true.

5. Results

In this section, I will describe the results I found. I will give possible mechanisms that explain these results in Section 6.

5.1. The gender earnings gap for self-employed workers

5.1.1. Traditional classified with the combined mean dummy

In Table 6 in the Appendix, a country is classified as traditional when the mean of all statements for this country is below the median of the means of all countries. The results of the regression without control variables show that self-employed females earn 45.3% less than their male counterparts, as shown in column 1. This gender earnings gap is 23.2 p.p. smaller in traditional countries. Both results are statistically significant at a 1% level. This indicates that traditional gender norms have a positive impact on the gender earnings gap of self-employed workers. In traditional countries, self-employed workers earn 116.1% less than in non-traditional countries, which is statistically significant at a 1% level.

In column 2, I include the country-specific control variables to make the countries more comparable. As a result, self-employed workers in traditional countries earn 22.8% less than self-employed workers in non-traditional countries. This is statistically significant at a 1% level. After adding the country-specific control variables, the gender earnings gap only slightly changed. Females earn 43.0% less than males, which is statistically significant at a 1% level. The gender earnings gap is 9.4 p.p. smaller in traditional countries. However, this is only statistically significant at a 10% level. Therefore, I cannot conclude that traditional gender norms have an impact on the gender earnings gap of self-employed workers.

In column 3, I include person-specific control variables, which control for differences between males and females that may affect the earnings. After adding these controls, the gender earnings gap still exists. Self-employed females earn 43.7% less than their male counterparts, which is statistically significant at a 1% level. However, the gender earnings gap is 20.2 p.p. smaller in traditional countries. In contrast to column 2, this result is statistically significant at a 1% level. This suggests that traditional gender norms have a positive effect on the gender earnings gap and make the gender earnings gap smaller. Self-employed workers earn 22.5% less in traditional countries than in non-traditional countries. This result is statistically significant at a 1% level.

5.1.2. Traditional defined per statement

I also conduct the regression with the country-specific and person-specific control variables for each statement of the ISSP survey separately. The results of these regressions are shown in Table 7 in the Appendix. For each statement, it holds that, on average, self-employed females earn between

30.6% and 45.7% less than self-employed males. For each statement this result is statistically significant at a 1% level. The gender earnings gap is slightly larger for traditional countries when I use the statements 'Working mother can have a warm relationship with child' (Column 1) and 'Both should contribute to household income' (Column 5) to classify a country as traditional. However, both results are not statistically significant. Therefore, I cannot state for these statements that the gender earnings gap differs between traditional and non-traditional countries. By using the other statements to classify a country as traditional or not, the gender earnings gap for self-employed workers is between 17.0 and 23.4 p.p. smaller in traditional countries. For these statements, the results are statistically significant at a 1% level. Therefore, I can conclude for these statements, that traditional gender norms make the gender earnings gap smaller for self-employed workers. For all statements, it holds that self-employed workers in traditional countries earn less than in non-traditional countries, which is statistically significant at a 1% level. The smallest difference in earnings between traditional and non-traditional countries is 10.7% for the statement 'Both should contribute to household income' (Column 5), and the largest difference is 42.1% for the statement 'Family life suffers through working mother' (Column 3).

5.2.   The gender earnings gap for all workers

5.2.1.   Traditional classified with the combined mean dummy

In Tables 6 and 7 I only consider self-employed workers in my analysis. Next, I compare employed and self-employed workers to examine whether the impact of traditional gender norms differs between these groups of workers. In Table 8 in the Appendix, I use the combined mean dummy to classify a country as traditional or not. Without adding person-specific and country-specific control variables, I found that females earn 27.8% less than males, as shown in column 1. This result is statistically significant at a 1% level. On general, the income in traditional countries is 103.1% lower than in non-traditional countries, which is statistically significant at a 1% level. However, the gender earnings gap is not statistically significantly different between traditional and non-traditional countries. Being self-employed increases the earnings by 3.8%, this result is only statistically significant at a 10% level. Therefore, I cannot conclude that the income between employed and self-employed workers differs. However, being a self-employed worker in a traditional country decreases the earnings by 12.6 p.p., which result is statistically significant at a 1% level. When I focus on self-employed females, the earnings are 17.3 p.p. lower for self-employed females than for employed females. This result is statistically significant at a 1% level.

However, being a self-employed female in a traditional country increases the earnings with 19.9 p.p. This result is statistically significant at a 1% level, which makes the gender earnings gap in traditional countries smaller for self-employed workers than for employed workers. These findings suggests that traditional gender norms have no impact on the gender earnings gap for employed workers, whereas they have a positive impact on the gender earnings gap of self-employed workers.

In column 2, I include the country-specific control variables. As a consequence, the earnings of workers in traditional countries are only 26.3% lower than in non-traditional countries, which is statistically significant at a 1% level. Females earn, in general, 28.1% less than males. This result is statistically significant at a 1% level. Females in traditional countries earn 2.3 p.p. less than females in non-traditional countries. This result is only statistically significant at a 10% level. Therefore, I cannot conclude that traditional gender norms impact the gender earnings gap. Being self-employed increases the earnings by 6.1%, this is statistically significant at a 1% level. This result is not statistically significantly different for traditional countries. Being a self-employed female decreases the earnings by 14.7 p.p., which is statistically significant at a 1% level. However, being a self-employed female in a traditional country has a smaller negative effect. Since being a self-employed female in a traditional country increases the earnings with 11.4 p.p., which is statistically significant at a 5% level. This makes the gender earnings gap for self-employed workers smaller in traditional than in non-traditional countries.

In column 3, I add the person-specific control variables. As a result, the earnings of females are 21.2% lower than the earnings of males, which is statistically significant at a 1% level. A worker in a traditional country earns 18.9% less than in a non-traditional country. For females, this difference is even more pronounced, with earnings being an additional 7.5 p.p. lower than the earnings of females in non-traditional countries. Both results are statistically significant at a 1% level. This indicates that traditional gender norms have a negative impact on the gender earnings gap. Being a self-employed worker results in lower earnings of 8.3%, which is statistically significant at a 1% level. This result is not statistically significantly different for traditional countries. Being a self-employed female result in an additional decline in earnings of 15.8 p.p., which is statistically significant at a 1% level. However, being a self-employed female in a traditional country increases the earnings by 29.2 p.p., which is statistically significant at a 1% level. Therefore, I can conclude that the gender earnings gap in non-traditional countries is larger

for self-employed workers than for employed workers, whereas the gender earnings gap in traditional countries is larger for employed workers than for self-employed workers.

5.2.2. Traditional defined per statement

Similar to 5.1.2., I conducted the regression with the person-specific and country-specific control variables for each statement separately. The results are given in Table 9 in the Appendix. For each statement, it holds that a female earns less than a male, with a female earning between 21.2% and 22.9% less than a male. For each statement, this difference is statistically significant at a 1% level. The earnings are between 6.8% and 20.1% lower in traditional countries than in non-traditional countries, which is statistically significant for each statement. The earnings for females in traditional countries are between 2.8 and 7.5 p.p. lower, which is statistically significant at a 1% level for each statement. This suggests that having traditional gender norms is correlated with a larger gender earnings gap for employed workers.

Focusing on self-employed workers, for each statement, it holds that self-employed workers earn less than employed workers, with the earnings being between 4.6% and 11.2% lower for self-employed workers than for employed workers. However, being a self-employed worker in a traditional country increases the earnings by 8.9 p.p. for the statement 'Working mother can have a warm relationship with child' (Column 1), which is statistically significant at a 1% level. For the other statements, there is not a statistically significant difference in the earnings of self-employed workers between traditional and non-traditional countries. For the statements 'Preschool child suffers through working mother' (Column 2), 'Family life suffers through working mother' (Column 3), 'Women's preference: home and children' (Column 4), and 'Men's job is earn money, women's job household' (Column 6), being a self-employed female result in lower earnings, with the earnings being between 12.5 and 15.8 p.p. lower for self-employed females, these results are statistically significant at a 1% level. In contrast, being a self-employed female in a traditional country is associated with higher earnings, with the earnings being between 21.1 and 29.2 p.p. higher for the same statements. These results are statistically significant at a 1% level. For the statements 'Working mother can have a warm relationship with child' (Column 1) and 'Both should contribute to household income' (Column 5), the earnings are not statistically significantly different for a self-employed female compared to a self-employed male. This holds for both traditional and non-traditional countries.

5.3. Results conclusion

In conclusion, based on the results presented in column 3 of Table 6 in the Appendix, it is evident that self-employed females earn 43.7% less than self-employed males. However, the gender earnings gap is 20.2 p.p. smaller in traditional countries. Additionally, the earnings of self-employed workers are 22.5% lower in traditional countries compared to non-traditional countries. These findings are all statistically significant at a 1% level.

Similar results holds for the statements 'Preschool child suffers through working mother' (Table 7, Column 2), 'Family life suffers through working mother' (Table 7, Column 3), 'Women's preference: home and children' (Table 7, Column 4), and 'Men's job is earn money, women's job household' (Table 7, Column 6). Findings with these statements show a gender earnings gap for self-employed workers, which is smaller in traditional countries. The statements 'Working mother can have a warm relationship with child' (Table 7, Column 1) and 'Both should contribute to household income' (Table 7, Column 5) also show a gender earnings gap for self-employed workers. However, for these statements the gender earnings gap for self-employed workers is not statistically significantly different between traditional and non-traditional countries.

When considering all the workers in Table 8, females earn 21.2% less than males. Additionally, the gender earnings gap is 7.5 p.p. larger in traditional countries. Moreover, the gender earnings gap is even larger for self-employed workers, with a difference of 15.8 p.p. However, the gender earnings gap for self-employed workers is 29.2 p.p. smaller in traditional countries.

Looking at all the statements in Table 9, the results show that for each statement, females earn less than males. The gender earnings gap is even larger in traditional countries for each statement. For the statements 'Preschool child suffers through working mother' (Column 2), 'Family life suffers through working mother' (Column 3), 'Women's preference: home and children' (Column 4), and 'Men's job is earn money, women's job household' (Column 6), the gender earnings gap is larger for self-employed workers. However, the gender earnings gap for self-employed workers is smaller in traditional countries for these statements. For the statements 'Working mother can have a warm relationship with child' (Column 1) and 'Both should contribute to household income' (Column 5), the earnings are not statistically significantly different for a self-employed female compared to a self-employed male. This holds for both traditional and non-traditional countries.

In conclusion, there is a gender earnings gap for both employed and self-employed workers. For employed workers the gender earnings gap is larger in traditional countries. Whereas for self-employed workers the gender earnings gap is smaller in traditional countries. This suggests that traditional gender norms have a positive impact on the gender earnings gap for self-employed workers.

6. Mechanisms

In section 5, I concluded that the gender earnings gap for self-employed workers is smaller in countries with traditional gender norms, whereas the gender earnings gap for employed workers is larger in countries with traditional gender norms. In this section, I will provide possible explanations for this difference.

6.1. Sorting effect

One possible explanation is a sorting effect of more successful and ambitious females into self-employment in traditional countries. According to Section 2.1., traditional gender norms impact the labor force participation of females. As a consequence, a female who participates in the labor market in a non-traditional country may choose to opt out of the labor market if she were in a traditional country. It is likely that in traditional countries, the more successful and ambitious females stay in the labor market and are self-employed, while less successful females opt out. However, both groups remain in the labor market in non-traditional countries. As a result, the gender earnings gap is smaller in traditional countries.

Additionally, I compared the impact of traditional gender norms on the earnings between employed and self-employed workers. Here I found that the gender earnings gap is larger for employed workers in traditional countries, whereas the gender earnings gap is smaller for self-employed workers in traditional countries. A similar sorting effect can possibly explain this, where the more successful and ambitious females choose self-employment, and the less ambitious women choose employment in traditional countries. Whereas in non-traditional countries, there may be a more equal distribution of females between employment and self-employment since it is more widely accepted for females to work or be self-employed

To check whether this explanation could be true, I compare the average earnings of employed and self-employed females in traditional countries and in non-traditional countries, which are shown in Table 10 in the Appendix. Here I observe that the earnings of employed females are slightly lower

than the earnings of self-employed workers in traditional countries. For non-traditional countries, this difference is larger, where employed females also earn less than self-employed females. This suggests that the explanation that successful women in traditional countries self-select into self-employment instead of employment does not hold. However, this is only a comparison and not empirically tested. Moreover, it cannot say anything about the women who opt out the labor market.

6.2.   Male's side

By comparing the earnings of self-employed and employed males in traditional and non-traditional countries, I found that the earnings of self-employed males are nearly 10% lower than the earnings of employed males in traditional countries. In contrast, in non-traditional countries, self-employed males earn approximately 18% more than employed workers. This suggests that a possible explanation for the difference in the gender earnings gap cannot be found on the side of females, but rather on the side of males.

This difference in earnings can possibly be explained by the fact that in traditional countries, more males choose for self-employment because they have no other alternatives for work. On the other hand, in non-traditional countries, more self-employed males choose to be self-employed because of their own personal preferences. This pattern is evident in the data from 2015. Unfortunately, the question about why someone chooses self-employment was only asked in 2015 and not in 2010, so I cannot include it as a control variable in the analysis, as it would result in dropping half of the observations. However, similar patterns holds for females, but the differences in earnings for females are different than the differences in earnings for males. This could suggest that it may not explain why employed males in traditional countries earn more than self-employed males in traditional countries, whereas it is the opposite in non-traditional countries. Traditional gender norms may also impact this difference between males in traditional countries. However, I cannot provide a clear mechanism for this, making it a good topic for further research.

6.3.   The gender earnings gap per statement

By classifying countries as traditional or non-traditional based on the different statements, the results differ for each statement. Not for each statement, the gender earnings gap for self-employed workers is smaller in traditional countries compared to non-traditional countries. Specially, for the statements 'Working mother can have a warm relationship with child' (Table 7, Column 1) and 'Both should contribute to household income' (Table 7, Column 5), there is no statistically

significant difference in the gender earnings gap between traditional and non-traditional countries. The countries classified as traditional with these two statements are only classified as traditional once or twice classified, considering all the statements. These are countries such as Norway, Ireland, The Netherlands, The United Kingdom, and Finland. While there is no difference in the gender earnings gap of self-employed workers between traditional and non-traditional countries for these statements, there is a difference in the gender earnings gap for employed workers. Where the gender earnings gap is larger in traditional countries (Table 9, Column 1; Table 9, Column 5).

Whereas the other statements are more focused on the idea that mothers/females have to stay a home, these two statements put less emphasis on it. For the other four statements, it holds true that the gender earnings gap is smaller for self-employed workers. A similar mechanism as discussed in Section 6.1. can be used to explain this, whereby more successful females stay in the labor market while less successful females opt-out. However, this sorting effect could be smaller for the two statements since these are less focused on staying at home as a female. So, I suggest that family responsibilities for self-employed females are of more importance for the other statements than for these two statements.

7. Heterogeneous effects

As discussed in Section 2, work-life balance and occupational segregation are two main components that affect the gender earnings gap. Additionally, these two factors are affected by traditional gender norms. In this section, I will compare the impact of traditional gender norms on self-employed workers with and without children. Moreover, I will examine the impact of traditional gender norms on the gender earnings gap across different occupations.

7.1. Children

One important factor that creates a difference in the work-life balance between males and females is having children. Especially traditional gender norms ascribe family responsibilities as something for women. To examine whether the gender earnings gap differs between self-employed workers with and without children, I conduct two separate regressions. First, I use only the observations of self-employed workers with children. Then, I use only the observations of self-employed workers without children. In both regressions, I use the combined mean dummy to classify a country as traditional. The regressions include the country-specific and person-specific control variables,

except for the control variable *Kids*. Additionally, I include time fixed effects. The results are shown in Table 11 in the Appendix.

In both cases, with and without children, there is a gender earnings gap which is statistically significant at a 1% level. Females with children earn 40.9% less than males with children, while females without children earn 50.0% less than males without children. The gender earnings gap is not statistically significantly different for self-employed workers with children in traditional countries compared to non-traditional countries. In contrast, the gender earnings gap is 35.9 p.p. smaller for self-employed workers without children in traditional countries.

These results suggests that the findings from Section 5, where the gender earnings gap is smaller in traditional countries, are mostly generated by the workers without children. This indicates that traditional gender norms have a positive impact on the earnings of self-employed females without children in traditional countries. However, have no impact on the earnings of self-employed females with children in traditional countries. This suggests that not having family responsibilities increases the earnings of self-employed workers in traditional countries. Whereas this is not the case in non-traditional countries.

7.2. Occupations

Occupational segregation is a second factor that drives the gender earnings gap. Therefore, I analyze each occupation to determine whether there is a gender earnings gap for self-employed workers, and whether this differs per occupation. For most occupations, females earn less than males. This is only statistically insignificant for the occupations: 6 Skilled agricultural, forestry and fish, and 8 Plant and machine operators, and assemblers. There are large differences in the gender earnings gap. In Professions (column 2), females earn 21.9% less than males, whereas in Craft and related trades workers (column 7), females earn 72.9% less than males.

The gender earnings gap is smaller in traditional countries for only three occupations. The gender earnings gap is for Managers (column 1) 26.9 p.p. smaller in traditional countries (5% significancy level), for Professionals (column 2) 26.0 p.p. smaller in traditional countries (5% significancy level), and for Service and sales workers (column 5) 36.7 p.p. smaller in traditional countries (1% significancy level). For all the other occupations, the gender earnings gap is not statistically significantly different in traditional countries.

These results show that traditional gender norms do not cause a smaller gender earnings gap for self-employed workers in each occupation. Since the results found in Section 5 show a clear impact of traditional gender norms on the gender earnings gap, this result must come from the specific occupations that show a difference in the gender earnings gap between traditional and non-traditional countries.

8. Discussion

Central in my paper is the question of whether traditional gender norms impact the gender earnings gap of self-employed workers. I have found that the gender earnings gap for self-employed workers is smaller in traditional countries. This finding holds true for the combined mean dummy and all statements, except for the statements 'Working mother can have a warm relationship with child' and 'Both should contribute to household income'. In these two statements there is not a statistically significant difference in the gender earnings gap between traditional and non-traditional countries. In the analysis where I compare employed and self-employed workers, the gender earnings gap is larger in countries with traditional gender norms for employed workers. However, the gender earnings gap for self-employed workers is smaller in traditional countries. In Section 7, I found that the gender earnings gap for self-employed workers is only smaller in traditional countries for self-employed workers without children. Whereas there is no statistically significant difference in the gender earnings gap for self-employed workers with children. Analyzing the impact of traditional gender norms on the gender earnings gap of self-employed workers per occupation, shows that traditional gender norms only positively impacts the gender earnings gap in the occupations managers, professionals, and service and sales workers

8.1. Limitations methodology

My study has several limitations. Firstly, the missing values in the data may not be missing at random. The variable with the most missing values is earnings, as individuals do not want to disclose their income. However, it is possible that a particular group rejects to reveal their earnings, and hence the values are not missing at random. This affects the reliability of the estimates. However, in Table 1 I compare the summary statistics before and after dropping the observations. I do not observe large discrepancies between these two groups. Therefore, I assume that the values are missing at random, and the estimates are not affected by the missing values.

Secondly, the classification of countries as traditional and non-traditional is based on the responses to the statements in the ISSP. There could be a political correctness bias that results the incorrect classification of countries. For several statements it holds that the difference in the mean between a traditional and non-traditional country is small. For example, considering the statement 'Both should contribute to income': Latvia, with a mean of 4.049, is classified as traditional, while Belgium, with a mean of 4.050, is classified as non-traditional. If Belgium respondents answer the questions more politically correct compared to Latvian respondents, it can cause a misclassification of the countries, which could affect the findings.

Lastly, the main limitation lies in the inability to guarantee the validity of the endogeneity assumption. The gender earnings gap is not fully explained yet in the literature. Thus, although I include, to my knowledge, all relevant country-specific and person-specific control variables, there might be certain unobserved factors that differ between traditional and non-traditional countries or between males and females. Furthermore, these could be factors that are hard to measure. These factors can potentially impact the gender earnings gap differently in traditional and non-traditional countries. Hence, the effect I attribute to traditional gender norms can be affected by unobserved factors, leading to an over- or underestimate of the impact of traditional gender norms on the gender earnings gap of self-employed workers. This could be the subject of further research.

8.2.   Limitations mechanisms

In Section 6, I attempt to provide an explanation for the findings based on a sorting effect. With this sorting effect the more successful females choose to be self-employed in traditional countries, whereas this is not the necessary the case in non-traditional countries. As a consequence, the gender earnings gap is smaller for self-employed workers in traditional countries. I try to test this, by comparing the earnings of employed and self-employed females in traditional as well as in non-traditional countries. However, in both cases, the earnings are higher for self-employed workers, which is more pronounced for non-traditional countries. Therefore, this test do not support the presence of the sorting effect. Additionally, this test does not completely test whether there is a sorting effect. Further research could focus on analyzing the relationship between being successful and self-employment choices in traditional countries. Moreover, in future research it would be good to conduct a statistical test to measure the impact of the sorting effect of females into self-employment on the difference in the gender earnings gap between traditional and non-traditional countries to provide more robust evidence and shed more light on this mechanism.

9. Conclusion

Traditional gender norms, where a career is associated with males, and childcare and household duties are attributed to females, are still persisting. According to empirical evidence, these traditional gender norms impact the gender earnings gap for employed workers. This raises two questions for this paper: 'Do traditional gender norms impact the gender earnings gap of self-employed workers?' and 'Is the impact of traditional gender norms on the gender earnings gap larger for self-employed workers than for employed workers?' I hypothesized that traditional gender norms will increase the gender earnings gap for self-employed workers, and that the negative impact of traditional gender norms is larger for self-employed workers than for employed workers. When my hypothesis holds true policymakers should consider the importance of a transition to more gender-egalitarian norms. Additionally, if there is a difference between employed and self-employed workers, policymakers should also differentiate their strategies between the two groups to decline the gender earnings gap for both groups.

With multiple linear regression analysis, I found that the gender earnings gap for self-employed workers is 20.2 p.p. smaller in traditional countries, suggesting that traditional gender norms decline the gender earnings gap. Additionally, I found that the gender earnings gap for employed workers in traditional countries is 7.5 p.p. larger. Therefore, I conclude that traditional gender norms have a negative impact on the gender earnings gap of employed workers whereas they positively impact the gender earnings gap of self-employed workers. With these findings, I have to reject both of my hypotheses. Therefore, I suggest policymakers to focus on other factors to decline the gender earnings gap for self-employed workers.

Moreover, I found that the gender earnings gap in traditional countries is only smaller for the self-employed workers without children. While there is no statistically significant difference in the gender earnings gap between traditional and non-traditional countries for the self-employed workers with children. Suggesting that the impact of traditional gender norms can be found in the group without children. Additionally, traditional gender norms only impacts certain occupations, such as managers, professionals, and service and sales workers. Which have a smaller gender earnings gap in traditional countries.

I mainly explain the smaller gender earnings gap in traditional countries by the sorting effect, where the more successful women in traditional countries sort into self-employment. Whereas in non-

traditional countries this is more equally divided. However, I did not empirically test this. Therefore, empirically testing this sorting effect could be subject in future research.

10. References

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11. Appendix

Table 1: Summary statistics of all workers in the dataset before and after dropping observations

VARIABLES	(1) mean	(2) sd	(3) min	(4) max	(5) N	(6) mean	(7) sd	(8) min	(9) max	(10) N
Female	0.488	0.500	0	1	87,657	0.496	0.500	0	1	64,809
Net monthly earnings in euro	1,262	1,796	0	271,140	66,487	1,278	1,811	0.134	271,140	64,809
Hours worked per week	38.41	13.27	1	168	84,852	38.58	12.66	1	168	63,710
Being self-employed	0.178	0.382	0	1	85,837	0.146	0.353	0	1	64,809
Age	42.53	12.49	15	91	87,316	41.98	12.05	15	70	64,809
Level of education	3.431	1.292	0	9	85,456	3.441	1.259	0	9	62,948
Having Children	0.495	0.500	0	1	87,666	0.500	0.500	0	1	64,809
Number of Children	0.877	1.068	0	8	87,666	0.889	1.072	0	8	64,809
Having a partner	0.659	0.474	0	1	87,666	0.659	0.474	0	1	64,809

Note: This table shows summary statistics for all workers before (columns 1-5) and after (columns 6-10) dropping observations. It shows the mean, st. dev., minimum, maximum, and number of observations for the variables female, self-employed, net monthly earnings, number of hours worked per week, level of education measured by the ISCED index, age, having children, number of children, and partner.

Table 2: Countries divided in traditional and non-traditional countries

Traditional Country	Mean	Non-traditional Country	Mean
Turkey	2.827	Denmark	4.170
Latvia	2.999	Sweden	3.982
Hungary	3.022	Norway	3.864
Lithuania	3.104	Finland	3.830
Bulgaria	3.113	Germany	3.790
Poland	3.190	France	3.717
Slovakia	3.234	Ireland	3.580
Austria	3.245	Slovenia	3.575
Czech Republic	3.311	Belgium	3.561
Switzerland	3.340	Netherlands	3.544
Portugal	3.383	United Kingdom	3.507
		Croatia	3.478

Note: This table shows which countries are classified as a country with traditional gender norms. To classify a country as traditional I use the mean of the six statements. If the mean is below the median of the means of all the countries, a country is classified as traditional. If the mean is equal to or above the median, a country is classified as non-traditional. In the paper I refer to this division as the 'combined mean dummy'.

Table 3: Countries divided in traditional and non-traditional countries

Traditional	Mean	Non-Traditional	Mean
1 Working mother cannot have warm relation with child			
Turkey	2.910	Denmark	4.364
Lithuania	3.391	Germany	4.346
Bulgaria	3.443	Slovakia	4.230
Poland	3.485	Slovenia	4.203
Netherlands	3.490	France	4.196
Hungary	3.685	Sweden	4.038
Latvia	3.706	Finland	4.036
Czech Republic	3.724	Switzerland	3.934
Croatia	3.753	Belgium	3.924
Norway	3.792	United Kingdom	3.908
Ireland	3.805	Austria	3.895
		Portugal	3.812
2 Pre-school child suffers through working mother			
Turkey	2.443	Denmark	3.898
Latvia	2.507	Sweden	3.800
Bulgaria	2.549	Norway	3.781
Austria	2.577	Finland	3.673
Hungary	2.613	Ireland	3.433
Portugal	2.675	Germany	3.415
Lithuania	2.757	Netherlands	3.342
Poland	2.888	France	3.281
Switzerland	2.984	Slovenia	3.275
Croatia	3.180	United Kingdom	3.237
Slovakia	3.197	Belgium	3.235
		Czech Republic	3.221
3 Family life suffers through working mother			
Latvia	2.624	Denmark	4.082
Austria	2.663	Finland	3.968
Hungary	2.731	Sweden	3.836
Turkey	2.810	Norway	3.593
Switzerland	2.858	Germany	3.400
Lithuania	2.871	Ireland	3.285
Bulgaria	2.894	France	3.275
Portugal	2.970	United Kingdom	3.265
Slovakia	3.020	Croatia	3.206
Slovenia	3.053	Netherlands	3.203
Poland	3.138	Czech Republic	3.201
		Belgium	3.176
4 Women's preference: home and children			
Turkey	2.216	Denmark	3.897
Slovakia	2.233	Netherlands	3.766

Hungary	2.410	Norway	3.704
Bulgaria	2.583	Germany	3.675
Czech Republic	2.593	Sweden	3.603
Latvia	2.607	Ireland	3.407
Poland	2.921	Austria	3.259
Croatia	2.926	Belgium	3.247
Portugal	2.971	Finland	3.246
Lithuania	2.975	United Kingdom	3.245
Slovenia	2.986	France	3.172
		Switzerland	3.077

5 Both should contribute to household income

Netherlands	3.642	Czech Republic	4.406
Ireland	3.676	Portugal	4.381
Switzerland	3.676	Bulgaria	4.341
United Kingdom	3.722	Slovenia	4.325
Turkey	3.792	Sweden	4.312
Lithuania	3.835	Denmark	4.301
Poland	3.856	France	4.272
Austria	3.866	Slovakia	4.245
Hungary	4.010	Croatia	4.232
Finland	4.041	Norway	4.111
Latvia	4.049	Germany	4.055
		Belgium	4.050

6 Men's job is earn money, women's job household

Slovakia	2.476	Denmark	4.477
Latvia	2.503	Sweden	4.306
Hungary	2.686	Norway	4.200
Czech Republic	2.722	France	4.107
Turkey	2.788	Finland	4.013
Lithuania	2.796	Ireland	3.875
Poland	2.852	Germany	3.848
Bulgaria	2.867	Netherlands	3.818
Austria	3.210	Belgium	3.733
Portugal	3.492	United Kingdom	3.664
Switzerland	3.509	Slovenia	3.611
		Croatia	3.573

Note: This table shows which countries are classified as a country with traditional gender norms per statement. If the mean is below the median of the means of all the countries, a country is classified as traditional. If the mean is equal to or above the median of the means of all the countries, a country is classified as non-traditional.

Table 4A: Summary statistics for all workers

VARIABLES	(1) Mean	(2) sd	(3) min	(4) max	(5) N	(6) Non-traditional mean	(7) N	(8) Traditional Mean	(9) N
Female	0.505	0.500	0	1	46,096	0.510	28,336	0.499	17,760
Net monthly earnings in euro	1,435	2,034	0.134	271,140	46,096	1,831	28,336	804.7	17,760
Hours worked per week	38.13	12.45	1	168	45,375	36.23	28,106	41.23	17,269
Being self-employed	0.121	0.326	0	1	46,096	0.100	28,336	0.155	17,760
Age	42.20	12.11	15	70	46,096	42.51	28,336	41.70	17,760
Level of education	3.474	1.249	0	9	44,251	3.634	26,497	3.236	17,754
Having Children	0.484	0.500	0	1	46,096	0.488	28,336	0.477	17,760
Number of Children	0.854	1.061	0	8	46,096	0.888	28,336	0.799	17,760
Having a partner	0.659	0.474	0	1	46,096	0.660	28,336	0.657	17,760
Traditional	0.385	0.487	0	1	46,096				

Note: The table shows the summary statistics for all observations in the dataset which is used. It shows the mean, st. dev., minimum, maximum, and number of observations of the variables female, being self-employed, earnings, number of hours worked, level of education, having kids, number of kids, having a partner, and whether someone lives in a traditional country. The level of education is given by the ISCED index. To classify whether someone lives in a traditional country, the division of Table 2 is used. The mean and number of observations for all variables are given separately for traditional and non-traditional countries in columns 6-9.

Table 4B: Mean for all workers separated by traditional and non-traditional countries

VARIABLES	(1) Non-traditional Male	(2) Non-traditional Female	(3) Traditional Male	(4) Traditional Female
Net monthly earnings in euro	2,115	1,557	919.8	688.9
Hours worked per week	39.32	33.27	44.45	38.02
Being self-employed	0.130	0.0708	0.200	0.110
Level of education	3.540	3.724	3.066	3.407
Having Children	0.444	0.530	0.447	0.508
Number of Children	0.822	0.952	0.782	0.815
Having a partner	0.677	0.644	0.681	0.632

Note: The table shows the mean for the variables: female, net monthly earnings in euros, hours worked per week, age, level of education measured by the ISCED index, having children, number of children, and having a partner. These are given for males and females in countries with and without traditional gender norm separately. To classify a country as traditional, the division of Table 2 is used.

Table 5: Mean of variables for self-employed workers

VARIABLES	(1) All mean	(2) Male mean	(3) Female mean	(4) Non-traditional All mean	(5) Non-traditional Male mean	(6) Non-traditional Female mean	(7) Traditional All mean	(8) Traditional Male mean	(9) Traditional Female Mean
Female	0.357			0.361			0.353		
Net monthly earnings in euro	1,489	1,654	1,193	2,160	2,437	1,670	797.1	855.6	690.0
Hours worked per week	43.52	46.71	37.78	41.43	43.97	36.94	45.78	49.63	38.72
Age	45.65	45.55	45.85	46.92	47.34	46.18	44.35	43.72	45.50
Level of education	3.187	3.083	3.376	3.646	3.538	3.842	2.739	2.642	2.919
Having Children	0.498	0.480	0.530	0.481	0.449	0.537	0.515	0.511	0.523
Number of Children	0.935	0.919	0.962	0.905	0.851	1.001	0.965	0.988	0.922
Having a partner	0.715	0.731	0.686	0.703	0.714	0.684	0.727	0.748	0.688
Traditional	0.492	0.495	0.487						

Note: The table shows the mean for the variables: female, net monthly earnings in euros, hours worked per week, age, level of education measured by the ISCED index, having children, number of children, having a partner, and whether someone lives in a country with traditional norms. To classify a country as traditional, the division of Table 2 is used. Only the observations of self-employed workers are used. In the columns 1-3 the observations are separated for all, males, and females. In the columns 4-6 the observations are separated for all, males, and females in non-traditional countries. In the columns 7-9 the observations are separated for alle, males, and females in traditional countries.

Table 6: Regression results self-employed workers of combined mean of all statements

VARIABLES	(1) log(earnings)	(2) log(earnings)	(3) log(earnings)
Female	-0.4538***	-0.4299***	-0.4368***
	(0.0388)	(0.0367)	(0.0363)
Traditional	-1.1614***	-0.2278***	-0.2245***
	(0.0302)	(0.0480)	(0.0449)
Female x Traditional	0.2319***	0.0937*	0.2016***
	(0.0538)	(0.0508)	(0.0486)
Person-specific control variables	No	No	Yes
Country-specific control variables	No	Yes	Yes
Time fixed effects	Yes	Yes	Yes
Constant	7.4418***	4.9305***	3.6033***
	(0.0242)	(0.0996)	(0.1764)
Observations	5,582	5,001	4,584
R-squared	0.2677	0.4232	0.5142

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note: This table describes the results for the regressions for self-employed workers with as dependent variable the logarithm of net monthly earnings. A country is classified as traditional, when the mean of all statements is below the median from the means of all countries. In column 1 the basic specification is given. In column 2 the country-specific control variables are added, which are GDP, percentage of people with tertiary education, and social expenditure as a percentage of GDP. In column 3 the person-specific control variables are added, which are number of hours worked per week, having children, age, age squared, level of education, having a partner, and occupation. All columns include time fixed effects.

Table 7: Regression results self-employed workers for each statement

VARIABLES	(1) log(earnings)	(2) log(earnings)	(3) log(earnings)	(4) log(earnings)	(5) log(earnings)	(6) log(earnings)
Female	-0.3493***	-0.4115***	-0.4418***	-0.4576***	-0.3057***	-0.4368***
	(0.0332)	(0.0345)	(0.0362)	(0.0362)	(0.0355)	(0.0363)
Traditional	-0.1133***	-0.3091***	-0.4210***	-0.2912***	-0.1066***	-0.2245***
	(0.0407)	(0.0415)	(0.0445)	(0.0690)	(0.0318)	(0.0449)
Female x Traditional	-0.0099	0.1697***	0.2148***	0.2347***	-0.0897*	0.2016***
	(0.0488)	(0.0485)	(0.0487)	(0.0485)	(0.0487)	(0.0486)
Person-specific control variables	Yes	Yes	Yes	Yes	Yes	Yes
Country-specific control variables	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	3.4001***	3.7836***	3.9827***	3.7190***	3.3835***	3.6033***
	(0.1657)	(0.1691)	(0.1691)	(0.2054)	(0.1593)	(0.1764)
Observations	4,584	4,584	4,584	4,584	4,584	4,584
R-squared	0.5123	0.5167	0.5198	0.5142	0.5141	0.5142

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note: This table describes the results of the regressions for each statement for self-employed workers, which includes country-specific and person-specific control variables. Time fixed effects are also included. Countries are classified with the following statements: 1) Working mother can have a warm relationship with child; 2) Preschool child suffers through working mother; 3) Family life suffers through working mother; 4) Women's preference: home and children; 5) Both should contribute to household income; 6) Men's job is earn money, women's job household.

Table 8: Regression results for all workers of combined mean of all statements

VARIABLES	(1) log(earnings)	(2) log(earnings)	(3) log(earnings)
Female	-0.278***	-0.2807***	-0.2121***
	(0.00849)	(0.0078)	(0.0064)
Traditional	-1.031***	-0.2625***	-0.1893***
	(0.0114)	(0.0121)	(0.0103)
Female x Traditional	0.0218	-0.0234*	-0.0748***
	(0.0157)	(0.0129)	(0.0109)
Being self-employed	0.0375*	0.0615***	-0.0825***
	(0.0222)	(0.0196)	(0.0191)
Self-employed x Female	-0.173***	-0.1474***	-0.1578***
	(0.0399)	(0.0375)	(0.0362)
Self-employed x Traditional	-0.126***	-0.0253	0.0158
	(0.0323)	(0.0280)	(0.0277)
Self-employed x Female x Traditional	0.199***	0.1147**	0.2918***
	(0.0559)	(0.0516)	(0.0492)
Person-specific control variables	No	No	Yes
Country-specific control variables	No	Yes	Yes
Time fixed effects	Yes	Yes	Yes
Constant	7.330***	4.9681***	2.7647***
	(0.00691)	(0.0259)	(0.0488)
Observations	46,096	40,611	38,023
R-squared	0.324	0.4898	0.6707

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note: This table describes the results for the regressions for all workers with as dependent variable the logarithm of net monthly earnings. A country is classified as traditional, when the mean of all statements is below the median from the means of all countries. In column 1 the basic specification is given. In column 2 the country-specific control variables are added. In column 3 the person-specific control variables are added. In all columns time fixed effects are included.

Table 9: Regression results all workers for each statement

VARIABLES	(1) log(earnings)	(2) log(earnings)	(3) log(earnings)	(4) log(earnings)	(5) log(earnings)	(6) log(earnings)
Female	-0.2227***	-0.2210***	-0.2292***	-0.2255***	-0.2197***	-0.2121***
	(0.0062)	(0.0063)	(0.0068)	(0.0066)	(0.0064)	(0.0064)
Traditional	-0.1810***	-0.1401***	-0.0789***	-0.2007***	-0.0683***	-0.1893***
	(0.0095)	(0.0101)	(0.0113)	(0.0195)	(0.0081)	(0.0103)
Female x Traditional	-0.0572***	-0.0627***	-0.0283***	-0.0342***	-0.0577***	-0.0748***
	(0.0109)	(0.0113)	(0.0105)	(0.0109)	(0.0105)	(0.0109)
Being self-employed	-0.1122***	-0.0664***	-0.0462**	-0.0843***	-0.0892***	-0.0825***
	(0.0193)	(0.0186)	(0.0194)	(0.0195)	(0.0205)	(0.0191)
Self-employed x Female	-0.0654*	-0.1254***	-0.1392***	-0.1580***	-0.0276	-0.1578***
	(0.0335)	(0.0345)	(0.0364)	(0.0360)	(0.0361)	(0.0362)
Self-employed x Traditional	0.0886***	-0.0097	-0.0518*	0.0148	0.0461*	0.0158
	(0.0276)	(0.0277)	(0.0276)	(0.0277)	(0.0277)	(0.0277)
Self-employed x Female x Traditional	0.0845*	0.2274***	0.2112***	0.2713***	-0.0146	0.2918***
	(0.0500)	(0.0492)	(0.0494)	(0.0491)	(0.0499)	(0.0492)
Person-specific control variables	Yes	Yes	Yes	Yes	Yes	Yes
Country-specific control variables	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	2.6553***	2.6464***	2.5370***	2.8113***	2.4544***	2.7647***
	(0.0459)	(0.0480)	(0.0504)	(0.0637)	(0.0457)	(0.0488)
Observations	38,023	38,023	38,023	38,023	38,023	38,023
R-squared	0.6710	0.6685	0.6657	0.6668	0.6668	0.6707

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note: This table describes the results of the regressions for each statement for all workers, which includes country-specific and person-specific control variables. In all columns time fixed effects are included. Countries are classified with the following statements: 1) Working mother can have a warm relationship with child; 2) Preschool child suffers through working mother; 3) Family life suffers through working mother; 4) Women's preference: home and children; 5) Both should contribute to household income; 6) Men's job is earn money, women's job household.

Table 10: Average earnings for self-employed and employed workers for females and males

	(1) Female Traditional	(2) Female Non-traditional	(3) Male Traditional	(4) Male Non-traditional
Self-employed	690.03	1669.862	855.57	2437.426
Employed	688.79	1548.346	935.834	2067.184

Note: This table shows the average earnings of females and males in traditional and non-traditional countries for employed and self-employed workers separately.

Table 11: Regression results comparing self-employed workers with and without children

VARIABLES	(1) Kids log(earnings)	(2) No Kids log(earnings)
Female	-0.4096***	-0.5001***
	(0.0446)	(0.0590)
Traditional	-0.2022***	-0.2450***
	(0.0568)	(0.0691)
Female x Traditional	0.0855	0.3589***
	(0.0594)	(0.0786)
Person-specific control variables	Yes	Yes
Country-specific control variables	Yes	Yes
Time fixed effects	Yes	Yes
Constant	3.9302***	3.4994***
	(0.2846)	(0.2317)
Observations	2,353	2,231
R-squared	0.5687	0.4742

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note: This table shows the results of the regression for self-employed workers with and without children. The regressions include the country-specific and person-specific control variables. Only the person-specific control variable 'kids' is not included.

Table 12: Occupations separated by females and males

	Females	Males
1 Managers	249	706
2 Professionals	343	414
3 Technicians and associate professionals	177	255
4 Clerical support workers	49	29
5 Service and sales workers	573	393
6 Skilled agricultural, forestry and fishery workers	298	674
7 Craft and related trades workers	136	680
8 Plant and machine operators, and assemblers	19	201
9 Elementary occupations	147	221

Note: Number of observations per occupation separated by females and males.

Table 13: Regression results comparing self-employed workers by occupation

VARIABLES	(1) log(earnings)	(2) log(earnings)	(3) log(earnings)	(4) log(earnings)	(5) log(earnings)	(6) log(earnings)	(7) log(earnings)	(8) log(earnings)	(9) log(earnings)
Female	-0.4424***	-0.2194***	-0.3648***	-0.5157**	-0.5122***	-0.1934*	-0.7292***	-0.2095	-0.4633**
	(0.1053)	(0.0709)	(0.0894)	(0.2364)	(0.0864)	(0.1161)	(0.1135)	(0.2019)	(0.1872)
Traditional	-0.3683***	-0.2448**	-0.1513	-0.5760	-0.4902***	-0.1108	-0.0613	-0.2284	-0.2069
	(0.0835)	(0.1240)	(0.1392)	(0.3481)	(0.1285)	(0.1474)	(0.0787)	(0.1443)	(0.2622)
Female x Traditional	0.2690**	0.2602**	0.2976*	0.5940	0.3665***	-0.1187	0.2610*	-0.0901	0.3715
	(0.1321)	(0.1286)	(0.1659)	(0.3740)	(0.1195)	(0.1331)	(0.1465)	(0.2675)	(0.2269)
Person-specific control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-specific control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	4.8678***	2.9958***	4.6618***	4.3511***	3.6874***	3.4950***	3.5090***	4.5481***	2.5910***
	(0.4207)	(0.5322)	(0.5993)	(1.3836)	(0.4780)	(0.3678)	(0.3566)	(0.5863)	(0.6846)
Observations	797	650	382	64	791	774	685	187	293
R-squared	0.4105	0.3538	0.3027	0.5844	0.3618	0.5710	0.6211	0.7128	0.4463

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note: This table shows the results of the regression for self-employed workers per occupation. Occupations are defined by using the one-digit ISCO classification of 2008. The occupations are as follows: column 1 Managers, column 2 Professionals, column 3 Technicians and associate professionals, column 4 Clerical support workers, column 5 Service and sales workers, column 6 Skilled agricultural, forestry and fish, column 7 Craft and related trades workers, column 8 Plant and machine operators, and assemblers, and column 9 Elementary occupations. The regressions include the country-specific and person-specific control variables. Only the person-specific control variable 'occupation' is not included.