Female Migrant's Employment in the EU

Sustainable Welfare States, Sociocultural Backgrounds and Female Migrants' Employment Status

Author: Nadine Zeeman, BSc
Supervisor: Dr. A. Morissens
Second Supervisor: S. Turper, MA

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List of Abbreviations

BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
ES	Spain
ESS	European Social Survey
EU	European Union
FI	Finland
FR	France
GDP	Gross Domestic Product
GR	Greece
HR	Croatia
HU	Hungary
IE	Ireland
MS	Member State
MA	Malta
NL	Netherlands
OECD	Organization for Economic Co-operation and Development
PL	Poland
PP	Percentage Point
PT	Portugal
SE	Sweden
SI	Slovenia
SK	Slovakia
UK	United Kingdom
US	United States

Chapter 1 Introduction

In this first chapter, I explain the research I will conduct for this master thesis. This chapter is divided into several parts in which I discuss the background and relevance of the study, the research questions and research strategy. In short, the empirical puzzle I am interested in will be unfolded.

1.1 Summary

Achieving sustainable welfare states is one of the main goals the European Union (EU) has set itself. However, the current decline of the working-age population will undermine this future aim. The financing of welfare systems becomes problematic (Directorate-General for Employment, Social Affairs and Inclusion, 2012, p. 15).

In light of these demographic challenges, it is crucial for the EU to increase its labour market participation (European Commission, n.d.). A group of particular concern is migrants who have a low employment rate, especially migrant women. Compared to female natives, their employment rates are low (Eurostat, 2011, p. 62). Nevertheless, not every EU member state experiences this phenomenon to a similar extent: variation exists. In this study I want to find out to what extent the employment status of female migrants can be explained by their sociocultural background. A comparison will be made with their female native counterparts. This guides me to the following main research question:

- *To what extent does the sociocultural background of female migrants and female natives explain the females' employment status within the selected[1] EU member states in 2010?*

To determine the answer to the above question, I aim to verify the theory of cultural assimilation. This theory tries to explain the employment rate of immigrant women. A cross-sectional comparative study will be conducted to find the answer to the main research question. The data needed for this study will be collected from the European Social Survey (ESS).

This study can be potentially relevant, because it can support the EU in developing strategies to achieve sustainable welfare states.

1.2 Background of the Study: Empirical Puzzle

My study is being conducted in a period known as the 'demographic winter' (Kotkin, Shroff, Modarres & Cox, 2012, p. 18). The EU is facing a shrinking workforce because of the increasing life expectancy of the populations in the member states. It is expected that the number of workers who are retiring every year is to increase more dramatically and will eventually outnumber new labour market entrants. This development presents an enormous challenge to the welfare systems and public finances of the member states. Spending on public pensions and long-term care will increase and as a result the sustainability of the welfare will be undermined (European Commission, 2012, p. 3). This should not be surprising since the path to economic growth and competiveness depends upon the size, the quality and the utilization of the human resources available. Consequently, a declining workforce will impact negatively on the competiveness and sustainable economic growth of a country (Peschner & Fotakis, 2013, p. 5, 34).

These demographic developments have renewed the attention towards labour migration. It has been argued that higher immigration in Europe can address this key challenge of population ageing. Immigrants are considered to be an important resource to reduce the impact of domestic workforce ageing (Peschner & Fotakis, 2013, p. 29-31). Therefore, to respond to this present situation, it is important that migrants can participate in the labour market of their receiving countries (Rubin et al.,

[1] Belgium (BE), Bulgaria (BG), Cyprus (CY), Czech Republic (CZ), Germany (DE), Denmark (DK), Estonia (EE), Spain (ES), Finland (FI), France (FR), Greece (GR), Croatia (HR), Hungary (HU), Ireland (IE), Netherlands (NL), Poland (PL), Portugal, (PT), Sweden (SE), Slovenia (SI), Slovakia (SK) and the United Kingdom (UK).

2008, p.1). The EU has even been encouraged to make use of the potential of immigrants already residing legally in the member states. This allows for the working population to grow in the short term by making the best use of the human resources currently available. Interestingly, already in 2003, the Commission has argued that the successful integration of immigrants in the labour market is a prerequisite to enable economic efficiency and competiveness (Commission of the European Communities, 2003, p. 19; Peschner & Fotakis, 2013, p. 29-31).

Nevertheless, the data available on the employment rates of immigrants demonstrate that the potential contribution of *female* immigrants is not sufficiently satisfied. Data for the year 2009 shows that this particular group of immigrants in the age group of 25-54 has a high employment gap for a large proportion of the EU member states, with the exception of Estonia, Cyprus, Hungary, Malta and Portugal. In ten other EU member states, the female immigrant's employment rate has been 10 percentage points lower than the employment rate of all women in this age group (Eurostat, 2011, p. 62). For two reasons is this finding quite remarkable. First, over the past years welfare states in Europe have become more inclusive. The universal systems of social insurance and specifically family policies have expanded enormously across the European welfare states. As a consequence, migrants have the right to social security. Secondly, increasing the employment rates of immigrants has been high on the political agenda. With regard to the first reason, countries as Germany and the Netherlands have adopted inclusive strategies to maximize employment. For example, family services to stimulate female employment have been adopted. Moreover, their policy priorities have become directed towards the activation and reintegration of migrants. This potentially has had a positive impact on immigrants in their societies, since they, in general, have access to social security, including facilities to reconcile work and family life. In addition, Belgium has made policy efforts to increase immigrant's families' access to crèches and childcare. However, non-EU families make less use of formal childcare than Belgian families. Cultural differences are said to account for this (European Communities, 2006, p. 125; Hemerijck, Palm, Entenmann & Van Hooren, 2013, p. 31, 43; Peschner & Fotakis, 2013, p. 29).

Consequently, the empirical puzzle I am interested in to analyze with my research is the low employment rate of female migrants found in several of the EU member states. This phenomenon will, in a similar way as population ageing, pose a significant risk to the aim of the EU to provide for sustainable welfare states, as well as its goal to attain inclusive and smart growth. Based on these expectations, the EU has made immigrants one of the major target groups to improve the outcomes in society. It has been put forward to close the employment gap for immigrants to obtain an overall employment rate of 75 percent in 2020 which will help the EU to achieve sustainable welfare states (Directorate-General for Home Affairs, 2013, p. 7, 49).

All of the above findings and future prospects underpin that it is in the EU's interest to find out the reasons why we find different employment rates among female migrants. In my study, I will also include female natives to allow for comparison. Female natives are included into the analysis because of the findings and assertions being made in the Report 'Indicators of Immigrant Integration'. This Report finds that the female native populations are having higher employment rates than their female migrant's counterparts. The employment rates of female natives within the EU member states are around the three and six percentage point higher than the employment rates of female migrants in these countries (Eurostat, 201, p. 62).

In my opinion, it is important to explore some of the possible mentioned explanations that try to account for the given fact that female immigrants have different employment rates compared to female natives within the EU member states. My main interest in this respect is to determine to what extent the sociocultural background of female migrants within the EU member states explains the female migrant labour market participation, that is, them being in employment or not.

1.3 Literature Review: State of the Art

Variations exist with regard to the employment of female migrants across the EU member states: differences in employment gaps are present between the employment rate of all women and the employment rate of female migrants aged 25-54 (Eurostat, 2011, p. 62). It is possible that these differences can be explained in variations in migrant's sociocultural background? Several researchers have already tried to find out whether there is a connection between the sociocultural background and employment rate of migrants. The study by Vinogradov and Kolvereid (2007) has tried to determine the relationship between the national culture, educational attainment in the country of origin and self-employment rates among first-generation immigrants residing in Norway in 2004. They have found that it is mostly the educational attainment of immigrants that accounts for their self-employment rate. Migrants with high average education levels are more likely to become self-employed. The other included values, such as personal values of individualism, do demonstrate a correlation between the levels of self-employment; however, they are not significant (Vinogradov & Kolvereid, 2007, p. 362, 371-372). Another research conducted in a similar direction is that of Reyes and Pinillos (2009). Their study has tried to find out the relationship between national culture, measured as individualism/collectivism, and the total entrepreneurial activity in a country, by controlling for a country's level of development. Their research demonstrates that a country's culture correlates with the entrepreneurship rate. Nevertheless, when taking into account the different level of development, individualism is no longer related to entrepreneurship in a similar way when not controlling for third variables (Reyes & Pinillos, 2009, p. 23).

However, other scholars did find a link between the migrants' employment rate within a country and their sociocultural background. The study by Carnoy (2001) has found that the sociocultural background of immigrants can have an influence on the extent to which women migrants participate in the labour market in the receiving country. The persistence of traditional family values among groups of immigrants results in relatively rigid labour markets (Carnoy, 2001, p. 316-317). This finding is supported by the study of Spierings, Smits and Verloo (2008). While not focusing on migrants, they have found that the socio-cultural background of societies in Middle Eastern and North African countries determines women's employment. They argue that a traditional sociocultural environment constitutes a barrier to women's employment (Spierings, Smits & Verloo, 2008, p. 22-24). Another study supporting the relationship between the two variables is the discussion paper by Blau, Kahn and Papps (2008). They have found, *inter alia*, that female immigrants with less traditional gender roles, coming from less traditional source countries, have employment rates close to that of female natives in the US for the period 1980-2000. This cultural factor facilitates their labor market assimilation (Blau, Kahn & Papps, 2008, p. 33-34). To conclude, a more recent cross-sectional study by Zorlu and Hartog (2012) has attempted to account for the employment assimilation of immigrants in the Netherlands by ranking immigrant according to their sociocultural distance to the Netherlands. By using data from two Dutch labor force surveys (2004, 2005), they have found that immigrants whose linguistic and cultural background is close to that of the Dutch society, are more likely to be employed than those immigrants whose sociocultural background differs from the Dutch society (Zorlu & Hartog, 2012, p. 19).

To sum up the results of the literature review, we find a mixed picture regarding the relation between the employment of migrants and their sociocultural background. Several of the researchers did not find a significant link, whereas other studies and working papers did find a relationship. It is therefore not completely clear whether the sociocultural background of female migrants residing in the EU member states can account for their employment status.

1.4 Relevancy of the Study: Contribution to Empirical Literature

The literature review indicates that there is already some knowledge available on the links between the employment of migrants and their sociocultural background. However, I believe that the study I will conduct contributes to the existing body of literature. First of all, I am of the opinion that the previous studies in the literature review have not focused on many factors to determine the sociocultural background of migrants. For example, the study of Reyes and Pinillos (2009) only focused on an individualist/collectivist dimension (Reyes & Pinillos, 2009, p. 23), while e.g. the research by of Blau et al. (2008) only pays attention to the dimension of gender roles (Blau et al., 2008, p. 2). I prefer to include more dimensions for the variable sociocultural background. This allows me to account for more aspects. Moreover, I want to focus on a different time frame than the studies I have mentioned did. I want to focus on a more recent period, namely the year 2010. This allows me to include more up-to-date data on the sociocultural background and employment status of female migrants and female natives. Besides, this year allows me to connect my findings to the EU's 2020 strategy and its concerns relating to a period of ageing populations. To conclude, I want to focus in this respect specifically on EU member states. The studies by Blau et al., (2008), Vinogradov and Kolvereid (2007) and Zorlu and Hartog (2012) all focused their research on one specific country. Reyes and Pinillos (2009) and Carnoy (2001) included a wide range of countries: the Antipodes, North American -, Latin American -, European -, Asian – and Middle Eastern countries (Carnoy, 2001, p. 426-428; Reyes and Pinillos, 2009, p. 35). My interest lays with the EU member states, because they are among the countries with an increasing ageing population. They have much to gain by increasing the employment of female migrants to achieve the headline target of the EU's 2020 Strategy on increasing their employment rates (Directorate-General for Home Affairs, 2013, p. 7, 49). To conclude, different from the studies mentioned, I will also include female natives into the analysis for comparison. This will be done to take into account the results of the Report 'Indicators of Immigrant Integration' being mentioned in section 1.2 (Eurostat, 2011).

Based on a more recent period, these countries and this sample, I would like to find out to what extent the sociocultural background of female migrants explains their employment status. These elements will add something to the existing literature available on the topic and therefore I believe that my study will be relevant.

1.5 Research Plan: Research Questions & Research Strategy

In the previous sections, I have discussed the background of my study, the knowledge already available interests as well as the relevance of my study. By taking this into account, I have developed my research question. The central explanatory research question that will guide my study is:

- *To what extent does the sociocultural background of female migrants and female natives explain the females' employment status within the selected EU member states in 2010?*

As this main research question indicates, the units of analysis are the female migrants and female natives residing in the EU member states. They are the major units being who are being analyzed in this study (Babbie, 2010, p. 98). The independent variable in this study is the sociocultural background and the dependent variable is the employment status of these females in the EU member states. To clarify the research objective, I will make use of several sub-research questions:

1. *What is the employment status of female migrants/female natives in the selected EU member states in 2010?*
2. *What is the sociocultural background of female migrants/female natives in the selected EU member states in 2010?*

3. *What is the relationship between the sociocultural background of female migrants/female natives and the employment status of female migrants/female natives in the selected EU member states in 2010?*

The main aim of this study is to find out whether the sociocultural background of female migrants and female natives can explain their employment status. My research is about assessing whether the independent- and dependent variable are to some extent related with each other. To determine this, I first have to determine the employment status of female migrants and female natives in the EU member states. Secondly, I have to obtain information about the sociocultural background of these females residing in one of the member states of the EU. This will be done by describing and analyzing their sociocultural background. This allows me to find out how they 'look' like on the selected indicators for my independent variable.

Several of the studies have argued that traditional values and patterns, e.g. regarding gender roles and family structures have an effect on the employment of migrants (Blau et al., 2008; Carnoy, 2001). In my study, this theoretical expectation will also be tested for female natives. In this sense, I want to categorize the female respondents according to how traditional they are and to see whether this is related to their employment status. In the section where I will discuss my theoretical framework and hypotheses it will become clear why I have chosen to make traditionalism the reference point for analyzing the female's social cultural background within the EU member states.

Chapter 2 Framework: Theory & Hypotheses

In this section, I will determine how the theory applied to my study provides a probable account of the empirical situation described in chapter one. An existing theoretical framework will be employed to outline theoretical expectations about the issue I am studying. Testable hypotheses are formulated for the specific variables that I want to focus my research on.

2.1 Cultural Assimilation Theory

In his book 'Accounting for tastes', Becker (1996) has argued that culture plays a significant role in the lives of individuals. He stated that individuals hardly can control their culture: it is impossible for people to alter their culture. Their culture and their traditions are shared values and preferences which have been handed down from generation to generation. In a way, culture is given to individuals and their culture influences their behavior and their preferences (Becker, 1996, p. 16). To relate this finding to my study, the research of Guiso, Sapienza and Zingalis (2006) has found that culture affects the values of individuals on *inter alia* their labor participation preferences. Cultural heritage has affected the work choices of American women (Guiso et al., 2006, p. 10, 17).

A theory that integrates both these assumptions and assertions is the cultural assimilation theory. The cultural assimilation theory is a theoretical model attempting to explain female immigrant labor market participation by analyzing the sociocultural background of immigrants. This existing theoretical work fits the literature review discussed in the previous chapter and can be informed by it.

The cultural assimilation theory is one of the several theories which try to explain the employment rate of immigrant women. One of the other theories is the leading human capital theory. In short, this theory argues that those migrants who are more able, that is who are higher educated, are also the people who are more likely productive in the labour market, thus are more likely to be in employment (Chiswick 2008, p. 67; Read, 2004, p. 55). In this study I will focus on the cultural assimilation theory, because this theory has received less empirical attention in the work of scholars. This theory argues that the background of immigrants can have an impact on migrant women's labour

force activity: them being in employment. In fact, it is proposed that immigrants typically maintain stronger attachments to indigenous customs than assimilating to the norms and values of their often western receiving countries. The attachment to home country values is said to be relatively stable over time. The theory presupposes that immigrant women who maintain ties with their countries of origin, where more traditional values prevail, will have lower work rates than women immigrants who have greater exposure to the values of their receiving countries. Traditionalism tends to be more in favor for women's domestic role (Read, 2004, p. 55-56; Vinogradov & Kolvereid, 2007, p. 361). The studies of Inglehart & Baker (2000) and Reyes & Pinillos (2009) can complement this theory. Both studies also argue, in line with the study of Vinogradov and Kolvereid (2007), that a society's historical heritage influences significantly the contemporary values and behaviors of people. Prevalent value orientations reflect the influence of tradition. Traditional cultures still determine the visions of people. Values therefore tend to be stable over time (Inglehart & Baker, 2002, p. 38; Reyes & Pinillos, 2009, p. 28-29). Thus in summary, what this theory basically argues is that the employment status of female immigrants can be explained by the adherence of immigrants to traditional values.

The theory of cultural assimilation will guide my research; it is the perspective lying behind my study. The expectations of the cultural assimilation theory are applied to my particular study. To determine the sociocultural background of the female migrants and female natives in my study, I will include several of the values touched upon by the theory as well as by the studies mentioned in the literature review. Several of these studies have focused on the following values to determine the sociocultural background of people: personal values, family values and gender values. For my study, this means that these values of my interest can either be traditional or not, with being traditional as the reference point. Thus traditional values are the so-called base ground.

The cultural assimilation theory fits my study, since values are difficult to control and to alter: they tend to be stable over time and therefore it is possible to measure them at one point in time, in this case the year 2010. Below, I will address these specific values since I believe that these are explanatory factors that need to be taken into account to address the empirical puzzle of my research.

2.1.1 Personal Values: Collectivism vs. Individualism

The first dimension is that of personal values and this dimension will be conceptualized by focusing on the article of Reyes & Pinillos (2009). Their study conceptualizes personal values by paying attention to personal traits which are being shaped by the national culture of a specific society. Personal values are being characterized by individualism or collectivism. The national culture of a country tends to be correlated with the entrepreneurship rate. Individualism is positively associated with firm creation and labour market activity (Reyes & Pinillos, 2009, p. 23).

Individualism is conceptualized as stressing the importance of the individual, self-sufficiency and self-control. Personal achievement and initiative are highly valued. In addition, personal values as autonomy, variety and pleasure are much adhered to. Collectivism, on the other hand, is marked by the subordination of personal interests to those of the group and is concerned about cooperation, harmony and the well-being of the group. Protection the group in exchanging for unquestioning loyalty is highly valued (Reyes & Pinillos, 2009, p. 23, 25-26; Vinogradov & Kolvereid, 2007, p. 363).

This conceptualization can be strengthened by including that of Inglehart and Baker (2002). We can derive from their article that collectivism can be placed on the traditional dimension of cross-cultural variation, while individualism is placed on the opposite side, the modern secular part. Traditional societies emphasize social conformity instead of individualistic striving and people support deference to authority (Inglehart & Baker, 2002, p. 25). This is thus opposite to personal values characterized by individualism, which happen to be more attendant in modern, secular societies.

2.1.2 Family Values: Conservative vs. Modern

The second dimension is that of family values and this dimension will be conceptualized by paying attention to the article of Carnoy (2001). Family values can either be directed towards the traditional pattern of a nuclear family or are shaped by modern patterns of family systems. People adhering to traditional family structures favor male dominated markets and therefore disregard female employment. Therefore, traditional family values tend to lead to rigid labour markets. People having modern family values prefer to delay marriage, avoid having children and favor to work rather than to stay at home. However, when they do have children and a job, they desire to arrange day care for their children rather than taking full-time care of their children themselves. The identity of women becomes associated with an income-earning capacity (Carnoy, 2001, p. 326-317, 414, 421-422, 426).

To make this conceptualization broader, I will include some of the family values discernible in the article of Inglehart & Baker (2002). People having traditional family values believe that the family is the cornerstone in society and crucial to society. They reject divorce and take a pro-life position on abortion, euthanasia and suicide. They have conservative family values. People with more modern family values take an opposite view on these issues (Inglehart & Baker, 2002, p. 25).

2.1.3 Gender Values: Masculinity vs. Femininity

The last dimension of my independent variable is the dimension of gender values. This is conceptualized by focusing on the article of Vinogradov and Kolvereid (2007). They define social gender roles in societies as values emphasizing either masculinity or femininity. Where masculinity prevails, social gender roles are distinct. Individuals who adhere to masculine gender values value social norms as ambition, ego boosting, wealth, recognition and differentiated gender roles. People with feminine gender values have the opposite social norms, e.g. caring and nurturing, cooperation, quality of life and overlapping gender roles (Vinogradov & Kolvereid, 2007, p. 363, 371).

This conceptualization can also be supplemented by that of Inglehart and Baker (2002). They conceptualize social gender values in a similar ways as the study by Vinogradov and Kolvereid (2007). People adhering to traditional gender values put emphasize on economic and physical security (Inglehart & Baker, 2002, p. 26). This corresponds to the conceptualization of Vinogradov and Kolvereid (2007) who define social gender roles also by including values as economic and physical security, which is wealth and aggressiveness (Vinogradov & Kolvereid, 2007, p. 363). Thus people adhering to traditional gender roles have more masculine gender values, whereas people adhering to modern gender roles have more feminine gender values.

Figure 2.1 below illustrates the three different values to analyze the sociocultural background of female migrants and - natives and includes their traditional and positive pole (see 'Examples').

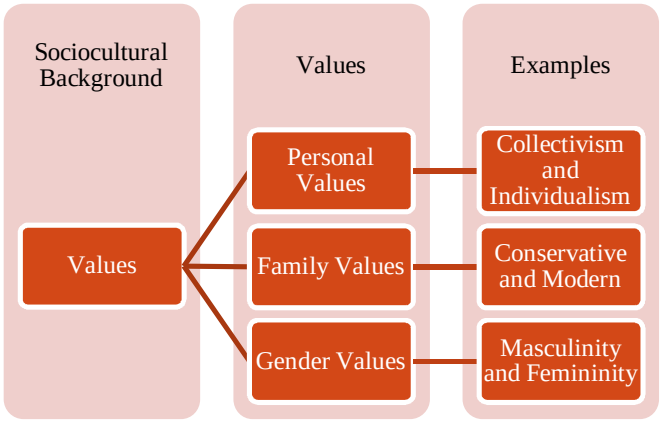

Figure 2.1 Theoretical Concept Sociocultural Background of Female Migrants and Female Natives

2.2 Hypotheses Cultural Assimilation Theory

To conclude this section on the theoretical framework, I have formulated specific hypotheses on the basis of the cultural assimilation theory. The hypotheses demonstrate that the role of the theory being used is that of verification. The theory argues that migrants that adhere to traditional values are less likely to be employed in the receiving countries, than migrants who adhere to more modern values (Read, 2004, p. 56). Since I also include female natives into the analysis, the same argument is tested for them. Consequently, I have come up with the following main hypothesis:

> *H1: The more traditional the sociocultural background of female migrants/female natives, the lower the female migrant's/female natives' employment*

From this main hypothesis I can derive several sub-hypotheses in relation to the three values identified in figure 2.1 (see above). These sub-hypotheses are:

1. 'Personal Values'
    a. *The more female migrants/female natives adhere to collectivist personal values, the lower the female migrant's/female natives' employment*

2. 'Family Values'
    b. *The more female migrant/female natives adhere to conservative family values, the lower the female migrant' /female natives' employment*

3. 'Gender Values'
    c. *The more female migrants/female natives adhere to masculine gender values, the lower the female migrant's/female natives' employment*

Chapter 3 Research Design: Focusing on the Methods

In this third chapter I discuss how I will empirically test my theoretical expectations. I will explain how my research design will connect the research questions to the needed data by focusing on the steps proposed by Punch (2006). I will address my concepts, the research approach I will follow, how I aim to select my cases and how I will collect the data needed to measure my variables. Moreover, I will also discuss the criteria of measurement quality: the issues of validity and reliability (Babbie, 2010, p. 150-153). To conclude, I describe how I will analyze the founded data.

3.1 Concepts: Dependent Variable, Independent Variable & Indicator Variable

Previous studies and working papers have attempted to determine whether the employment of female migrants can be explained by their sociocultural background. Based on the theoretical expectations derived from the cultural assimilation theory, I want to find out whether a relationship between these two variables can be found and, in the case of a relationship, what direction it takes. In this sense, we are dealing with a dependent variable which is expected to depend or to be caused by an independent variable (Babbie, 2010, p. 18). Since I am also including female natives into the analysis, the dependent variable is the employment status for the female migrants and female natives, while the independent variable is their sociocultural background. To conclude, an indicator variable will be added to my study to provide for better statistical tests with regard to the relationship between the independent- and dependent variable.

However, before addressing the definitions of the variables, I will first conceptualize my units of analyses. My units of analyses are the female migrants and female natives residing in the EU member states. I need to be clear about what it means to either be a migrant or native.

3.1.1 Units of Analyses: Female Migrants and Female Natives

First I will conceptualize the concept 'migrant'. For the first, I make use of the definition provided by Eurostat, which is the statistical office of the EU. Eurostat conceptualizes migrants by using the category of 'foreign-born' people in their pilot study on indicators of immigrant integration. Foreign-born are defined as follows: 'Foreign-born is a person whose place of birth (or usual residence of the mother at the time of the birth), is outside the country of his/her usual residence ('Comparing apples with apples', n.d.; Eurostat, 2011, p. 27). Migrants are described as foreign-born, who are persons who have migrated to their country of residence at a particular point in time, regardless of their citizenship (Eurostat, 2011a, p. 23). In this sense, focus is being placed on first generation migrants, who are residing in the receiving EU member state.

The second concept of interest links with the conceptualization above. To specify the definition of 'native' I make use of the conceptualization of the ESS. The ESS defines natives as inborn persons. This means that natives are persons who have been born in the particular country in question (Erikson & Jonsson, n.d., p. 31-32).

To determine whether a respondent can be classified as a migrant or a native, the following question of the ESS is being asked: 'Were you born in [country]?' The respondents have to mark one of the provided three answer categories. Consequently, when they mark 'yes' they are included into the analysis as natives and when they mark 'no', they are categorized as being a native (Erikson & Jonsson, n.d., p. 31-32). This question can be found in figure 7.1 in Appendix A.

3.1.2 Dependent Variable: Employment Status

The main research question of my study indicated that I focus on the female migrants and female natives residing within the EU member states. Therefore, to determine their employment status, I will employ the definition used by the EU in its documents and statistics. The definition the EU's employs for this variable comes from the European Social Survey (ESS).

The dependent variable 'employment status' will be defined by focusing on the conceptualization of the ESS. The EES is an academically driven cross-national survey that is conducted every two years across European countries since 2001. It is being funded by the European Commission's Framework Programmes, European Science foundation and by national funding councils in the countries which participate in the survey ('About ESS', n.d.). The ESS conceptualizes the present employment status of the respondents by having paid work or not. Paid work corresponds to being employed, while not having paid work corresponds to not being employed. Paid work includes being an employee, self-employed and working for a family business. Not being in paid work, thus not being employed is defined as being: in education, unemployed and actively looking for a job, unemployed and nor actively looking for a job, permanently sick or disabled, retired, in community or military service or doing housework, looking for the children or other persons (Erikson & Jonsson, n.d., p. 47, 50). In section 3.4 on page 15 I will provide a description of the ESS data.

3.1.3 Independent Variable: Sociocultural Background

The second variable is the independent variable. The independent variable will be conceptualized by first providing a nominal definition which makes the concepts more specific. It is assigned to a term without the claim that this definition represents something real; instead it is arbitrary (Babbie, 2010, p. 134). This nominal definition is 'social and cultural values'. I have decided to use this nominal definition, because of the review of previous studies and research which have been addressed in

chapter one. Figure 2.1 on page 11 illustrates the social and cultural values to be focused on to determine the sociocultural background of female migrants and female natives.

The study by Vinogradov and Kolvereid (2007) has used this nominal definition. While their focus is specifically on self-employment they do have as their independent variable the sociocultural background of immigrants. To determine the sociocultural background of immigrants, they have focused on *inter alia* the culture of the country of origin of the immigrants defined as the persistence of various values, including social and cultural values (Vinogradov & Kolvereid, 2007, p. 362-363). Another relevant study in this respect is the working paper by Spierings et al. (2008). They conceptualize the sociocultural background of countries/societies as societal norms and cultural ideas, which subsequently fall under their nominal definition of values. Two types of values are deemed important: values about the general role of women and values regarding women in the place of the public sphere (Spierings et al., 2008, p. 8).

In my view, it is useful to conceptualize the variable 'sociocultural background' by using this nominal definition of values, since it allows for various dimensions to be included. To be clear, there is a broad range of values and it is therefore quite an extensive definition of my independent variable. By including various dimensions of this particular nominal definition, the study allows for more certainty when pursuing the objective of finding out whether the sociocultural background of female migrants and - natives indeed explains their employment status.

To conclude this part on the independent variable, I have included a complete figure of the conceptualization of sociocultural background. The nominal definition, the dimensions and the various examples are integrated into figure 3.1 on the next page.

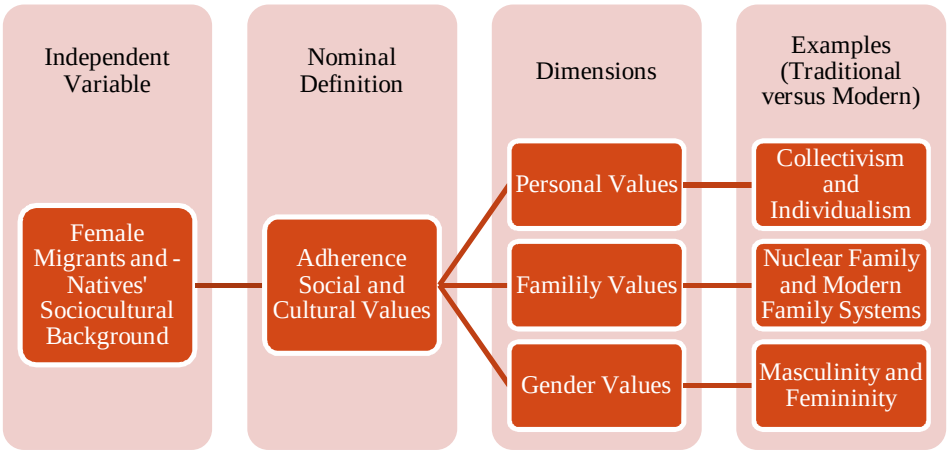

Figure 3.1 Conceptual Tree Theoretical Concept Sociocultural Background

3.1.4 Indicator Variable: Country Dummy Variable

For my research I will add an indicator variable, also known as a dummy variable. I aim to use individual level variables for which the needed information is available. To get more accurate statistical tests, a dummy variable can be entered into my model as an independent variable ('Regression based on samples from several countries', 2013). I will include a nominal level variable with multiple levels. That is, a country dummy variable will be added in my study, thus the EU member states are the indicator variable. This 'special' variable indicates with which of the EU member states we are dealing in the data analysis (De Veaux, Velleman & Bock, 2008, p. 816). The EU member states will be compared to see whether residing in one of them makes has an effect on the dependent variable ('Chapter 5: Nominal Independent Variables', n.d.).

Dummy variables need to be created prior to the analysis to determine the association between my independent- and dependent variable. It is impossible to assess the association between

the metric dependent variable and the nominal independent variable. Therefore, the nominal independent variable, EU member states, with multiple levels needs to be transformed into a categorical numerical variable. A dummy variable indicates whether the country belongs to the designated category or not. A country belongs to the category when it is assigned the value 1 and is excluded when it is assigned the value 0. The country variable is being recoded into a set of several dichotomous variables ('Chapter 5: Nominal Independent Variables', n.d.; De Veaux, Velleman & Bock, 2008, p. 842).

In my study, more than two categories are present, since I analyze 21 EU member states. The first step is to recode 'EU member states' into a set of dummy variables, each of which has two levels. First, I need to make clear how many dummy variables need to be created. The number of levels of the original variable is 21. This implies that the number of dummy variables to be inserted is 20. The formula for this is: k-1, with 'k' meaning the number of levels of the original variable. I will insert 21 levels of 'EU member states' and create a variable that corresponds with each level, that will have the value 1 or 0. The omitted category becomes the reference category against which the other categories are assessed. This means that one country is chosen as the reference category. Subsequently, one dummy variable will be created for each of the other EU member states. Since I make a comparison on the individual level, a particular country's dummy variable will be recoded as follows: a female respondent is assigned the value 1 if she lives in that country and is assigned a value 0 if she does not live in that country. This means that the female respondents who reside in the reference country sample are assigned the value 0 on all the dummy variables ('Chapter 5: Nominal Independent Variables', n.d.; 'Working with dummy variables', 2007).

3.2 Strategy

The quantitative strategy I will follow in order to find an answer to my main research question is a cross-sectional study to analyze the female migrants and female natives residing within the EU member states at one point in time: the year 2010. I want to describe and subsequently analyze the sociocultural background of those females who are living in one of the EU member states. These descriptions and analyses will be based on the three different values observed in figure 3.1 on page 13. This allows me to determine how traditional each of them is on the basis of the cultural assimilation theory. In this way, I want to find out whether the sociocultural background of female migrants and female natives within the EU member states can explain their employment status.

3.3 Sample

It is important to be explicit about who or what is to be studied in your research (Punch, 2006, p. 50). In chapter one I have mentioned that my units of analysis are the female migrants and female natives residing in the EU member states. To determine the sociocultural background of them, I need to determine their values. Consequently, the units of observation and the units of analysis are the same for both my variables of interest (Babbie, 2010, p. 99).

I aim to enlist a large sample of female respondents, since this allows me to make use of a variety of estimators to analyze differences between multiple treatment groups ('Countries', n.d.,; Gerring, 2012, p. 274, 282). I want to compare the employment status of female migrants with female natives and see whether the sociocultural background differs between the two groups.

3.3.1 Probability Sampling & External Validity

My population is selected by means of probability sampling. Probability sampling involves a random-selection mechanism to guarantee that the sample being observed is representative of the whole population (Babbie, 2010, p. 196). The ESS employs a random-selection mechanism by selecting individuals by strict random probability methods at every stage. The aim is to have samples which are

representative of all persons who are 15 years and over (with no upper age limit) who are residing within private household in each of the countries, regardless of their language citizenship or nationality ('Sampling', 2014). With respect to the latter, a deviancy needs to be addressed and taken into account. Research has documented that migrants are underrepresented in the ESS. Griga and Hadjar (2013) argue that some minority groups and groups of people with a migrant background tend to be underrepresented in the ESS (Griga & Hadjar, 2013, p. 5). Another study has documented that Turks in Germany are underrepresented in the survey when comparing them to Turkish figures (Zuccotti, Ganzeboom & Guveli, 2014, p. 11). This underrepresentation may have consequences for the findings of my study. The representativeness of my findings becomes undermined. Representativeness is achieved when the sample has a similar distribution of characteristics as the population from which the sample has been selected. Whereas probability sampling is a sampling technique which enhances representativeness and enables generalizability, underrepresentation of migrants in the ESS hinders this (Babbie, 2010, p. 198). Despite this 'weakness' of the ESS, I do not worry about external validity threats. I specifically want to focus on female migrants residing in the EU member states that have responded to the ESS in Round 5. My aim is not to make any generalizations to other migrants in the population.

3.4 Data Collection Method: the European Social Survey

For my dependent-, independent- and indicator variable, I explain how I collect the needed data. The quantitative data comes from the ESS and is collected at the micro- and macro-level.

In section 3.1.1 on page 12, I already included a short description of the ESS. I want to add that the survey provides information of on the attitudes, beliefs and behavior patterns of diverse populations in the EU member states ('About ESS', n.d.). The ESS is used by a variety of persons, including: academics, researchers, politicians, policy makers and journalists. The data form the survey is being used for studies and research which are interested in understanding more about the patterns in public attitudes and behaviors over time and across countries (*Exploring public attitudes, informing public policy*, 2013, p. 1). The ESS is a valuable data source since it provides the needed information for the year I want to focus on. I want to focus on year 2010 and the fifth round of the ESS collects data for this year. Besides, the ESS describes various populations in the EU member states within a single time frame by means of a cross-sectional study ('About ESS', n.d.; 'ESS5 - 2010 Summary and deviations', n.d.). Since I will conduct a cross-national analysis, the ESS fits my intended research.

3.4.1 Data Collection Dependent Variable: Employment Status

To collect the data for my dependent variable, I will make use of existing quantitative survey research measuring public attitudes. The data from Round 5 of the ESS will be used to determine the employment status of the female respondents residing in the EU member states.

The definition of the ESS has been used to conceptualize the concept of 'employment'. Employment is being defined by focusing on the employment status of individuals. People are either in paid work or not, thus employed or not. By using their conceptualization I am certain that their operationalization of employment status reflects the dependent variable of my study. The data used for this concept is valid for my research. Moreover, by collecting the data form the ESS, I have data on the same level as the data for my dimensions of my independent variable. To determine the current employment status of the respondents, the ESS has included a survey question for which the respondents have to indicate whether the description fits them or not. This question can be found in figure 7.2 in Appendix B. Those who have marked that they have been doing paid work are considered to employed, whereas those who have not marked the question are considered to be not in employment (SOURCE QUESTIONNAIRE FINAL (Round 5, 2010/11), 2010, p.41).

3.4.2 Data Collection Independent Variable: Sociocultural Background

I have conceptualized my independent variable 'sociocultural background' as representing three different values: personal-, family- and gender values. With regard to these values, several modules of the ESS are of interests: the rotating module of round 5 on 'Family, Work and Wellbeing', and data of the core module on personal orientations and believes on gender roles ('Development of the Core module', n.d.; Gallie, Dieckhoff, Russell, Steiber & Tahlin, 2011).

In the following sections, I will provide for each of the three dimensions of the independent variable the operational definitions from the ESS that measure the values in a similar way as I have conceptualized them. Multiple indicators are used, because multiple indicators increase the validity of the indicators. This allows for more certainty that the proposed measures actually measure what they are supposed to measure (Munck & Verkuilen, 2002, p. 15). I have decided to include the indicators of the ESS that provide the respondents answer categories which match my theoretical expectations.

For each of the three dimensions, three indicators will be used to measure the specific value. These three indicators for each value will be put together by means of a scale when Cronbach's alpha is close to one. Cronbach's alpha is the most common measure to determine the reliability of measurement scales of a test. It is particularly used for survey research that includes multiple Likert questions. Likert questions are also being used by the ESS. When Cronbach's Alpha is consistent, the more the items are related to each other and consequently are measuring the same construct ('Cronbach's Alpha', n.d.; Laerd Statistics, n.d.).

3.4.2.1 Operationalization Personal Values

In figure 3.2 below the operationalization of this dimension can be found. To determine the personal values of the female respondents, I will measure their responses to three survey descriptions of hypothetical persons. The indicators I have chosen fit my conceptualization and hypothesis for this dimension. Each of the indicators resembles some of the examples of individualism: autonomy, personal achievement and enjoyment. These are opposite to my interests in values of collectivism. More importantly, the indicators reflect my sub-hypothesis: '*The more female migrants/female natives adhere to collectivist's personal values, the lower the female migrant'/female natives' employment'*

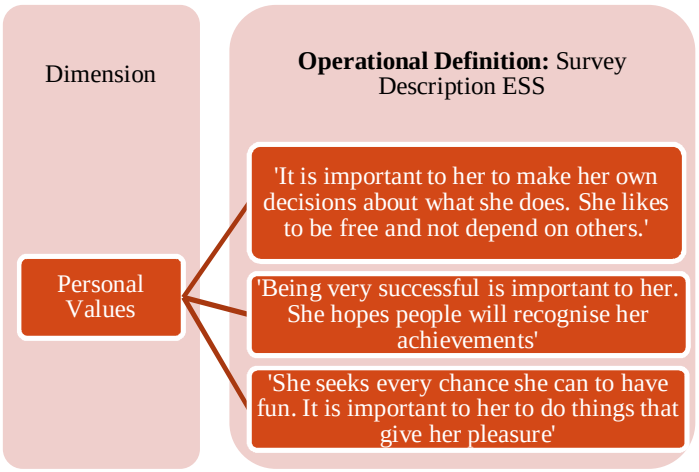

Figure 3.2 Progression of Measurement Personal Values (The European Social Survey, SELF-COMPLETION QUESTIONNAIRE S-C-A (Round 5 2010), n.d.).

3.4.2.2 Operationalization Family Values

The measurement of this dimension is indicated by figure 3.3 below. The family values of the female respondents are measured by their responses to three survey statements. The operational definitions fit my conceptualization of family values. Female respondents with conservative family values believe that the family is the cornerstone in society and that men have the income earning capacity. Moreover, they prefer to reconcile work and family life, instead of opting for fulltime childcare. The statements and question fit the sub-hypothesis I want to test: '*The more female migrants/female natives adhere to conservative family values, the lower the female migrant's/female natives' employment'*

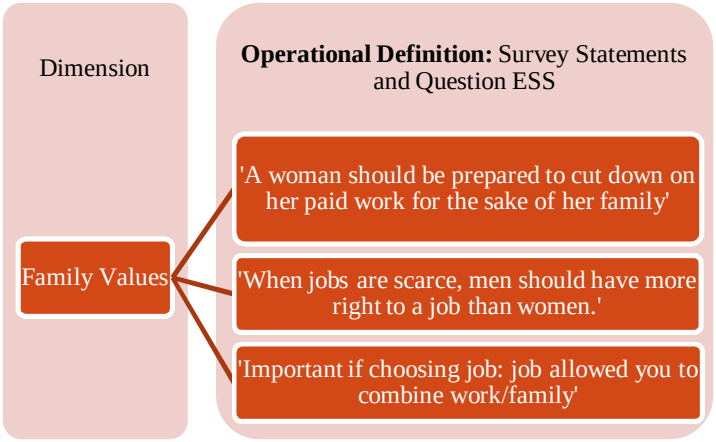

Figure 3.3 Progression of Measurement Family Values (*SOURCE QUESTIONNAIRE FINAL (Round 5, 2010/11)*, n.d.).

3.4.2.3 Operationalization Gender Values

In figure 3.4 below, the operationalization of this dimension can be found. The gender values of the female respondents are measured by their responses to three survey descriptions. These descriptions reflect upon my conceptualization of gender values and the sub-hypothesis. The first description is an example of a feminine gender values: it focuses on the caring and nurturing aspect. The two other descriptions resemble masculinity: stressing the importance of ego boosting, wealth and economic security. The descriptions reflect the sub-hypothesis: '*The more female migrants/female natives adhere to feminine gender values, the lower the female migrant's/female natives' employment'*.

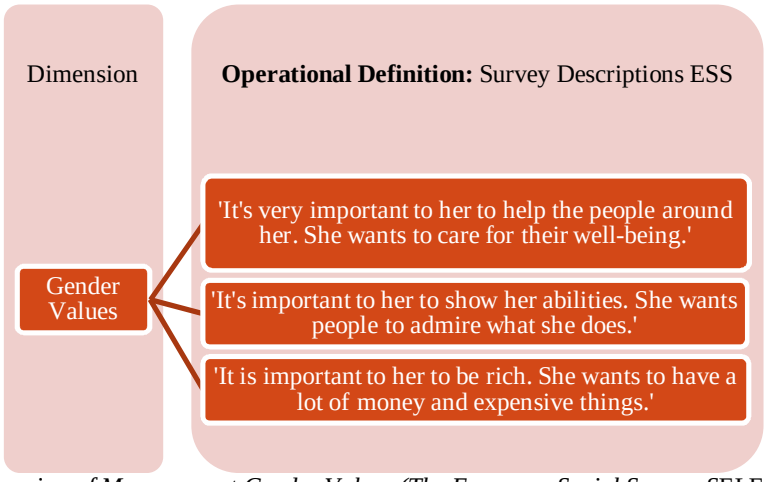

Figure 3.4 Progression of Measurement Gender Values (The European Social Survey, SELF-COMPLETION QUESTIONNAIRE S-C-A (Round 5 2010), n.d.)

3.4.3 Sample Weighting: Design Weights

Design weights need to be included in my study for both the independent- and dependent variable. These weights are used to correct for the different probabilities of selection. It will make the sample more representative of a 'true' sample by taking into account the effects of the sample design. Design weights correct for sampling bias and allow making comparisons between female migrants and female natives in the different EU member states. The ESS provides procedures to generate weighted tables from unweighted data for all their variables ('Chapter 1: Why weighting?', 2013, n.d.,; *Weighting European Social Survey Data,* n.d., p.1).

3.4.4 Data Collection Indicator Variable: Country Dummy Variable

To collect the data for my country dummy variable, I will make use of the multilevel data of the ESS. The ESS data allows one to create dummy variables to represent countries. The ESS argues that the main advantage of including country dummy variables is that countries can be chosen for theoretical reasons and that these countries will remain in the focus during the statistical analyses. Table 3.1 below illustrates at what kind of levels data from the ESS can be obtained. The pooled fixed-effects analysis would use dummy variables to represent countries ('Comparative research and multilevel models', n.d.).

	Number of Contexts (Cases)		
Level of Analysis	**One**	**Few**	**Many**
Macro only	Implicit Comparative	Comparative System Analysis	Analysis of Aggregate Statistics
Micro only		Separate Micro-level Analysis	**Pooled Fixed-effects analysis**
Macro and Micro		Pooled Fixed-effects Analysis	Multilevel Analysis

Table 3.1 A Typology of Comparative Design (Comparative research and multilevel models', n.d.).

3.4.5 Limitations Data Collection Method

My study will analyze the female migrants and female natives within the EU member states for the year 2010. I have chosen for this specific year for two reasons. First of all, this year allows me to include the rotating module on 'Family, Work and Wellbeing' of Round 5, which is a necessary module to determine the family values. Secondly, the year provides the most recent data for my independent- and dependent variable.

Nevertheless, by focusing on the data of Round 5, I will not be able to focus on female respondents within Italy, Luxembourg and Austria. These three countries have not been measured in this round. Moreover, no information for the country dummy variable is available for Latvia, Malta and Romania. Consequently, I am only able to analyze the female migrants and female natives within 21 EU member state ('ESS Cumulative Data Wizard', n.d.; 'ESS Multilevel Download', n.d.). This is a limitation of my study, since it will result in smaller sample size than hoped for. A relatively small sample size affects the reliability of my findings derived from my units of observation. The sample size affects the relative reliability or precision of a test. A small sample size will result into larger standard errors. A standard error is the estimation of the standard deviation of a sampling distribution by applying statistics to the founded data (De Veaux, Velleman & Bock, 2008, p. 455; Gerring, 2012, p. 83). The standard error is inversely affected by the sample size. The denominator of the standard error is the sample size, namely *n,* which consequently means that when n increases the standard error decreases (standard error = standard deviation/$\sqrt{n}$). Since my sample size is small, this will result in a larger standard error. Consequently, it will be difficult to rejects the null hypothesis, but is will not be impossible. Small sample sizes require large effects to be able to reject the null hypothesis (Oswald & Price, 2006, n.d.; Trochim, 2006, n.d.).

A small sample size is primarily of concern with regard to the female migrants analyzed. Table 3.2 on the next page illustrates the percentages of female migrant's respondents for Round 5 of the ESS for the participating countries in the ESS: in total and per several *individual* countries. These percentages are determined on the basis of the total respondents of the ESS per country as well as in total. The data is obtained from the online analysis of the ESS data (*ESS Data*, n.d.). The table illustrates that the sample sizes of female migrants in the ESS are small. This has consequences for the reliability of my findings. Large sample sizes, thus more observations, lead to less indeterminacy and more precision with respect to the relationship between the independent- and dependent variable (Gerring, 2012, p. 88).

EU Member States	Female Migrants	Total Respondents
Denmark	49 (3.11%)	1,576
The United Kingdom	147 (6.07%)	2,422
The Netherlands	77 (4.21%)	1.829
All included EU Member States	**1,965 (3.75%)**	**52, 458 (100%)**

Table 3.2 Sample Size Female Migrants Round 5 ESS (Design Weight on)

A second limitation of my data collection method is that of non-response since the ESS conducts face-to-face interviews with the respondents (*ESS5 Sampling Guidelines, 2010,* p. 10). Total nonresponse and item nonresponse are noticeable. Item nonresponse implies that the respondent refuses to give an answer, does not know the answer or just does not provide any answer (Brick & Kalton, 1996, p. 216). Both types of nonresponse are a serious source of bias concerning the results of most surveys. The primary concern is that the people who do not respond differ from those who do respond, thus they vary on the variables of interest. It is impossible to find out what a respondent might have said on a particular item in the face-to-face interviews conducted by the ESS (De Veaux, Velleman & Bock, 2008, p. 303). For Round 5 of the ESS the minimum response target rate of 70% has not always been reached. Response rates differed significantly between the participating countries (Matsuo & Loosveldt, 2013, p. 43). To be clear, item nonresponse can be inferred from the ESS by taking the answer categories of the items into account. Data is available for the categories of 'no answer', 'refusal' and 'don't know' (*Source Questionnaire Final (Round 5, 2010/11)*, 2005, n.d.).

3.4.6 Dependent Variable: Total Nonresponse & Item Nonresponse

The data for the dependent variable 'employment status' presents no form of total- and item nonresponse: these methodological issues are absent (*ESS Data,* n.d.). All the female migrants' and female natives' respondents within the selected EU member states have provided an answer to this question. Moreover, item nonresponse also does not occur, since all the respondents of my interest have marked the question. Nevertheless, the issue of missing cases does occur. For several respondents who have indicated that they have paid work we cannot identify whether they are born in the EU member state where they residing or not. This means that I cannot categorize them as being a native or a migrant and therefore I am not able to use their answers for this question. Fortunately, in table 3.3 below, we can see that the raw numbers of female respondents that are characterized as missing cases are very small, taking into account that the total number of female respondents answering the question on their current employment status in Round 5 is 21852.7.

Missing Cases	Raw Number
'refusal'	0.9
'don't know'	2.0
'no answer'	3.0

Table 3.3 Missing Cases Dependent Variable (Design Weight on)

3.4.7 Content Validity

For my study it is important to mention the issue of content validity. Content validity is obtained when the indicators of a concept reflect the meanings of the concepts as how they are defined by the researcher him- or herself (Drost, 2011, p. 118). Therefore, the indicators I have chosen should reflect the conceptualizations of my values. In this sense, I need to be certain that the ESS tests the values of the EU populations. The study of Davidov, Schmidt & Schwartz (2008) has tested the capability of the ESS to measure values for twenty countries. Evidence is being found that equivalence about the meanings of different values is observable (Davidov, Schmidt & Schwartz, 2008, p. 22). Content validity is assured and therefore the ESS is a valuable source to collect the data from for my independent variable. To add, the reliability of the final questionnaire is to some extent guaranteed by adding a supplementary questionnaire next to the main survey ('Improving Question Quality', n.d.).

3.5 Data Analysis

The data will be analyzed in a quantitative way by analyzing existing statistics. For both variables I make use of secondary analyses: I will reanalyze the data of the ESS for the purpose of my own study (Babbie, 2010, p. 288). The computer program IBM SPSS Statistics will be used to reanalyze the data.

First, the employment status of the female migrants and female natives will be analyzed to determine whether the differences in paid work rates between these female respondents differ significantly. Significant results are valuable, since they establish that there is a difference in the paid work rates between the two groups of female respondents (De Veaux, Velleman & Bock, 2008, p. 535). This should be done to determine whether the findings of the Report 'Indicators of Immigrant Integration' (Eurostat, 2011) correspondent with the findings of this study. Only the EU member states that have significant differences in paid work rates between female natives and female migrants are included into the 'actual' analysis part of the thesis. In this part, the dependent- and the independent variable will be connected in tables providing summary statistics, including coefficients and significance. Consequently, I am looking for a potential association between various explanatory variables and a response variable. With regard to the independent variable I have mentioned that each of the values will be measured by three indicators. The three indicators per value will be scaled when Cronbach's alpha is consistent. This consistency will be determined by means of IBM SPSS Statistics.

The data of the dependent- and independent variables will be analyzed on a micro-level by collecting the data from the female migrants and female natives participating in round 5 of the ESS ('ESS Multilevel Data', n.d.). My study involves and compares multiple cases: female native respondents and female migrant respondents in the selected EU member states. Table 3.1 on page 18 provides a typology of comparative design and on the basis of my level of analyses and the presence of many cases a pooled fixed-effects analysis will be conducted to analyze the relationship between my variables. In general, fixed-effects models are useful for cross-sectional data when there is a small number of level 2 units. This type of analysis is based on a pooled data file with country effects, thus the country dummy variables I have created that represent the EU member states included in the study. Consequently, by adopting this type of analysis, the intercept in the regression models will vary between the EU member states ('Comparative research and multilevel models', n.d.; 'Random versus fixed effects', n.d.).

However, before conducting a fixed-effects analysis, I will perform an exploratory factor analysis in the case when Cronbach's alpha is insufficient. Comparing nine indicators for each of the EU member states selected will be a consuming task. Therefore, I prefer analyses on single scales that are constructed on the basis of the nine indicators. A great advantage of using scales is that they will higher the reliability. This is because the random measurement errors present in the different items will cancel each other out ('Exercise 1.3. Exploratory factor analysis', n.d.). An exploratory factor analysis will be performed to determine the reliability of the indicators.

Using the computer program SPSS, an exploratory factor analysis will be conducted on the nine indicators to determine the sociocultural background of the female respondents. A small remark has to be made in relation to the sociocultural background of the female respondents. For this analysis, all the answer categories of the indicators for the independent variable are included. I have mentioned before that I will focus on the answer categories considered to be traditional (see section 4.5.2.). However, the factor analysis allows you to distinguish from traditional- and modern answer categories. If I were to focus only on the traditional side of the answer categories, relevant information would get lost and impossible to obtain at a later stage in the analysis.

The factor analysis will be carried out on the pooled datasets without making a distinction between the female natives and female migrants and between the EU member states included into the study. Factor analysis is used to determine the factors that are present within a set of specific observations. This type of analysis is a method to discover patterns among several variables (Babbie, 2010, p. 491-493). In this study, I will use factor scores obtained from the factor analysis for subsequent analyses. Factor scores are composite variables which provide information about the female respondents place on each of the factors (DiStefano, Zhu & Mîndrilă, 2009, p. 1).

There are several refined methods to create factor scores: a least square regression approach, the Bartlett's approach and the Anderson-Rubin approach. For my study I have chosen to focus on the first approach, because it maximizes validity. Regression factor scores predict the location of the female respondents on the factors included for this study. Factor scores are obtained in SPSS by checking the 'Save as variables' option and selection 'Regression' from the three options that are being provided in the section 'Scores' of the Factor Analysis Window. Before obtaining factors scores, factor loadings need to be determined. Factor loadings are the correlations of the original indicators with a factor (DiStefano, Zhu & Mîndrilă, 2009, p. 4-5).

To conclude, the independent variables (the factor component scores) and the dependent variable will be related by performing a binary logistic regression analysis. I have chosen for this type of analysis, because my dependent variable is a dichotomous variable. In this analysis the factor component scores are the explanatory latent variables ('Logistic Regression', n.d.; Skrondal & Laake, 2001, p. 563). The binary logistic regression analysis will be conducted individually for the pooled data sets. A binary logistic regression model fits the previous least square regression procedure ('Choosing a Procedure for Binary Logistic Regression', n.d.).

Chapter 4 Data and Analysis: Descriptions & Interpretations

In this fourth chapter, I will describe the data that I am going to use in my analysis by including tables and figures. The data for my dependent variable and (sub)-independent variables will be analyzed.

4.1 Selected EU Member States

I have analyzed the female migrants and female natives residing in the following EU member states: Belgium (BE), Bulgaria (BG), Cyprus (CY), Czech Republic (CZ), Germany (DE), Denmark (DK), Estonia (EE), Spain (ES), Finland (FI), France (FR), Greece (GR), Croatia (HR), Hungary (HU), Ireland (IE), Netherlands (NL), Poland (PL), Portugal, (PT), Sweden (SE), Slovenia (SI), Slovakia (SK) and the United Kingdom (UK). For these 21 EU member states is the relevant micro-level data available for Round 5 of the ESS.

4.2 Employment Status: Female Natives and Female Migrants

The first sub-research question I need to answer to: '*What is the employment status of female migrants/female natives in the EU member states in 2010?'* The ESS survey question focusing on the

current employment status can be found in figure 7.2 in Appendix B. For my study I have separately analyzed and used the data for the sub-question *'Using this card, which of these descriptions applies to what you have been doing for the last 7 days? In paid work (or away temporarily) (employee, self-employed, working for your family business'*. The respondents mark when they are in paid work.

Table 4.1 below provides some background information on the employment status of the female respondents within the EU member states who have participated in the ESS for Round 5. In Table 4.1 illustrates the percentage of female natives and female migrants who are in paid work within each of the selected EU member states. The second column indicates which proportion of female natives respondents are in paid work of the total number of female natives respondents (paid work+ not in paid work) per each EU member state. The third column illustrates this for the female migrants. The last column demonstrates the differences in percentage points (pp) between natives and migrants: % female natives - % female migrants. The negative differences have been highlighted. Appendix C table 7.1 provides the sample sizes for each group per EU member state.

I have added the group 'female natives' to illustrate what has being claimed in the Report 'Indicators of Immigrant Integration' (Eurostat, 2011)[2]. When we look at the data in the last column of the table, we clearly observe a mixed picture: the differences in percentage points between natives and migrants are both positive and negative. The results are remarkable: in more than half of the EU member states (11) the differences between female natives and female migrants are negative. Whereas we would anticipate more or less positive differences, we also obtain negative ones. Moreover, when comparing the EU member states, variations also occur. Whereas female respondents in both groups in e.g. Germany and France do not differ greatly with being in employment, this differs for the female respondents in Bulgaria, Cyprus and Poland, where the difference in pp is fairly high.

EU MS	Natives	Migrants	Difference	EU MS	Natives	Migrants	Difference
BE	48.5%	51.8%	-3.3%	HR	35.2%	27.5%	7.7%
BG	39.2%	17.6%	21.6%	HU	43.3%	48.4%	-5.1%
CY	42.6%	70.2%	-27.6%	IE	33.7%	41.5%	-7.8%
CZ	49.5%	40.6%	8.9%	NL	57.0%	45.9%	11.1%
DE	48.8%	46.4%	2.4%	PL	43.4%	8.1%	35.3%
DK	53.3%	46.9%	6.4%	PT	34.5%	48.2%	-13.7%
EE	47.8%	34.0%	13.8%	SE	56%	50%	6.0%
ES	42.6%	53.3%	-10.7%	SI	42%	45.3%	-3.3%
FI	44.7%	47.1%	-2.4%	SK	43.9%	49.5%	-5.6%
FR	51.3%	49.1%	2.2%	UK	47.5%	51%	-3.5%
GR	32.3%	40.7%	-8.4%	**EU-21**	**44.6%**	**44.3%**	**0.3%**

Table 4.1 Female Employment Status of Natives and Migrants in 2010 (In summary per EU Member State) (Design Weight on)

4.2.1 Employment Status: Female Natives and Female Non-western Migrants

To be clear, this table does not say anything about the reasons for these negative and positive results. The results might be due to the composition regarding the country of birth of these female migrants. The migrants are coming from western and non-western source countries. Western migrants are also migrants coming from the other EU member states. The Report 'Indicators of Immigrant Integration' has found that female migrants born outside the EU have lower employment rates than female migrants born in the EU (Eurostat, 2011, p. 62). To see whether this applies for my sample, I have also included a table which illustrates the percentages of female natives and female non-western

[2] This Report argues that foreign born women have lower employment rates than their counterparts in the total population in a large proportion of the EU member states (Eurostat, 2011, p. 62).

migrants who are in paid work within each of the selected EU member states. Table 4.2 below provides the results in a similar way as table 4.1 above.

As we can see at the last row representing the EU-21 average the differences in paid work between female natives and female non-western migrants is only 0.2%. Moreover a remarkable difference also occurs in this comparison: in 11 of the EU member states, the differences in paid work between female natives and female non-western migrants are negative. This is similar to what has been found in table 4.1. In table 4.1, for 11 EU member states, we have found that the percentages of the female natives in paid work are lower than that of the female migrants: the difference in pp has been negative. To come back to table 4.2, only for the Czech Republic, Finland, Sweden and the United Kingdom do we find opposite directions for the difference in pp. In the Czech Republic and Sweden changed the directions from positive to negative (8.9% vs. -12.2% and 6.0% vs. -1.7%) and in Finland and the United Kingdom the directions changes from negative to positive (-2.4% to 11.4% and -3.5% to 1.0%).

To conclude, table 4.2 does not confirm what is being mentioned in the Report 'Indicators of Immigrant Integration'[3]. We should expect that the differences in pp would therefore be in the positive direction and greater. However, this is not the case for more than half of the EU member states. We can therefore argue that the composition of the female migrants on the basis of their country of birth does not account for the differences in pp found in table 4.1 above.

EU MS	Natives	Non-Western Migrants	Difference	EU MS	Natives	Non-Western Migrants	Difference
BE	48.5%	50.0%	-1.5%	HR	35.2%	25.1%	10.1%
BG	39.2%	24.5%	14.7%	HU	43.3%	67.2%	-23.9%
CY	42.6%	72.9%	-30.3%	IE	33.7%	33.9%	-0.2%
CZ	49.5%	61.7%	-12.2%	NL	57.0%	43.7%	13.3%
DE	48.8%	46.1%	2.7%	PL	43.4%	13.4%	30.0%
DK	53.3%	47.8%	5.5%	PT	34.5%	45.3%	-10.8%
EE	47.8%	34.2%	13.6%	SE	56%	57.7%	-1.7%
ES	42.6%	48.2%	-5.6%	SI	42%	45.9%	-3.9%
FI	44.7%	33.3%	11.4%	SK	43.9%	51.7%	-7.8%
FR	51.3%	45.5%	5.8%	UK	47.5%	46.5%	1.0%
GR	32.3%	36.9%	-4.6%	**EU-21**	**44.6%**	**44.4%**	**0.2%**

Table 4.2 Female Employment Status of Natives and Non-Western Migrants in 2010 (In summary per EU Member State) (Design Weight on)

Nevertheless, before we can say something relevant about the findings in tables 4.1 and 4.2, a difference of proportion test need to performed to determine whether these differences in paid work rates are statistically significant (De Veaux, Velleman & Bock, 2008, p. 526-528).

4.2.2 Two-Proportion Z-Test: Female Natives and Female Migrants

I want to find out whether the rates of having paid work differ between female natives and female migrants in each of the EU member states. This can be analyzed by testing whether the differences between the two groups are statistically significant. A two-proportion z-test can be used to test for the difference between these two proportions. The data for this test comes from a random sample by the ESS in which female respondents have been surveyed in Round 5 in the year 2010. My study breaks down the respondents by country of birth, either natives or migrants, which means that there is no reason that either alternative is most preferred.

[3] Here it has been found that in a high proportion of the EU member states, female natives are more employed than female migrants (Eurostat, 2011, p. 62).

H_0: There is no difference in paid work rates between the two groups: $P_{\text{female natives}} - P_{\text{female migrants}} = 0$
H_a: The paid work rates are different: $P_{\text{female natives}} - P_{\text{female migrants}} \neq 0$
$\alpha = 0.05$

Before I will continue with the two-proportion z-test I first check whether the necessary assumptions and conditions have been reached. First, I assess the independence assumption. This assumption implies that the data from each group needs to be based on results for *independent* individuals. To see whether this is the case, three conditions need to be satisfied: the randomization condition, the 10% condition and the independent group assumption. To be clear, the 10% condition entails that the sample should not be bigger than 10% of the population. The results are the following:

- ✓ The independence assumption: The ESS selects respondents at random, so they should be independent.
- ✓ Randomization Condition: The respondents have been randomly selected by strict random probability methods at every stage.
- ✓ 10% Condition: The number of female migrants and female natives surveyed is certainly far less than 10% of the female migrant and female native's population within each of the EU member states.
- ✓ Independent Group Assumption: The samples of female migrants and female natives are independent from each other because the sample has been selected at random.

As can be seen, each of the conditions has been satisfied and therefore I am allowed to perform a two-proportion z-test. Appendix D table 7.3 provides all the needed 'mechanics' to test for statistical significance. The equation that needs to be tested is the following (De Veaux, Velleman & Bock, 2008, p. 528, 531; 'Sampling', 2014):

$$Z = \frac{(\bar{p}_1 - \bar{p}_2) - 0}{\sqrt{\bar{p}(1 - \bar{p})\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

With regard to my hypothesis testing, I am most concerned with the last column referring to the P-values in table 4.13 below. I need to link the P-values to my decision about the null hypothesis and interpret the results (De Veaux, Velleman & Bock, 2008, p. 535). To be clear the null-hypothesis will be rejected when the P-value is lower than the significance level ($\alpha = 0.05$). As table 4.13 shows, five P-values (in bold) are below the significance level: those from Cyprus, Estonia, Greece, Poland and Portugal (highlighted). This means that for those five EU member states I can reject the null hypothesis, since the difference observed is very small: they are below the significance level ($p < 0.05$). Thus, for these five countries I conclude that there is a significant difference in the paid work rates between female natives and female migrant: they are not similar. The female migrant respondent and female native respondents in the other 16 EU member states do not differ significantly regarding their employment status.

EU MS	Z	P	EU MS	Z	P	EU MS	Z	P
BE	-0.76	0.45326	ES	-1.94	0.0524	NL	1.85	0.0644
BG	1.23	0.2186	FI	-0.28	0.7794	PL	2.68	**0.0074**
CY	-3.44	**0.0003**	FR	0.38	0.704	PT	-2.51	**0.012**
CZ	0.89	0.3734	GR	-2.14	**0.0324**	SE	1.15	0.2502
DE	0.64	0.5222	HR	1.48	0.1388	SI	-0.51	0.610
DK	0.87	0.3844	HU	-0.57	0.5686	SK	0.01	0.992
EE	3.47	**0.0006**	IE	-2.14	0.704	UK	-0.82	0.4122

Table 4.3 Statistical Significance Female Natives and Female Migrants (Design Weight on)

4.2.3 Two-Proportion Z-Test: Female Natives and Female Non-Western Migrants

A two-proportion z-test will also be used to determine whether the differences in paid work are statistically significant between the female native respondents and female non-western migrant respondents residing within the included EU member states. In Appendix D table 7.4 we can find all the needed 'mechanics' to test for statistical significance.

H_0: There is no difference in paid work rates between the two groups:

$$P_{\text{female natives}} - P_{\text{female non-western migrants}} = 0$$

H_a: The paid work rates are different:

$$P_{\text{female natives}} - P_{\text{female non-western migrants}} \neq 0$$

$\alpha = 0.05$

Assumptions and Conditions

- ✓ The independence assumption: The ESS selects respondents at random, so they should be independent.
- ✓ Randomization Condition: The respondents have been randomly selected by strict random probability methods at every stage.
- ✓ 10% Condition: The number of female non-western migrants and female natives surveyed is certainly far less than 10% of the female non-western migrants and female native's population within each of the EU member states.
- ✓ Independent Group Assumption: The two groups are independent from each other because the sample has been selected at random. The sample of female non-western migrants and female natives are independent from each other.

The necessary output to test for statistical significance can be found in table 4.4 on the next page. To test the hypothesis, we need to take into account the last column with the P-values. These values are of interest to firstly discuss the difference in pp for the Czech Republic, Finland, Sweden and the United Kingdom. These countries showed remarkable results compared to the findings of table 4.1 on page 22. Opposite directions have been found and by means of table 4.4 we can see whether the difference in pp have been significant. The P-values demonstrate that this is not the case: the P-values are not below the significance level ($\alpha = 0.05$). Only two P-values are below the significance level ($\alpha = 0.05$): those from Cyprus and Estonia. This means that in Cyprus and Estonia there is a significant difference in the paid work rates between female natives and female non-western migrants. In fact, in Cyprus, the female native respondents have significantly lower paid work rates than female non-western migrant respondents, whereas we find the opposite in Estonia. Thus only the finding for Estonia complies with the findings of the Report 'Indicators of Immigrant Integration' (Eurostat, 2011). In this EU member state, the female native respondents are more in paid work than the female non-western respondents.

Based on the findings in table 4.4, I can conclude that we cannot conclude that the composition of the migrants makes a significant difference in paid work rates between female natives and female migrant's respondents in the ESS. Only in the case of Cyprus and Estonia do we see a significant difference when we only focus on the female non-western migrants and excluding the female western migrants. In addition, the Z-values all show the same direction and only differ for four EU member states in the second analysis. With regard to the above findings, I believe it is appropriate to focus on the female native respondents and female migrants respondents, irrespective of their country of birth.

EU MS	Z	P	EU MS	Z	P	EU MS	Z	P
BE	-0.21	0.83366	ES	-0.81	0.418	NL	1.86	0.0638
BG	0.69	0.2451	FI	0.96	0.33706	PL	1.73	0.0802
CY	-2.17	0.03	FR	0.80	0.4238	PT	-1.79	0.0734
CZ	-0.60	0.5486	GR	-1.04	0.2984	SE	-0.23	0.8181
DE	0.52	0.60306	HR	1.81	0.0702	SI	-0.47	0.63836
DK	0.52	0.60306	HU	-1.16	0.246	SK	-0.27	0.7872
EE	3.40	0.00068	IE	-0.03	0.976	UK	0.18	0.8572

Table 4.4 Statistical Significance Female Natives and Female Non-Western Migrants (Design Weight on)

4.2.4 Significant Results Female Natives and Female Migrants

In table 4.3 on page 24, we have found five significant results. In table 4.5 below, we can find the output for these five countries. However, apart from these findings being significant, there is something else that requires our specific attention. Special attention should be given to the directions of the Z-values of the five EU member states where we have found these significant results. Both positive and negative directions for the Z-values are observed. Most remarkable are the negative directions: negative ones indicate that the female natives are less in paid work than the female migrants in the EU member states of attention. This is contrary to the findings in the Report on 'Indicators of Immigrant Integration'. This report has found that female natives are having higher employment rates than their female counterparts (Eurostat, 2011). In Cyprus, Greece and Portugal, the female migrant respondents are significantly more in paid work than the female native respondents (output shaded). Based on the literature review, we would suggest the opposite. Whereas the female respondents in these five EU member states signify the unexpected, the expected direction is being found in EE and PL. The female native respondents are significantly more in paid work than their female migrant counterparts. In this regard, I believe it interesting for this study to analyze more in depth the female respondents in these five countries to determine if the profiles of them concerning their values can explain these interesting results. In a way, the master thesis resembles a two-step research. In what follows, I will focus only these five EU member states mentioned and this means that I need to alter some of the previously states assertions and expectations.

EU MS	$N_{female\ natives}$	$Y_{female\ natives}$	$P^{\wedge}_{female\ natives}$	$N_{female\ migrants}$	$Y_{female\ migrants}$	$P^{\wedge}_{female\ migrants}$	$P^{\wedge}_{pooled}$	SE_{pooled}	Z	P
CY	554.7	236.1	0.426	41.3	29.0	0.702	0.4447	0.080152	-3.44	**0.0003**
EE	880.0	421.0	0.478	191.0	65.0	0.340	0.4538	0.039741	3.47	**0.0006**
GR	1352.4	437.1	0.323	157.3	64.1	0.408	0.3319	0.039668	-2.14	**0.0324**
PL	893.1	387.5	0.434	14.1	1.1	0.078	0.4277	0.132792	2.68	**0.0074**
PT	1198.2	413.5	0.345	81.6	39.3	0.482	0.3532	0.054682	-2.51	**0.012**

Table 4.5 Significant Results Female Natives and Female Migrants (Design Weight on)

4.3 Employment Status: Female Respondents in Five EU Member States

In this 'second part' of the master thesis I will analyze the five EU member states with the significant results to determine the possible relation between my dependent- and independent variable. Firstly, I need to reform my hypotheses derived from the cultural assimilation theory.

4.3.1 Hypotheses Cultural Assimilation Theory

In short, the cultural assimilation theory argued that migrants who have traditional values are more likely to be employed in the receiving country than migrants who have less traditional values (Read, 2004, p. 55-56). Since I also include female natives in the comparison, this expectation is also tested

for female native respondents. Based on the findings above, I need to reformulate some of the hypotheses so that they fit with the findings from the give EU member states. The main hypothesis is:

> *H1: The more traditional the sociocultural background of female migrants/female natives, the lower the female migrant's/female natives' employment*

For Cyprus, Greece and Portugal, I have found that the female migrants are more in paid work than their female native counterparts. Based on the theory I expect the female native respondents to have more traditional values than the female migrant respondents. For Estonia and Poland I have found the opposite: the female native respondents are more in paid work than their female migrant counterparts within these countries. Within these countries, I expect, on the basis of the theory that the female migrants are more adhering to traditional values than the female natives. For each of the three types of values I have made sub-hypotheses comparing to two groups of respondents for the two categories of EU member states. On the basis of the findings for Cyprus, Greece and Portugal (a.) and Estonia and Poland (b.), the following sub-hypotheses have been formulated:

1. 'Personal Values'
    a. If collectivist personal values are related to low employment status, then female natives are more likely to have collectivists personal values than female migrants
    b. If collectivist personal values are related to low employment status, then female natives are less likely to have collectivists personal values than female migrants

2. 'Family Values'
    a. If conservative family values are related to low employment status, then female natives are more likely to have conservative family natives than female migrants
    b. If conservative family values are related to low employment status, then female natives are less likely to have conservative family values than female migrants

3. 'Gender Values'
    a. If masculine gender values are related to low employment status, then female natives are more likely to have feminine gender values than female migrants
    b. If masculine gender values are related to low employment status, then female natives are less likely to have feminine gender values than female migrants

These renewed hypotheses need to be tested to find out whether the sociocultural background of the female respondents can explain why they are either more or less employed. In what follows, I will analyze the possible association between my independent- and dependent variable.

4.4 Sociocultural Background

Table 4.1 on page 22 showed that the employment statuses of the female respondents differed between the female natives and female migrants. By conducting a differences of proportion test for five EU member states these differences are found to be significant. Might these differences have something to do with the sociocultural background of the female respondents? This brings us to the second research question: '*What is the sociocultural background of female migrants/female natives in the EU member states in 2010?*'[4]

[4] Before answering this question, Cronbach's alpha will be measured to determine whether the three indicators for each dimension can be put together on a scale ('Cronbach's Alpha', n.d.; Laerd Statistics, n.d.).

4.4.1 Cronbach's Alpha

Multi-item statements, questions and descriptions are applied in my study to measure the three dimensions of my independent variable. Three items per dimension are employed to measure the respondent's values. The multi-item scales are presented in figures 3.2 to 3.4 (page 16-17). In SPSS, I have analyzed these scales by means of an item-analysis for the multi-item scale for each of the dimensions. The entire item-analysis output can be found in Appendix E.

Cronbach's alpha ranges between 0 and 1. The closer Cronbach's alpha coefficient is to 1, the greater the internal consistency of the items included in the scale. It is reasonable to include a scale for the items when Cronbach's alpha is close to 0.8 (Gliem & Gliem, 2003, p. 87). The coefficients for Cronbach's alpha demonstrate for each of the values that none is close to 0.8. For the three items included in the personal values, Cronbach's alpha is 0.554. For the three items included in the family values, Cronbach's alpha is 0.412. To conclude, for the three items included in the gender values, Cronbach's alpha is 0.390.

In Appendix E, we can also assess what will happen if we would drop one item from the analysis. What we can conclude from the item analyses is that for none of the dimensions Cronbach's alpha will be considered sufficiently good enough to include a scale for the items if one of the items were to be deleted. This means that I will address each of the items separately in the analyses.

4.4.2 Measuring the Sociocultural Background

The answer to the second sub-research question needs to be determined for each of the three dimensions of the independent variable. For each of the indicators of the three dimensions, I will include the answer categories that are considered to be traditional based on cultural assimilation theory and my hypotheses. I have chosen to include more than one answer category to reduce the impact of outliers in the further analysis. Moreover, I have included tables for each of the dimensions that provide some background information about how the female respondents have responded to the various descriptions and statements of the ESS. The tables include the percentages of the female respondents of the total female respondents (either native or migrant) within the five EU member states who have opted for the answer categories of interest.

4.4.2.1 Personal Values

The indicators I have chosen to determine the personal values of the female respondents are the three descriptions that can be found in figure 4.1 on the next page. A five-point ordinal scale is presented of which the female respondents have to indicate which answer category fits them best.

For the purpose of this study I have selected the last three answer categories for each of the three indicators. These answer categories fit the collectivist dimension of personal values, thus the traditional side. Female respondents who have selected these categories can be *inter alia* described as people who dislike individualistic striving and adhere to social conformity.

Here we briefly describe some people. Please read each description and tick the box on each line that shows how much each person is or is not like you.

P1. It is important to her to make her own decisions about what she does.
She likes to be free and not depend on others.
P2. Being very successful is important to her. She hopes people will recognize her achievements.
P3. She seeks every chance she can to have fun. It is important to her to do things that give her pleasure.

How much like you is this person?

Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not like me at all
☐	☐	☐	☐	☐	☐

Figure 4.1Anwer Categories Personal Values (The European Social Survey, SELF-COMPLETION QUESTIONNAIRE S-C-A (Round 5 2010), n.d.).

In table 4.6 below, background information is provided for each of the three indicators measuring the personal values of the female respondents residing in one of the five EU member states. As we can see, a division is made between female native - and female migrant respondents. I will analyze a few of the percentages in the table. For the first indicator we can assess that within Estonia, 9 percent of the female native respondents have selected the last three answer categories. This is fairly similar how the female migrant respondents within Estonia have answered to this description. 8.4 percent of the total female migrant respondents have opted for the first three answer categories. It seems that the female migrant and female native respondents value dependency similarly. To provide another example, take into consideration the percentages found within Poland for the second indicator. The female native respondents (37.6%) have opted less for the three answer categories than the female migrant respondents (62.4%). It seems that the female natives in Poland value success more than the female migrant respondents. To conclude, the third indicator also indicates big differences for Poland when comparing the two percentages. Again, the female migrant respondents (87.9%) are according to my operationalization more traditional than the female native respondents (59.9%).

Personal Values	P1		P2		P3	
EU MS	Natives	Migrants	Natives	Migrants	Natives	Migrants
CY	10.2%	6.4%	41.0%	40.4%	28.5%	32.7%
EE	9%	8.4%	42.8%	45.0%	57.8%	62.3%
GR	10.3%	12.0%	28.0%	32.3%	25.9%	32.5%
PL	12.7%	22.2%	35.7%	62.4%	59.9%	87.9%
PT	20.6%	7.3%	37.3%	19.7%	48.9%	34.9%

Table 4.6 Summary Background Information Collectivist Personal Values (Design Weight on)

4.4.2.2 Family Values

The indicators I have chosen to determine the family values of the female respondents are the statements that can be found in figure 4.2 below. For each of these three statements, the respondents have to choose their answer from a six-point ordinal scale.

With regard to the purpose of my study I will select the first two answer categories for the first two statements and the fourth and fifth categories for the last statement. I have chosen to include these answer categories because they resemble conservative family values. For the first two statements, the first two answer categories indicate that the respondent disregards female employment. In these instances men are considered as the (main) breadwinners and women as the caregivers. Concerning the third statement, the fourth and fifth answer categories also resemble conservatism. Female respondents opting for these answer categories prefer to work, but this should not go at the

expense of taking care of their (future) children. They like to take care of their children themselves, instead of arranging day care.

I am now going to read out some statements about men and women and their place in the family. Using this card, please tell me how much you agree or disagree with the following statements.

F1. A woman should be prepared to cut down on her paid work for the sake of her family.
F2. When jobs are scarce, men should have more right to a job than women.

Agree strongly	Agree	Neither agree nor disagree	Disagree	Disagree strongly	(Don't know)
☐	☐	☐	☐	☐	☐

For you personally, how important do you think each of the following would be if you were choosing a job? Please use this card.

F3. A job which allowed you to combine work and family responsibilities.

Not important at all	Not Important	Neither important nor unimportant	Important	Very important	(Don't know)
☐	☐	☐	☐	☐	☐

Figure 4.2 Answer Categories Family Values (SOURCE QUESTIONNAIRE FINAL (Round 5, 2010/11), n.d.).

In table 4.7 on the next page, background information is provided for each of the three indicators measuring the family values of the female respondents residing in one of five EU member states. I will analyze a few of the percentages in the table. For the first indicator, the female respondents in Poland 'look' fairly similar, irrespective of their country of birth. Of the total female native respondents, 53.7 percent has opted for the first two answer categories; of the total female migrant respondents this is 54.6 percent. These female respondents are considered to have conservative family values. To take another example, the female respondents in Estonia differ considerable for the second indicator. Whereas 'only' 18.4 percent of the female native respondents have opted for the first two answer categories, a large proportion (44.5%) of the female migrant respondents did so. The female migrant respondents within Estonia adhere to more conservative family values, that is, men should foremost be the breadwinner in a household. Female native respondents in Estonia value this to a lesser extent. To conclude, when we assess the third indicator for Cyprus also interesting findings can be observed. Within Cyprus, 91.5 percent of female migrant respondent believe that work should allow you to reconcile work and family life. They value this highly. However, it is important to mention that, even though lower, a large proportion of the female native respondents (73.3%) also greatly value work that allows one to combine work and family life. There should be a balance between taking of their (future) children as well as having a job to earn an income.

Family Values	F1		F2		F3	
EU MS	Natives	Migrants	Natives	Migrants	Natives	Migrants
CY	69.4%	61.7%	42.4%	37.3%	73.3%	91.5%
EE	48.2%	63.4%	18.4%	44.5%	70.9%	56.0%
GR	58.4%	58.1%	37.3%	40.8%	77.8%	84.6%
PL	53.7%	54.6%	26.4%	48.9%	79.2%	38.3%
PT	53.0%	60.5%	25.2%	17.8%	71.3%	76.8%

Table 4.7 Summary Background Information Conservative Family Values (Design Weight on)

4.4.2.3 Gender Values

For this last dimension, the indicators I have selected to determine the gender values of female natives and female migrants can be found below in figure 4.3. For each of these descriptions from the ESS, a five – point ordinal scale is provided for the respondents to select their answer.

The first three answer categories will be included in my study for the analysis regarding the second and third indicator. These answer categories resemble the masculine gender values, thus the traditional side. For the first, the last three answer categories will be selected, so that these also resemble the traditional aspect of gender values. Female respondents who have chosen one of these answer categories can be described, on average, as individuals who dislike caring for others, strive for recognition and admiration for the things done and prefer living in wealth and prosperity.

Here we briefly describe some people. Please read each description and tick the box on each line that shows how much each person is or is not like you.

G1. It's very important to her to help the people around her. She wants to care for their well-being.
G2. It's important to her to show her abilities. She wants people to admire what she does.
G3. It is important to her to be rich. She wants to have a lot of money and expensive things.

How much like you is this person?

Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not like me at all
☐	☐	☐	☐	☐	☐

Figure 4.3 Answer Categories Gender Values (The European Social Survey, SELF-COMPLETION QUESTIONNAIRE S-C-A (Round 5 2010), n.d.).

In table 4.8 on the next page, background information is provided for each of the three indicators measuring the gender values of the female respondents residing in one of the 21 EU member states. I will discuss a few of the percentages in the table. With regard to the first indicator, the female respondents in Greece (2.9% and 3.6%) and also in Cyprus (2.8% and 3.4%) have very low proportions in the last three answer categories. For both female natives and female migrants in these countries it is highly valued to care for others. For the second indicator, we can see that the female respondent in Estonia look very similar. Around half of the female native (50.6%) and female migrant (51.8%) respondents have indicated that they value to show their abilities and like to be admired. To conclude, in Cyprus, Greece and Portugal, the proportions of female migrants who have opted for the first three answer categories are higher than those for the female natives. This is different from the proportions in Estonia and Poland. Here we find the opposite. The percentages of female migrant respondents who have chosen for the first three answer categories are lower than that of the female native respondents. The female migrant respondents value money and expensive things less than their female native counterparts. The female migrants in these countries can, according to my conceptualization, be seen as having less masculine gender values than the female native respondents.

Gender Values	G1		G2		G3	
EU MS	**Natives**	**Migrants**	**Natives**	**Migrants**	**Natives**	**Migrants**
CY	2.8%	3.4%	62.9%	68.5%	31.7%	45.3%
EE	8.2%	11.0%	50.6%	51.8%	28.3%	28.3%
GR	2.9%	3.6%	80.3%	74.8%	47.6%	52.5%
PL	6.5%	22.7%	64.6%	49.7%	39.6%	16.3%
PT	14.7%	6.6%	71.1%	80.4%	28.2%	32.6%

Table 4.8 Summary Background Information Feminine Gender Values (Design Weight on)

4.5 Country Dummy Variable: EU Member States

In section 3.1.3 on page 13, I have explained that country dummy variables need to be created prior to the analysis of determining the association between my variables. To be clear, I will now provide how this will be done for my own study. The number of levels of the original variable is now 5. This means that the number of dummy variables to be created is 4. The EU member state chosen to be the reference country will be Greece. I have chosen for Greece, because this member state is represented by a relatively large sample. This improves the accuracy of the precision of regression coefficients which are the estimates of population coefficients ('Example, part one: Create dummy variables', n.d.). In table 4.9 below, we can find the number of female respondents for each of the five selected countries. As can be seen, GR has the highest sample of female respondents for Round 5 of the ESS.

EU MS	Frequency	% of All
CY	595.9	11.1%
EE	1071.0	20.0%
GR	1510.2	28.1%
PL	908.3	16.9%
PT	1279.9	23.9%
Total	**5365.3**	**100.0%**

Table 4.9Sample Size Female Respondents Round 5 of the ESS (Design Weight on)

Since Greece will be my reference country, I want to compare the female native and female migrant respondents in Cyprus, Estonia, Poland and Portugal with Greece. The Greek sample is the reference category and for the other four EU member states I need to create a dummy variable: one in which the female migrants in Cyprus are assigned the value 1, while the female migrants in the other countries are assigned a 0. This applies also to Estonia, Poland and Portugal. Table 4.10 below illustrates the coding for the four new dummy variables ('Example, part one: Create dummy variables', n.d.).

	Dummy CY	Dummy EE	Dummy PL	Dummy PT
Value Female Migrants/Natives CY	1	0	0	0
Value Female Migrants/Natives EE	0	1	0	0
Value Female Migrants/Natives PL	0	0	1	0
Value Female Migrants/Natives PT	0	0	0	1

Table 4.10 Nominal Variable's Categories' Codes on Dummy Variable Sets

These dummy variables can be computed in several ways. I will use the computer program SPSS to 'create' such variables. The new variables will be named as the EU member state I am referring to and the label will be named 'Lives in EU member state X'. The 'Compute Variable' module of SPSS allows one to create string variables from nominal variables ('Example, part one: Create dummy variables', n.d.).

4.6 Sociocultural Background and Employment Status

In this section, I will determine whether the sociocultural background of the female natives and female migrants can explain their employment status. A pooled fixed-effects analysis is conducted to find whether this is the case.

To analyze the data at a micro-level, I need to recode the needed variables. To do so, a similar strategy is applied as with the creation of dummy variables above. I need to recode the variables included into the analysis into separate dummy variables. This means that I need to recode the demographic variable 'gender' and the 'born in country' to enable me to focus only on females and to focus separately on those female respondents who are either natives or migrants. 'Gender' is being

recoded into a dummy variable with 0 = man and 1 = female. 'Born in country' is recoded into two dummy variables with the first one concerning natives: 0 = no and 1 = yes, and the second one concerning migrants: 0 = yes and 1 = no. Moreover, I have recoded the indicators of the independent variable which have been in the opposite direction of my interest: that is, the answer categories have been ranked from traditional to non-traditional so that they fit my hypothesis testing. High values correspond with traditional values. Appendix F provides the output of this ('ESS5 Appendix A6 Variables and Questions ed. 3.1', n.d., p. 58, 68).

4.6.1. Pooled Data: Everyone into the Pool

To include a pooled fixed-effects analysis, I need to base the analysis on a pooled data file with country fixed effects, thus the country dummy variables I have created. I have decided to pool the data from those female migrants who have positive Z-values (+) for the dependent variable together and pool the female migrants who have negative Z-values (-) for the dependent variable together. This also needs to be done for the female native respondents in my study. This leads to two separate pooled data sets. Table 4.11 below shows which female respondents from the EU member states are grouped together. Since the data is now being pooled, country dummies are not necessary anymore. Nevertheless, we do need to recode the EU member states in the pooled data sets for the analysis. A comparison between two groups of countries is being made. In this sense, I will recode the first group = 0 and the second = 1. The first group is recoded as zero because this group has the largest sample size of female respondents and therefore will be the reference group (see table 4.11below).

Pooled Datasets	Sample Size (Raw Numbers)	In % of All
CY + GR +PT (Z-)	3386	63.1%
EE + PL (Z+)	1979.3	36.9%

Table 4.11 Pooling the Data (Design Weight on)

4.6.2 Factor Analysis: Factor Loadings

In section 3.6 on page 20, I have explained that I will conduct an exploratory factor analysis on the pooled dataset. First, I need to determine the factor loadings before I can create factor scores necessary to provide information about the female respondents place on each of the factors. Appendix G table 7.9 demonstrates the output of the factor extraction which needs to be conducted before factor loadings are obtained. Before extraction, 9 linear components within the dataset are identified. Subsequently, SPSS extracts the factors with an eigenvalue greater than 1, which leaves us with three factors. The last column presents the eigenvalues of the factors after rotation. This is most interest for my study, since rotation optimizes the factor structure for my data. Factor rotation improves the interpretation of factor loadings. It helps to determine what each factor represents ('Exploratory Factor Analysis', n.d., p. 6; Field, 2005, p. 6-7)[5].

Table 4.12 on the next page demonstrates the output of the factor analysis after rotation. In this table we can see the factor loadings for each of the indicators of the independent variable on each of the tree components. In short, factor loadings demonstrate the correlation between the indicators and the factors and help us understanding the nature of a particular factor. The factor loadings in bold are the substantial loadings of the indicators on a particular component. The indicators which have negative factor loading demonstrate an inverse impact on the factor ('Factor Analysis', n.d., p. 138; 'Factor Analysis & Principal Components', n.d.).

[5] To note, it is important not to forget to weight the data by the design weight, since I am comparing nine different indicators for five EU member states.

Indicators that load on the same factor are taken together since they represent common themes, or in my case, common types of values. The indicators that are highly loading on the first factor are the last two indicators of the dimension personal values. These indicators go hand in hand. For the second factor, three indicators from each of the three dimensions load on the second factor. To conclude, the first two indicators of the dimension 'family values' together with two indicators of the dimension 'gender values' load on factor 3. However, the correlations are not very high for each of the factor loadings. It will be valuable to iterate the factor analysis by leaving out the indicators that have a low factor loading to allow for a better interpretation of the dimensions. The indicators excluded are the last three indicators representing the dimension 'gender values' ('Exploratory Factor Analysis', n.d., p. 7).

Rotated Component Matrixa,b			
	Component		
	1	2	3
Important to make own decisions and be free	.332	**.606**	.155
Important to be successful and that people recognize achievements	**.913**	.170	.065
Important to seek fun and things that give pleasure	**.559**	.297	.003
Women should be prepared to cut down on paid work for sake of family	.071	-.143	**.818**
Men should have more right to job than women when jobs are scarce	-.039	.088	**.849**
Important if choosing job: job allowed you to combine work/family	-.013	**.590**	-.038
Important to help people and care for others well-being	-.097	-.770	**.108**
Important to show abilities and be admired	-.913	-.170	**-.065**
Important to be rich, have money and expensive things	-.654	**.118**	.057
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.a,b a Rotation converged in 4 iterations.			

Table 4.12 Factor Loadings Indicators Independent Variable (Design Weight on)

Table 4.13 on the next page demonstrates the factor loadings after rotation with leaving out the three indicators described above. Appendix F table 7.10 includes the table with the output of the factor extraction. Now, two components remain, with the first three indicators and the last one loading on the first component and the fourth and fifth indicator loading on the second component. In the further analysis I will label the first factor as 'career values', whereas I will label the second factor as 'family values', thus the original conceptualization. I have decided to label the first factor as resembling career values, because these indicators resemble the value to develop yourself and subsequently to be recognized for this development. These indicators can be put together in the dimension of 'career values', since these can be fulfilled when adhering that a career is important in life. That is why probably the last indicator, originally belonging to the 'family dimension' loads on the first component, together with the personal values. By answering this question, a female respondent already indicates that she is thinking about a job and believes it is something relevant.

Rotated Component Matrix[a,b]

	Component	
	1	2
Important to make own decisions and be free	**.685**	.117
Important to be successful and that people recognize achievements	**.759**	.087
Important to seek fun and things that give pleasure	**.753**	-.007
Women should be prepared to cut down on paid work for sake of family	-.013	**.835**
Men should have more right to job than women when jobs are scarce	.031	**.832**
Important if choosing job: job allowed you to combine work/family	**.374**	-.145

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

b. Only cases for which Gender = Female are used in the analysis phase.

Table 4.13Factor Loadings Indicators Independent Variable (Iteration without previous low Factor Loadings)

4.6.3 Factor Analysis: Factor Component Scores Individuals

Using the least square regression approach, I have saved the factor component scores as variables for my further analysis. As I have mentioned before, factor component scores are composite variables which provide information about the female respondents in my study concerning their place on each of the factors (DiStefano, Zhu & Mîndrilă, 2009, p. 1). The first factor indicates their place on the 'career dimension', whereas the second indicates their place on the 'family dimension'.

A binary logistic regression needs to be run on the factor component scores for each of the female respondents of the five EU member states. The selection variable for the binary logistic regression analysis will differ from the selection variable that has been used to determine the factor loadings. The factor loadings need to be determined on the basis of the entire sample: the female respondents from Cyprus, Estonia, Greece, Poland and Portugal. For the binary logistic regression analysis, the analysis needs to be based on the two pooled datasets. In this sense, I will differentiate between the female respondents of Cyprus, Greece and Portugal and subsequently Estonia and Poland because of the findings of the two proportion z-tests in relation to the dependent variable. Thus, before running the analysis, I need to recode the EU member states into country dummies. The female respondents of Cyprus, Greece and Portugal are recoded as 0, whereas the female respondents in Estonia and Poland are recoded as 1.

Factor scores for the assigned two factors were determined by using factor scores coefficients. The two factors including the factor score values have been included into the analyses as independent variables. Being in paid work, thus employed, has been included in the regression analysis as the dependent variable. The output of the binary logistic regressions will show *inter alia* the following variables in the equitation: the regression coefficients for the constant (B), the standard errors (SE), the Wald test testing the significance of each coefficient (β) in the model and whether the results are significant (Sig.). Concerning the latter, I have chosen for alpha to be 0.05 ($\alpha = 0.05$) ('Annotated SPSS Output: Logistic Regression', n.d.; 'Logistic Regression', n.d.).

To conclude, with binary logistic regression analysis one also tests hypotheses. In logit models, the hypotheses are focused on the regression coefficients of the predictor variables to see whether these are statistically significant. The hypotheses to be tested are as follows:

1. $H0: \beta 1 = 0$
2. $Ha: \beta 1 \neq 0$

These hypotheses will be tested for each of the four groups in the analyses. The significance level that has been chosen for my study is a significance level of 0.05 (*Chapter 14 Logistic Regression,* n.d.).

4.6.4. Binary Logistic Regressions: Female Respondents

First, I will run the binary logistic regression analysis on the dataset including the country dummies as well as the country of birth dummies, thus whether one is a native or a migrant. The formula of the binary logistic regression becomes then as follows (*Chapter 14 Factor Analysis,* n.d., p. 2):

$$Y = F_1\beta_1 + F_2\beta_2 + e + \text{Country Dummy} + \text{Country of Birth Dummy}$$

In this formula Y = employment status, with employed (in paid work) = 1 and not employed (not in paid work) = 0. Since it is a binary logistic regression, the dependent variable is dichotomous and therefore can take the value 1 or 0. For my study I am interested in 'being employed' and therefore have awarded this value 1 (*Logistic Regression*, n.d.).

Table 4.14 on the next page provides the relevant variables in the equitation for this binary logistic regression. Appendix H table 7.11 provides the entire output for this binary logistic regression. The country dummy I have used is Greece, since this country has been the reference country. Greece is represented by a relatively large sample (see section 4.6 on page 32). Moreover, the country of birth dummy is being represented as being a migrant. The same argument for this reason applies as for the country dummy. The female natives are represented by a larger sample than the female migrants in the five EU member states (see section 4.3.4 on page 26). Therefore, the female natives have become the reference group. The outcomes of the variable 'Sig.' (Significant) are in bold, since these are the results I need to focus on.

As table 4.14 illustrates firstly is that both dimensions are significantly related to the dependent variable 'employed'. The first factor score 'career values' and the second factor score 'family values' are below the alpha level of 0.05 ($P < 0.05$). A second finding of this regression is that we can see that the dummy 'country of birth' does not significantly relate to the dependent variable. This implies that for my data it does not make difference whether the female respondent is a native or a migrant when taking into account their employment status. As we can see, the P-value is above $\alpha = 0.05$. However, what the output does demonstrate, the country dummies seem to make a difference. All of the P-values are below the alpha level of 0.05 ($P<0.05$). The outstanding cases are Cyprus and Portugal. The female respondents in Estonia and Poland are demonstrating the expected results: they are opposite to Greece. This should not be surprising, since I have found that in Estonia and Poland that the female migrant respondents are less employed than the female native respondents. However, Cyprus and Portugal are showing an effect in the unexpected direction. Section 4.6.1 on page 33 has indicated that Cyprus and Portugal are belonging to the same pooled data set as Greece. Nevertheless, their country effects are significant for the dependent variable 'employed'. Whereas this is an interesting finding, I believe it goes beyond this study to find out why country dummies have this particular effect. For my study it is more relevant to focus on the two factors representing the two dimensions of my independent variable.

Variables in the Equation

		B	Sig.
Step 1[a]	'Career Values'	.185	**.000**
	'Family Values'	.296	**.000**
	Migrant(1)	-.200	**.078**
	Cyprus(1)	-.764	**.000**
	Estonia(1)	-.790	**.000**
	Poland(1)	-.548	**.000**
	Portugal(1)	-.303	**.001**
	Constant	2.041	**.000**

a. Variable(s) entered on step 1: FAC1_3, FAC2_3, Migrant, Cyprus, Estonia, Poland, Portugal.

Table 4.14 Output Binary Logistic Regression Female Respondents

In what follows, I will run separate binary logistic regressions for the pooled data sets. I will not differentiate between female migrants and female natives, since the country of birth does not have a significant effect on the dependent variable. Nevertheless, I will include tables with the country of birth dummy to illustrate that even in the pooled data sets this dummy variable has no significant effect on the dependent variable. What we can derive from the latter is that I will differentiate on the basis of the pooled data sets. That is, I will perform the regression first on the female respondents in Estonia and Poland and secondly on the female respondents in Cyprus, Greece and Portugal. For all the binary logistic regression applies that the entire output can be found in Appendix H (see table 7.12 to 7.15).

4.6.4.1. Binary Logistic Regression: Female Respondents EE and PL

In table 4.15 below we can see the binary regression analysis performed on the pooled data set of Estonia and Poland for the female respondents by including the dummy variable 'country of birth'. Also in this pooled data set, there is no significant effect of being employed when taking into account their country of birth, thus being a native or a migrant. This corresponds with the finding of table 4.14 above. Moreover, we can see that the effect of the country dummy variable still makes a difference ($P<0.05$).

Variables in the Equation

		B	Sig.
Step 1[a]	Migrant(1)	-.067	**.493**
	EePL	.340	**.000**
	Constant	-.514	**.000**

a. Variable(s) entered on step 1: Migrant, EePL.

Table 4.15 Output Binary Logistic Regression Female Respondents EE and PL with Dummy Variable

I will now analyze table 4.16 on the next page, which focuses on the two dimensions and their effect on the dependent variable for the pooled data set of female respondents in Estonia and Poland. The regression coefficients (B) of the dimension are important in this respect.

For the first dimension 'career values', representing the personal- and family values, the regression coefficient is negative (-0.046). This means that the first factor has a negative relationship

with employment status. In practice, this entails that a one unit decrease in this predictor variable leads to a decrease of 0.046 in the predicted log odds of employment status (=1), holding the other predictor constant.

For the second dimension 'family values', representing two indicators of the original dimension of family values, the regression coefficient is positive (0.246). This indicates that the second factor has a positive relationship with employment status. Consequently, a one unit increase in this predictor variable leads to an increase of 0.246 in the predicted log odds of employment status (=1), by keeping the other predictor constant.

Another important variable in the equation is the significance of each coefficient (β). For the first factor, the coefficient is not significant (P>0.05). For the second factor, we do observe a significant coefficient (P<0.05). This means that this coefficient is significantly different from 0 ('Annotated SPSS Output: Logistic Regression', n.d.).

To be clear, what does the above mean for my particular study? With regard to the regression coefficients of the female respondents in Estonia and Poland I will explain what this means in practice for my research. Concerning the dimension 'career' values, for every next answer category on the selected survey descriptions of the ESS, we expect a –0.046 decrease in the log-odds of employment status, holding the other variables constant. Since I have ranked my answer categories from traditional to non-traditional (and have recoded the ones in the other direction), this would indicate that the less traditional a female respondent becomes on the indicators of career values, the less likely she will have an employment status of being in paid work.

For the dimension 'family values', we find the opposite. For every next answer category on the selected survey statements of the ESS, we expect a 0.264 increase in the log-odds of employment status, holding the other variables constant. I have ranked the answer categories from traditional to non-traditional. Therefore, the less traditional a female respondent becomes on the family dimension, the more likely she will have an employment status of being in paid work.

Variables in the Equitation

		B	Sig.
Step 1[a]	FAC1_3 'Career'	**-.046**	**.401**
	FAC2_3 'Family'	**.264**	**.000**
	Constant	**.080**	**.133**

a. Variable(s) entered on step 1: FAC1_3, FAC2_3.

Table 4.16Output Binary Logistic Regression Female Respondents EE and PL

4.6.4.2 Binary Logistic Regression: Female Respondents CY, GR and PT

I also need to run the binary logistic regression analysis on the pooled data set of female respondents in Cyprus, Greece and Portugal. I will firstly discuss the results of table 4.17 on the next page. In this table we can see the binary regression analysis performed on the pooled data set of Cyprus, Greece and Portugal for the female respondents by including the dummy variable 'country of birth'. The same conclusions for this table can be made as for table 4.15 above. In the pooled data set, there is no significant effect of being either a female migrant or a female native with regard to the employment status. This corresponds with the finding of table 4.14 above. In addition, the effect of the country dummy remains significant: we can see that the P-value is below the alpha level of 0.05 (P<0.05).

Variables in the Equitation

		B	Sig.
Step 1[a]	Migrant(1)	-.067	**.493**
	CyGrPT	-.340	**.000**
	Constant	-.174	**.077**

a. Variable(s) entered on step 1: Migrant, CyGrPT.

Table 4.17 Output Binary Logistic Regression Female Respondents CY, GR and PT with Dummy Variables

I will now analyze table 4.18 on the next page, which focuses on the two dimensions and their effect on the dependent variable for this pooled dataset. For these two dimensions, we need to have a look at the regression coefficients (B) for each of the two factors.

In table 4.18 we can see that for the first factor, representing the career values, the regression coefficient is positive (0.288). This implies that the relationship between this predictor variable and the dependent variable is positive. In fact, the predicted log odds of employment status (=1) will increase with 0.288 if the predictor variable will increase with one unit, holding the other factor 'family values' constant.

For the second dimension 'family values', the regression coefficient is positive (0.295). Therefore, the relationship between this predictor variable and the dependent variable is positive. In this equation, a one unit increase in this predictor variable leads to an increase of 0.295 in the predicted log odds of employment status (=1), by keeping the other predictor constant.

In addition, for both predictor variables, the regression coefficients are statistically significant. Both coefficients have a p-value below the significance level ($\alpha = 0.05$). For both factors the p-value is 0.000, thus smaller than $\alpha = 0.05$. This means that the coefficients are significantly different from 0 ('Annotated SPSS Output: Logistic Regression', n.d.).

As well as I did for the pooled data sets of the female respondents in Estonia and Poland, I will interpret the above findings for my study in relation to the female respondents in Cyprus, Greece and Portugal. Taking a look at the predictor variable 'career values', we can we can observe that for every next answer category selected on the selected survey descriptions of the ESS, we expect a 0.288 increase in the log-odds of employment status, holding the other variables constant. Since I have ranked my answer categories from traditional to non-traditional (and have recoded the ones in the other direction), this would indicate that the less traditional a female respondent becomes on the indicators of career values, the more likely she will have an employment status of being in paid work.

By analyzing the predictor variable 'family values', we find the same result compared to the dimension 'career values'. For every next answer category selected on the survey statements of the ESS, we expect a 0.295 increase in the log-odds of employment status, holding the other variables constant. I have ranked the answer categories from traditional to non-traditional. Therefore, the less traditional a female respondent becomes on the family dimension, the more likely she will have an employment status of being in paid work.

Variables in the Equitation

		B	Sig.
Step 1[a]	FAC1_3 'Career'	.288	.000
	FAC2_3 'Family'	.295	.000
	Constant	-.328	.000

a. Variable(s) entered on step 1: FAC1_3, FAC2_3.

Table 4.18 Output Binary Logistic Regression Female Respondents CY, GR and PT

4.6.5 Testing the Hypotheses

In section 4.3.1 on page 26 I have developed new hypotheses that fitted the findings of the two-proportion z-tests on the employment status. In these hypotheses, I have argued that there exist differences between the female native and female migrant respondents for each of the pooled datasets. However, as the binary logistic regressions showed us (see table 4.15 and 4.17), the country of birth does not make a difference for the dependent variable 'employment status'. What this implies is that I can refer back to the original hypotheses formulated in section 2.2 on page 11. I only need to interpret them separately for each pooled dataset, because of my findings in table 4.16 and 4.18 that the country dummy variables does make a difference for the dependent variable ($P<0.05$).

In what follows, I will address separately, per dimension, the hypotheses formulated for the female respondents in subsequently Estonia and Poland and Cyprus, Greece and Portugal.

4.6.5.1 Hypotheses Career Values

I have mentioned that the dimension 'career values' has been made up by indicators of the dimensions 'personal values' and 'family values' (see section 4.6.2 on page 33). This means that the hypotheses need to be revised before they can be interpreted on the basis of the binary logistic regression analyses. They need to be changed to fit the new dimension 'career values'. I have used three indicators of the 'personal values' and one indicator for the 'family values'. Traditionalism in personal values has been associated with adhering to collectivism, whereas traditionalism in family values has been associated with adhering to conservatism. To revise the hypothesis in one overall hypothesis for the career values dimension, I will change the hypothesis in a similar direction as the dimension 'family values'. Here, traditionalism has been defined as conservative and this will also been done for the dimension 'career values'. By giving this dimension the same conceptualization of traditionalism, the hypotheses for the two dimensions become better interpretable. The new hypothesis to be tested for the two pooled datasets is the following:

1. 'Career Values'
    a. *The more females adhere to conservative career values, the lower the female's employment*

In tables 4.19 on the next page, I have put the relevant variables of the equations found in tables 4.16 and 4.18: the regression coefficients and whether the results are significant ($\alpha = 0.05$). These need to be interpreted in relation the hypothesis for the dimension 'career values'.

I will now discuss these variables to test hypothesis for both pooled data sets. For Estonia and Poland, I have found that the less traditional a female respondent becomes on the indicators of career values, the less likely she will have an employment status of being in paid work. For Cyprus, Greece and Portugal I found the opposite: the less traditional a female respondent becomes on the indicators

of career values, the more likely she will have an employment status of being in paid work. However, only for the pooled data set of CY, GR and PT is the relationship between this dimension and the dependent variable is significant (P<0.05). This means that I can aspect the hypothesis for the female respondents in Cyprus, Greece and Portugal. I have found in this pooled dataset what the hypothesis has been suggesting: the less conservative the female respondents' career values, the more likely she will be employed, which means having paid work in my conceptualization. The dimension 'career values' explains the employment status of the female respondents in these three countries, since the regression coefficient has been significant (P<0.05). The relationship between this dimension and the dependent variable has not been significant for the pooled dataset of Estonia and Poland (P>0.05). Therefore, for the female respondents in these two countries, this dimension cannot explain their employment status.

Variables of Equitation	CY GR PT	EE PL
B (Regression Coefficient)	0.288	-0.046
Sig. (Significance)	0.000	0.401

Table 4.19 Summary Statistic Career Values per Pooled Datasets

4.6.5.2 Hypotheses Family Values

The following hypothesis has been formulated for the dimension 'family values' (see section 2.2 on page 11):

2. 'Family Values'
    b. *The more females adhere to conservative family values, the lower the female's employment*

In table 4.20 below, I have put the relevant variables of the equations found in tables 4.17 and 4.19: the regression coefficients and whether the results are significant ($\alpha = 0.05$). These need to be interpreted in relation the hypotheses for the dimension 'family values'.

I will now discuss these variables to test hypothesis for both pooled data sets. For EE and PL, I have found that the less traditional a female respondent becomes on the family dimension, the more likely she will have an employment status of being in paid work. A similar finding is found for the female respondents in CY, GR and PT. Here, I have found that the less traditional a female respondent becomes on the family dimension, the more likely she will have an employment status of being in paid work. For both pooled datasets the relationship between this dimension and the dependent variable is positive and significant. This means that the hypothesis for this dimension can be accepted. I have found that the more conservative the female respondents' family values, the less likely they are employed. This is also being suggested by the hypotheses. Since the impact of the regression for this dimension is significant (P<0.05), we can claim that the dimension explains the employment status of the female respondents in both pooled data sets.

Variables of Equitation	CY GR PT	EE PL
B (Regression Coefficient)	0.295	0.264
Sig. (Significance)	.000	.000

Table 4.20 Summary Statistic Family Values per Pooled Data Sets

Chapter 5 Conclusion

In this last chapter, I provide the answer to my main research question and discuss the implications of my findings. Furthermore, I address the limits of my study and possible future research directions. Overall, I summarize what I have studied and how I did my research.

5.1 Findings & Research Question

The purpose of my study is to find an answer to my main research question. The main research question is as follows:

> *To what extent does the sociocultural background of female migrants and female natives explain the females' employment status within the EU member states in 2010?*

My research has become informed by previous studies which have tried to find out whether we can find a relationship between the employment status of migrants and their sociocultural background. In these studies, the sociocultural background has been conceptualized as representing the adherence to various values which can either be less or more traditional. In my study, I have included a similar nominal definition: personal-, family- and gender values have been focused upon to determine the sociocultural background of female migrants and female natives residing in the EU member states. This nominal definition allowed me to use the cultural assimilation theory as the perceptive underlying my study. This theory tries to explain the labour force activity of migrant women. It stipulates that women with traditional values will have lower work rates than migrant women who adhere less to traditional values.

In my research, I have compared the employment status of female native respondents and female migrant respondents residing for each of the five EU member states included in the study. To collect the data on the employment status and sociocultural background of these females, I have made use of the data provided by Round 5 of the ESS which focuses on the year 2010. Initially my aim has been to conduct a cross-sectional study across all the EU member states for which the needed data was available. However, I only found 5 significant results for the dependent variable in Cyprus, Greece, Estonia, Poland and Portugal. Subsequently, I have analyzed the sociocultural backgrounds of the female respondents in these five countries by performing a factor analysis and binary logistic regressions. The factor analysis resulted into two 'main' dimensions: the family values and the career values. These two dimensions have been included to determine the sociocultural background of the female respondents. The binary logistic regressions for each of the dimensions have been performed on the two pooled data sets: one including the countries where the female migrants have been more employed than the female natives (Cyprus, Greece and Portugal) and one in which the countries were taken together where the female migrants have been less employed than the female natives (Estonia and Poland).

Based on the results of the binary logistic regressions on the pooled datasets, the answer that needs to be given to the main research question is that in my study the sociocultural background explains is to a moderate extent the employment status of the female respondents within the five selected EU member states in 2010. I have found three significant results for the two dimensions of the independent variable on the dependent variable in the two pooled datasets. In the pooled dataset of Cyprus, Greece and Portugal, the two dimensions can explain the dependent variable. In the pooled dataset of Estonia and Poland, only the dimension 'family values' significantly explains the being in paid work. Moreover, the relationships for the significant results for the dimension 'family values' have been in the same direction for both pooled data sets. Figure 5.1 on the next page summarizes the direction of these relationships. The first arrow indicates that there exists a relationship between the two variables: the independent variable explains the dependent variable. The direction of the

relationship between the two variables is determined by the binary logistic regressions performed for each of the two dimension of the independent variable.

The first dimension 'career values' illustrates in the figure that there is a relationship between this dimension and the dependent variable and that it is negative. However, this only applies to the female respondents in Cyprus, Greece and Portugal. The second dimension 'family values' shows that there is a relation between this dimension and the dependent variable and that it is negative (for both pooled datasets). To connect the output of figure 5.1 to my study, we can state the following:

1. The less conservative the female respondents' career values, the more likely she will be employed.
2. The less conservative the female respondents' family values, the more likely she will be employed.

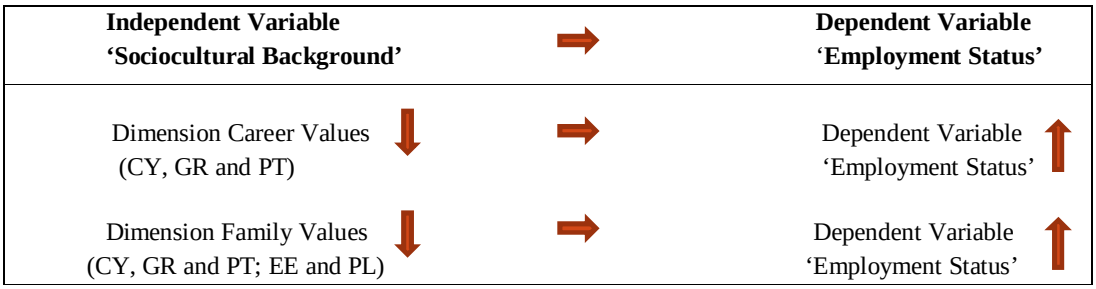

Figure 5.1Demonstrating the Relationship between the Independent- and Dependent Variable

It is important to mention that I have conceptualized the sociocultural background of the female respondent as being more or less traditional on the basis of the chosen indicators. Therefore, the operationalization and the findings are based on this conceptualization. This implies that the answer to my main research question can only be derived from this kind of conceptualization; the findings would consequently be different if one where to focus on a different kind of conceptualization of the dependent variable.

5.2 Implications: Research & Policy

I have tried to find out why the employment statuses differ between the female migrants and female natives in the EU member states. Previous research and studies have already before tried to find out whether the sociocultural background of particularly migrant women can explain their employment status. Based on the findings of the report 'Indicators of Immigrant Integration (Eurostat, 2011), I have also included a comparison group: the female natives.

While some researchers have found a patterns, including Vinogradov and Kolvereid (2007) and Reyes and Pinillos (2009), other researchers have found a relationship between the independent- and dependent variable. These include Carnoy (2001), Spierings, Smits and Verloo (2008) and Blau, Kahn and Papps (2008). To come back to my own research: I did find a link between the two variables, with the exception of the career values dimension in EE and PL. In addition, I have found the relationships did not differ between the female native respondents and female migrant respondents. That is, the dummy variable country of birth had no significant effect on the dependent variable 'employment status'.

In part 5.1 above, I have summarized the findings of my study. It is important to analyze these findings to determine whether they have any theoretical relevance. On the basis of my data, we can state the sociocultural background of the female respondents is to a moderate extent related to their employment status. Both dimensions of the independent variable are related to the employment status of the female respondents in both pooled data sets. For both dimensions, the relationship is negative.

To relate these conclusions to the theory underlying my study we can argue that the cultural assimilation theory partly holds. In summary, this theory argued that the sociocultural background of immigrants can have an impact on their labour force activity. It states that the employment status of female migrants can be explained by their adherence to traditional values (see section 2.1 page 8). In my research I have found that indeed the sociocultural background, or my nominal definition of values, explains the employment status of female respondents. Their assumptions thus do not only apply to female migrants, but also to female natives. Another argument made by the theory is that adhering to traditional values will have the consequences of lower work rates of migrant women (Read, 2004, p. 55-56). My data support this argument for both dimensions. The theory holds thus the situations described in my study, however not significantly for the dimension 'career values' for EE and PL.

I believe that my findings are not only theoretically, but also socially relevant. If we would relate these findings to a 'higher' level, the results may prove to interesting and relevant for the institutions of the EU. As I have mentioned in section 1.2 on page 4 discussing the background of the study, the EU is diligently looking for a ways to increase the employment of immigrants, especially migrant women, who are currently living in the EU member states. The potential contribution of female migrants in the labour markets needs to be better satisfied. This is important to tackle the current demographic developments of an ageing population and a shrinking workforce. These demographic developments burden the sustainability of the welfare states of the EU. Consequently, the EU has made immigrants their target group to improve the outcome in society by trying to find ways to increase their employment rates. To link this to my own study, it is first important for the EU to find out what determines the employment status of female migrants before any real action can be taken. The data of my study has illustrated that the sociocultural background of female respondents, either native or migrant, explains their employment status. Whereas this is an interesting finding, it is a result difficult to work with for the EU. How to change the direction of the adherence of career- and family values so that one is more likely to find paid work and become employed? This is likely to be impossible since I have found in several of the research papers that values are said to be stable over time (see section 2.1 page 8). This should be taken into account when proposing policies or action plans to increase the employment rates of female migrants residing in the EU member states. Even though these proposed strategies might be looking promising on paper, if a female migrant sticks to their sociocultural background the strategies might be unfruitful. Therefore, I propose a different policy direction to address the key challenge of ageing populations that can be put next to the EU's ideas on how to close the employment gap of female migrants. As a matter of fact, the Directorate-General for Employment, Social Affairs and Inclusion of the European Commission has published in 2012 a guide with ideas on how to pursue on active ageing agenda throughout the EU (Directorate-General for Employment, Social Affairs and Inclusion, 2012). In this guide, suggestions are put forward on how to stimulate employment for *older people* so that they can contribute to the economy and the society (Directorate-General for Employment, Social Affairs and Inclusion, 2012, p. 29). Older people are a good target group to provide for sustainable welfare states, because surveys have found that they are willing and eager to work or to continue working after reaching their retirement age. For example, the Eurobarometer on Active Ageing found that 41 percent of the respondents who fall in the age group of people older than 55 years are willing to work after they have reached the age at which they are receiving a pension (*Special Eurobarometer 378 Active Ageing,* 2012, p. 76).What I want to say by quoting this guide and survey is that the EU is also suggested to make, next to (female) immigrants, the older population one of their major target groups to improve the outcome in society.

5.3 Discussion: Limitations & Future Research Directions

Despite the fact that I have tried to account for several issues that are seen as the limitations of my study, not every possible threat could be ruled out.

First of all, I need to consider the problems associated with sampling bias. I need to take into account the underrepresentation of migrants in the ESS. This underrepresentation is *inter alia* due to the translation procedure of the ESS. The translation requirements are focused around five key principles. One of these is the most important for this study. This principal is that translations are only provided for each of the languages spoken in the participating countries of which at least five percent of the population uses this language as their first language ('Translation', n.d.). This ultimately means that minority groups, especially migrants, are not able to respondent to the questions and descriptions in the ESS. Thus, language problems lead to an underrepresentation of migrants in the ESS. Consequently, language problems also entail that the less educated migrants are groups to be under covered in the ESS. They are less likely to speak the majority language in the country. This implies that a specific set-up of female migrants is included into our sample for this study: they are expected to be the ones more or less highly educated (*ESS Sampling Guidelines*, 2012, p.12; Zuccotti, Ganzeboom & Guveli, 2014, p. 11).

A second limitation, elaborating on the first, concerns the reliability of my findings. In section 3.5.4 on page 18 discussing the limitations of my data collection method this issue has already been touched upon. I have relatively small sample sizes affecting the relative reliability of the two-proportion Z-test. While my intention has been to focus on female respondents of the initial 21 EU member states, only for five EU member states I have found significant results for the dependent variable 'employment status'. Due to large standard errors it has been impossible to reject the null-hypothesis of observing no significant differences between the paid work rates of female natives and female migrants within each of the 21selected EU member states. Only for five EU member states the effects have been great enough to reject the null hypothesis. To refer back to the small sample sizes: this has *inter alia* been caused by the presence of missing cases in Round 5 of the ESS. For several of the female respondents, it has been impossible to indicate whether they are natives or migrants. This meant that they have been excluded in the analysis and therefore led to a reduction of the initial sample size.

A third limitation which also relates to my data collection method is that of total non-response and item nonresponse. Total non-response occurs in the ESS and is an issue affecting the representativeness of the population which is included into the sample. Moreover, item nonresponse causes biases since responses are missing. The ESS is a good quality data collection source to measure my variables; however I need to take into consideration these 'deficits'. It is important to keep in mind that the data and results obtained for dependent- and independent variable from the female respondents are likely to differ from those female natives and female migrants who have not respondent, either a form of total- or item nonresponse. This is the best way to go about this methodological problem of my study.

Based on these limitations, I have some recommendations for future research within this field. Subsequent researchers within the same field of interest are advised to focus on a different dataset than the ESS. Whereas I am of the opinion that the ESS is a great data source to apply for comparative research focusing and trying to understand people's behavior and attitudes, it does have its drawbacks with regard to the data I have been interested in. The limitations I have discussed above have been caused by using the ESS as my data collection source. Therefore, it might be advisable to also consider other relevant datasets, by adjusting some of the aspects I have focused on. Below, I will discuss two of these alternative data bases.

A first data collection source that could have been used to analyze the employment status of female migrants and female natives in the EU member states is the Generations and Gender Program (GGP). The GGP provides micro- and macro level data by means of survey research for, at the moment, 19 countries. The data of the GGP allows for cross-national comparability. The GGP provides *inter alia* information on the organization of paid and unpaid work and tries to understand behaviors over time. Moreover, the GGP survey has an average of 9,000 respondents per country resulting in the possibility to also analyze minorities. The latter could have been a great advantage for my own study, since the ESS does not allow analyzing a large sample of people who are minorities, since migrants are being underrepresented ('About the Generations and Gender Programme', n.d.; 'Background', n.d.). Nevertheless, despite these advantages, the GP would be less relevant for my own study, since I had the aim to focus on more a more recent period and only on EU member states, because of the findings of the Report 'Indicators of Immigrant Integration' (Eurostat, 2011). In this sense, I needed to focus my research on Wave 2 and this only allows me to currently focus on 6 EU member states, whereas my aim has been to focus on all the EU member states (28) ('Questionnaires', n.d.). Moreover, despite the fact that the GGP tries to study behaviors, it does not focus on the values I have chosen on the basis of my literature review and theoretical framework. Family values are touched upon, whereas the others are only address partly or not all. Still, for a slightly different study which will focus on broader group of countries and different conceptualization of the independent variable, the GGP is a good data collection source.

Another data collection source that could have been used to collect data from is the World Value Survey (WVS). This survey provides data on the beliefs, values and motivations of people throughout the world. Wave 6 (2010-2014) of the survey provides information on social, economic, religious, and political values for 57 countries for more than 85,000 respondents. The sample size is therefore much greater than that of the ESS. Data is *inter alia* provided for family values as well as employment statuses. It is therefore a useful database to determine the relation between the employment status of female respondents and their sociocultural background. Moreover, you can also differentiate per immigrant and citizen respondents and gender, male or female ('Online Data Analysis', n.d.; 'Who we are', n.d.). The WVS tries to cover all residents, including non-citizens, in their sample. Moreover, the minimum number of completed files must be 1000 ('Fieldwork and Sampling', n.d.). Nevertheless, when you intend to focus on EU member states, as I did, then the WVS is less valuable than the ESS. In the most recent wave, Wave 6, only 9 EU member states are included into the analysis. Therefore, the WVS would be less valuable by focusing on the populations residing within these countries if one takes the same point of departure as I did. In addition, the WVS does not offer data on the respondent's level, only at the country level. In addition, whereas it still concerns a survey, the problems associated with total nonresponse and item non response are not ruled out ('Data Dissemination', n.d.; 'Non response', n.d.; 'World Values Survey 6: 2010-2014', n.d.).

Based on the above recommendations, I encourage further research to be done in this field of study. Researchers should not become discouraged by reading my limitations and recommendations. Therefore, I like to put forward some advice and several options to researchers also interested in the 'empirical puzzle' I have tried to disentangle.

First of all, if one wants to find out whether there is an association between the employment status of female migrants and their sociocultural background and compare this with female natives, it might be advisable to do this on a macro-level (aggregated data) instead of at the micro level. In this sense, a multilevel analysis will be conducted. The WVS would then be a good data collection source since it provides data at the country level. Moreover, instead of focusing on EU member states, one

could then choose the countries with a large sample size of respondents to deal with the underrepresentation of minority groups and the reliability of tour findings.

Secondly, future research is advised to conceptualize and operationalize the independent variable 'sociocultural background' differently. By focusing on different aspects of the sociocultural background of individuals it might be possible to use the data from the GGP. This is beneficial for analyzing minorities in countries, such as female migrants from specific countries of birth, because the sample sizes per country of the GGP are much greater those of the ESS. However, this would mean that it is better to focus on a number of countries from different continents, instead of only EU member states.

To conclude, there are several options available for future researchers who are interested in the same empirical puzzle as I have been interested in. Above, I discussed a few of them. Naturally, there are more options to explore. However, I only discussed several of them to provide a stepping stone for further studies in this field: it goes beyond this study to provide an in-depth discussion and analysis of possible other ways to reduce the limitations of my study.

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7. Appendices

Appendix A Question determining the Country of Origin of Respondents

C28 Were you born in [country]?

Yes
No
(Don't know)

Figure 7.1 ESS Survey Question (SOURCE QUESTIONNAIRE FINAL (Round 5, 2010/11), 2010, p.19)

Appendix B Question determining the Current Status of Respondents

F17c STILL CARD 50 And which of these descriptions best describes your situation (in the last seven days)? Please select only one.

CODE ONE ANSWER ONLY

in paid work (or away temporarily) (employee, self-employed, working for your family business)
in education, (not paid for by employer) even if on vacation
unemployed and actively looking for a job
unemployed, wanting a job but not actively looking for a job
permanently sick or disabled
retired
in community or military service82
doing housework, looking after children or other persons
(other)
(Don't know)

82 This code does not apply to JOBS in the military but to compulsory military service only.

Figure 7.2 Survey Description ESS (SOURCE QUESTIONNAIRE FINAL (Round 5, 2010/11), 2010, p.41)

Appendix C Sample Sizes per EU Member State

EU MS	N Female Respondents	N Female Natives	N Female Migrants	EU MS	N Female Respondents	N Female Natives	N Female Migrants
BE	883	774.0	109	HR	890	801.8	88.2
BG	1341.6	1334.1	7.5	HU	844.8	815.8	29.0
CY	596	554.7	41.3	IE	1382.9	1183.1	199.8
CZ	1169.3	1144.1	25.2	NL	971.8	897.8	74.0
DE	1468.7	1284.0	184.7	PL	907.2	893.1	14.1
DK	767	718.0	49.0	PT	1279.8	1198.2	81.6
EE	1071	880.0	191.0	SE	779	673.0	106.0
ES	971.7	884.2	87.5	SI	749	685.0	64.0
FI	967	933.0	34.0	SK	1059.7	1026.6	33.1
FR	903.9	822.4	81.5	UK	1321.4	1167.9	153.5
GR	1509.7	1352.4	157.3	**EU-21**	21834.5	20023.2	1811.3

Table 7.1 Sample Sizes per EU Member State (Female Natives and Female Migrants) (Design Weight on)

EU MS	N Female Respondents	N Female Natives	N Female Migrants (Non-Western)	EU MS	N Female Respondents	N Female Natives	N Female Migrants (Non-Western)
BE	822	774.0	48	HR	876.4	801.8	74.6
BG	1339.4	1334.1	5.3	HU	821.6	815.8	5.8
CY	567.6	554.7	12.9	IE	1231.2	1183.1	48.1
CZ	1150.1	1144.1	6	NL	948.2	897.8	50.4
DE	1386	1284.0	102	PL	901.3	893.1	8.2
DK	741	718.0	23	PT	1264.2	1198.2	66
EE	1067	880.0	187	SE	725	673.0	52
ES	939	884.2	54.8	SI	722	685.0	37
FI	951	933.0	18	SK	1029.5	1026.6	2.9
FR	872.3	822.4	49.9	UK	1250.9	1167.9	83
GR	1474.3	1352.4	121.9	**EU-21**	21080	20023.2	1056.8

Table 7.2 Sample Sizes per EU Member State (Female Natives and Female Non-Western Migrants) (Design Weight on)

Appendix D Mechanics Two-Proportion Z-Test

EU MS	$N_{female\ natives}$	$Y_{female\ natives}$	$P^{\wedge}_{female\ natives}$	$N_{female\ migrants}$	$Y_{female\ migrants}$	$P^{\wedge}_{female\ migrants}$	$P^{\wedge}_{pooled}$	SE_{pooled}	Z	P
BE	774.0	375.0	0.484	109	57.0	0.523	0.4887	0.051139	-0.76	0.45326
BG	1334.1	522.5	0.392	7.5	1.3	0.173	0.3898	0.178587	1.23	0.2186
CY	554.7	236.1	0.426	41.3	29.0	0.702	0.4447	0.080152	-3.44	**0.0003**
CZ	1144.1	565.9	0.495	25.2	10.2	0.405	0.4926	0.100682	0.89	0.3734
DE	1284.0	626.1	0.488	184.7	85.6	0.463	0.4841	0.039328	0.64	0.5222
DK	718.0	383.0	0.533	49.0	23.0	0.469	0.5293	0.073699	0.87	0.3844
EE	880.0	421.0	0.478	191.0	65.0	0.340	0.4538	0.039741	3.47	**0.0006**
ES	884.2	376.7	0.426	87.5	46.7	0.534	0.4353	0.055564	-1.94	0.0524
FI	933.0	417.0	0.447	34.0	16.0	0.471	0.4478	0.08682	-0.28	0.7794
FR	822.4	422.1	0.513	81.5	40.0	0.491	0.5111	0.05805	0.38	0.704
GR	1352.4	437.1	0.323	157.3	64.1	0.408	0.3319	0.039668	-2.14	**0.0324**
HR	801.8	284.5	0.355	88.2	24.3	0.276	0.3436	0.053278	1.48	0.1388
HU	815.8	352.9	0.433	29.0	14.1	0.486	0.4332	0.093638	-0.57	0.5686
IE	1183.1	398.3	0.337	199.8	83.0	0.415	0.3478	0.036428	-2.14	0.704
NL	897.8	511.5	0.570	74.0	34.0	0.459	0.5608	0.060023	1.85	0.0644
PL	893.1	387.5	0.434	14.1	1.1	0.078	0.4277	0.132792	2.68	**0.0074**
PT	1198.2	413.5	0.345	81.6	39.3	0.482	0.3532	0.054682	-2.51	**0.012**
SE	673.0	377.0	0.560	106.0	53.0	0.500	0.5520	0.051966	1.15	0.2502
SI	685.0	288.0	0.420	64.0	29.0	0.453	0.4232	0.06458	-0.51	0.610
SK	1026.6	450.3	0.439	33.1	14.5	0.438	0.4379	0.087613	0.01	0.992
UK	1167.9	555.1	0.475	153.5	78.3	0.510	0.4791	0.042889	-0.82	0.4122

Table 7.3 Mechanics Statistical Significance Female Natives and Female Migrants (Design Weight on)

EU MS	$N_{female\ natives}$	$Y_{female\ natives}$	$P^{\wedge}_{female\ natives}$	$N_{female\ non-western}$	$Y_{female\ non-western}$	$P^{\wedge}_{female\ non-western}$	$P^{\wedge}_{pooled}$	SE_{pooled}	Z	P
BE	774.0	375.0	0.484	48	24	0.500	0.4887	0.051139	-0.21	0.83366
BG	1334.1	522.5	0.392	5.3	1.3	0.245	0.3898	0.178587	0.69	0.2451
CY	554.7	236.1	0.426	12.9	9.4	0.729	0.4447	0.080152	-2.17	0.03
CZ	1144.1	565.9	0.495	6	3.7	0.617	0.4926	0.100682	-0.60	0.5486
DE	1284.0	626.1	0.488	102	47	0.461	0.4841	0.039328	0.52	0.60306
DK	718.0	383.0	0.533	23	11	0.478	0.5293	0.073699	0.52	0.60306
EE	880.0	421.0	0.478	187	64	0.342	0.4538	0.039741	3.40	0.00068
ES	884.2	376.7	0.426	54.8	26.4	0.482	0.4353	0.055564	-0.81	0.418
FI	933.0	417.0	0.447	18	6	0.333	0.4478	0.08682	0.96	0.33706
FR	822.4	422.1	0.513	49.9	22.7	0.455	0.5111	0.05805	0.80	0.4238
GR	1352.4	437.1	0.323	121.9	45	0.369	0.3319	0.039668	-1.04	0.2984
HR	801.8	284.5	0.355	74.6	18.7	0.251	0.3436	0.053278	1.81	0.0702
HU	815.8	352.9	0.433	5.8	3.9	0.672	0.4332	0.093638	-1.16	0.246
IE	1183.1	398.3	0.337	48.1	16.3	0.339	0.3478	0.036428	-0.03	0.976
NL	897.8	511.5	0.570	50.4	22	0.437	0.5608	0.060023	1.86	0.0638
PL	893.1	387.5	0.434	8.2	1.1	0.134	0.4277	0.132792	1.73	0.0802
PT	1198.2	413.5	0.345	66	29.9	0.453	0.3532	0.054682	-1.79	0.0734
SE	673.0	377.0	0.560	52	30	0.577	0.5520	0.051966	-0.23	0.8181
SI	685.0	288.0	0.420	37	17	0.459	0.4232	0.06458	-0.47	0.63836
SK	1026.6	450.3	0.439	2.9	1.5	0.517	0.4379	0.087613	-0.27	0.7872
UK	1167.9	555.1	0.475	83	38.6	0.465	0.4791	0.042889	0.18	0.8572

Table 7.4 Mechanics Statistical Significance Female Natives and Female Non-Western Migrants (Design Weight on)

Appendix E Item-Total Statistics

Cronbach's alpha ranges between 0 and 1. The closer Cronbach's alpha coefficient is to 1, the greater the internal consistency of the items included in the scale. Rules of thumb are as follows: "_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor and _ < .5 – Unacceptable".

Reliability Statistics Personal Values

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.554	.556	3

Reliability Statistics Family Values

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.412	.359	3

Reliability Statistics Gender Values

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.390	.358	3

Table 7.5 Item Analysis from SPSS Output

E.1 Item-Total Statistics Personal Values

Table 7.6 below shows the item-total statistics for the dimension 'personal values'. The last column illustrates Cronbach's alpha when one item is deleted. For the dimension 'personal values', the Cronbach's Alpha's will be considered 'poor' if one of the individual items is deleted from the scale. If no items are deleted Cronbach's alpha is considered questionable.

Scale Statistics Personal Values

Mean	Variance	Std. Deviation	N of Items
8.36	7.748	2.783	3

Item-Total Statistics Personal Values

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Important to make own decisions and be free	6.16	4.926	.338	.114	**.498**
Important to be successful and that people recognise achievements	5.23	3.890	.382	.146	**.426**
Important to seek fun and things that give pleasure	5.33	3.818	.384	.148	**.423**

Table 7.6 Item-Total Statistics Personal Values

E.2 Item-Total Statistics Family Values

Table 7.7 below shows the item-total statistics for the dimension 'family values'. The last column illustrates Cronbach's alpha when one item is deleted. For the dimension 'family values', the Cronbach's Alpha's are subsequently 0.053, -0.098 and 0.660. The inter-scale reliability would increase if the last indicator would be deleted from the scale. This will improve Cronbach's Alpha to 'questionable'. The other two items will not lead to an improvement of the inter-scale reliability if these indicators would be deleted. Especially the second alpha is negligible. A negative alpha implies a negative average covariance among items. When alpha is negative, the integrity of the scores should be questioned. A negative alpha can occur because of an incorrect measurement model or poor scores (Ritter, 2010, p. p.8).

Scale Statistics Family Values

Mean	Variance	Std. Deviation	N of Items
10.76	4.861	2.205	3

Item-Total Statistics Family Values

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Women should be prepared to cut down on paid work for sake of family	7.78	2.230	.367	.247	**.053**
Men should have more right to job than women when jobs are scarce	7.09	1.998	.423	.245	**-.098**[a]
Important if choosing job: job allowed you to combine work/family	6.64	4.160	-.011	.006	**.660**

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Table 7.7 Item-Total Statistics Family Values

E.3 Item-Total Statistics Gender Values

Table 7.8 below shows the item-total statistics for the dimension 'gender values'. The last column illustrates Cronbach's alpha when one item is deleted. For the dimension 'gender values', the Cronbach's Alpha's are 0.0262, -0.096 and 0.528. The inter-scale reliability would increase if the last indicator would be deleted from the scale. This will improve Cronbach's Alpha to 'questionable'. Where the other two items to be deleted, this would not strengthen Cronbach's Alpha for this dimension. Again, the second item has a negative alpha for the same reason as mentioned for the item of the dimension 'family values' (Gliem & Gliem, 2003, p. 86-87).

Scale Statistics Gender Values

Mean	Variance	Std. Deviation	N of Items
9.25	6.168	2.484	3

Item-Total Statistics Gender Values

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Important to be rich, have money and expensive things	5.23	3.221	.247	.140	**.262**
Important to show abilities and be admired	6.17	2.576	.394	.160	**-.096**[a]
Important to help people and care for others well-being	7.11	4.938	.069	.038	**.528**

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Table 7.8 Item-Total Statistics Gender Values

Appendix F Recoding: Reversing of Answer Categories Indicators

Original Version

Here we briefly describe some people. Please read each description and tick the box on each line that shows how much each person is or is not like you.

P1. It is important to her to make her own decisions about what she does.
She likes to be free and not depend on others.
P2. Being very successful is important to her. She hopes people will recognize her achievements.
P3. She seeks every chance she can to have fun. It is important to her to do things that give her pleasure.

How much like you is this person?

Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not like me at all
☐	☐	☐	☐	☐	☐
1	2	3	4	5	6

Recoded Version

Here we briefly describe some people. Please read each description and tick the box on each line that shows how much each person is or is not like you.

P1. It is important to her to make her own decisions about what she does.
She likes to be free and not depend on others.
P2. Being very successful is important to her. She hopes people will recognize her achievements.
P3. She seeks every chance she can to have fun. It is important to her to do things that give her pleasure.

How much like you is this person?

Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not like me at all
☐	☐	☐	☐	☐	☐
6	5	4	3	2	1

Figure 7.3 Recoding of Indicator Gender Values (The European Social Survey, SELF-COMPLETION QUESTIONNAIRE S-C-A (Round 5 2010), n.d.).

Original Version

For you personally, how important do you think each of the following would be if you were choosing a job? Please use this card.

F3. A job which allowed you to combine work and family responsibilities.

Not important at all	Not Important	Neither important nor unimportant	Important	Very important	(Don't know)
1	2	3	4	5	6

Recoded Version

For you personally, how important do you think each of the following would be if you were choosing a job? Please use this card.

F3. A job which allowed you to combine work and family responsibilities

Not important at all	Not Important	Neither important nor unimportant	Important	Very important	(Don't know)
6	5	4	3	2	1

Figure 7.4 Recoding of Indicator Family Values (SOURCE QUESTIONNAIRE FINAL (Round 5, 2010/11), 2010, p.75)

Original Version

Here we briefly describe some people. Please read each description and tick the box on each line that shows how much each person is or is not like you.

G1. It's very important to her to help the people around her. She wants to care for their well-being.

Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not like me at all
1	2	3	4	5	6

Recoded Version

Here we briefly describe some people. Please read each description and tick the box on each line that shows how much each person is or is not like you.

G1It's very important to her to help the people around her. She wants to care for their well-being.

Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not like me at all
6	5	4	3	2	1

Figure 7.5 Recoding of Indicator Gender Values (The European Social Survey, SELF-COMPLETION QUESTIONNAIRE S-C-A (Round 5 2010),2010, p.4)

Appendix G Factor Analysis: Factor Extraction Indicators Independent Variable

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.862	31.803	31.803	2.862	31.803	31.803	2.535	28.172	28.172
2	1.457	16.184	47.987	1.457	16.184	47.987	1.497	16.630	44.802
3	1.153	12.814	60.801	1.153	12.814	60.801	1.440	15.999	60.801
4	.890	9.892	70.693						
5	.799	8.877	79.569						
6	.676	7.509	87.078						
7	.609	6.767	93.845						
8	.554	6.155	100.000						
9	1.231E-14	1.368E-13	100.000						

Extraction Method: Principal Component Analysis.

a. Only cases for which Female = 1 (FILTER) = Selected are used in the analysis phase.

Table 7.9 Eigenvalues associated with each Factor before Extraction, after Extraction and after Rotation

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.781	29.682	29.682	1.781	29.682	29.682	1.751	29.191	29.191
2	1.402	23.364	53.046	1.402	23.364	53.046	1.431	23.855	53.046
3	.936	15.594	68.640						
4	.739	12.310	80.950						
5	.592	9.863	90.813						
6	.551	9.187	100.000						

Extraction Method: Principal Component Analysis.

a. Only cases for which Female = 1 (FILTER) = Selected are used in the analysis phase.

Table 7.10 Eigenvalues associated with each Factor before Extraction, after Extraction and after Rotation

Appendix H Binary Logistic Regression: Output Variables in Equitation

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	FAC1_3	.185	.033	31.335	1	**.000**	1.203	1.127	1.283
	FAC2_3	.296	.033	82.573	1	**.000**	1.345	1.262	1.434
	Migrant(1)	-.200	.114	3.114	1	**.078**	.818	.655	1.022
	Cyprus(1)	-.764	.113	45.488	1	**.000**	.466	.373	.582
	Estonia(1)	-.790	.095	69.137	1	**.000**	.454	.377	.547
	Poland(1)	-.548	.097	32.228	1	**.000**	.578	.478	.698
	Portugal(1)	-.303	.090	11.449	1	**.001**	.739	.620	.880
	Constant	2.041	.266	59.018	1	**.000**	7.695		

a. Variable(s) entered on step 1: FAC1_3, FAC2_3, Migrant, Cyprus, Estonia, Poland and Portugal.

Table 7.11 Output Binary Logistic Regression Female Respondents

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Migrant(1)	-.067	.097	.470	1	**.493**	.936	.773	1.132
	EePL	.340	.058	34.746	1	**.000**	1.405	1.255	1.574
	Constant	-.514	.096	28.674	1	**.000**	.598		

a. Variable(s) entered on step 1: Migrant, EePL.

Table 7.12 Output Binary Logistic Regression Female Respondents EE and PL with Dummy Variables

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	FAC1_3 'Career'	**-.046**	.054	.706	1	**.401**	.955	.859	1.063
	FAC2_3 'Family'	**.264**	.054	23.555	1	**.000**	1.302	1.170	1.449
	Constant	**.080**	.053	2.263	1	**.133**	1.083		

a. Variable(s) entered on step 1: FAC1_3, FAC2_3.

Table 7.13 Output Binary Logistic Regression Female Respondents EE and PL

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Migrant(1)	-.067	.097	.470	1	**.493**	.936	.773	1.132
	CyGrPT	-.340	.058	34.746	1	**.000**	.711	.635	.797
	Constant	-.174	.098	3.132	1	**.077**	.840		

a. Variable(s) entered on step 1: Migrant, CyGrPT.

Table 7.14 Output Binary Logistic Regression Female Respondents CY, GR and PT with Dummy Variables

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	FAC1_3 'Career'	.288	.040	51.743	1	.000	1.334	1.233	1.443
	FAC2_3 'Family'	.295	.039	56.643	1	.000	1.343	1.244	1.451
	Constant	-.328	.040	67.227	1	.000	.721		

a. Variable(s) entered on step 1: FAC1_3, FAC2_3.

Table 7.15 Output Binary Logistic Regression Female Respondents CY, GR and PT