Post-Familialism and Social-Political Environments

Low Total Fertility Rates and Values in the European Union

Author: Nadine Zeeman s1065750
Supervisor: Dr. M. van Gerven
Second Supervisor: Prof. Dr. A. Need

Bachelor Thesis European Studies
Faculty of Management and Governance

30/08/2013

Table of Contents

List of Abbreviations

AT	Austria
BE	Belgium
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
ES	Spain
ESS	European Social Survey
EU	European Union
FI	Finland
FR	France
GR	Greece
HU	Hungary
IE	Ireland
IT	Italy
LU	Luxembourg
NL	Netherlands
PL	Poland
PT	Portugal
SE	Sweden
SI	Slovenia
SK	Slovakia
TFR	Total Fertility Rate
UK	United Kingdom

Chapter 1 Introduction

In this first chapter, I explain the research I will conduct. This chapter is divided into several parts in which I discuss the background and relevance of the study, the research questions and research strategy.

1.1 Background & Relevance of the Study

The empirical puzzle I am interested in is post-familialism, also known as low total fertility rates (TFRs) (Kotkin, Shroff, Modarres & Cox, 2012). Post-familialism refers to the childless setting trend in the industrialized world. In the last couple of years more individuals choose to forbear having children. Some societies will therefore become increasingly childless, which will lead to a demographic decline that has consequences for the future of these societies. The term 'demographic winter' has even been uttered, which refers to a society in which on the one hand the working population is shrinking while on the other hand the population becomes older. Several countries are already facing the problem of below replacement fertility (Kotkin et al., 2012)

Post-familialism can also be found in the EU member states. Several scholars have addressed the demographic decline within the EU member states. Around the year 2000, an important shift has taken place in the EU: a positive momentum changed into a negative one. A positive momentum indicates that a country has a young population with the potential to grow, while a negative momentum implies that a country has increasingly an older population with a tendency towards population decline (Lutz, O'Neill & Scherbov, 2003). In a similar perspective, Muenz (2007) has demonstrated that a high proportion of EU member states are experiencing low TFRs. It is even predicted that in the upcoming years the proportion of EU member states that will encounter a declining domestic population is likely to increase (Muenz, 2007).

Post-familialism forms a serious threat to the goals the EU has set itself in its Lisbon Strategy at the beginning of the year 2000. The EU has determined to become 'the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion' (Vandenbroucke, Hemerijck & Palier, 2011, p. 5). High attention has been paid to the concept of sustainability (Rodriguez et al., 2010) which has become the main focus in the area of social welfare. The EU wants to sustainable achieve welfare states. A large workforce is needed to pay for the necessary taxes that are needed to finance social welfare. Therefore high TFRs are of utmost importance. The fiscal sustainability of a welfare system will be undermined if the labour supply is to decrease. The EU has assigned low TFRs the label 'new social risk', which signifies the importance of addressing this issue (Vandenbroucke et al., 2011).

Variation exists in the TFRs of the EU member states: not every EU member state experiences the phenomenon of post-familialism to a similar extent. May this variation be explained by differences in the countries' social-political environment? Several researchers have tried to find out whether there is pattern discernible between the TFRs of a country and their social-political environment. The study by Castles (2003) has aimed to determine the reasons for variation in TFRs by focusing on 21 OECD countries in the period 1960 to 1998. In his study he has included several independent variables, including the social-political environment of a country which is measured by looking at two cultural values: 'catholic adherence' and 'total divorce rate'. He did not find a strong link between TFRs and cultural values. He argues that the strength and coherence of the pattern is likely to be only coincidental (Castles, 2003). However, other scholars have found a link. Inglehart and Baker (2002) have discovered that part of the reason that low-income societies have high TFRs is because of the persistence of traditional values. Industrial societies tend to have low TFRs, because they adhere to modern, secular values (Inglehart & Baker, 2002). Nevertheless, their findings do not correspond with the findings from Chesnais (1996), who has focused on the period 1960-1995.

Chesnais has found a reverse link: countries that have traditional, Catholic and family-oriented values have lower TFRs than countries that adhere less to these traditional values (Chesnais, 1996).

Overall, there is thus already some knowledge available about the link between TFRs and social-political environments. However, I believe that my study adds knowledge to the existing body of literature. In general, I want to find out whether such a link exists in a different type of countries and in a more recent year. For several reasons, my study will be different than the previous ones. First of all, the previous conducted research failed to include a broader picture of a country's social-political environment. Chesnais (1996) has primarily focused on religious and family values, while Castles (2003) only includes cultural values. In my study I include more dimensions. In addition, I focus on a more recent time period, the year 2005. My research is conducted in the period when the positive momentum in the EU changed into a negative one (Lutz et al., 2003) Moreover, I focus in my study specifically on EU member states. The studies by Castles (2003) and Inglehart & Baker (2002) have also focused on countries outside Europe, while Chesnais (1996) only includes Western Europe. My interest lies with the EU member states, because of the finding by Lutz et al. (2003) that the EU is experiencing below replacement fertility and is likely to experience even more declining domestic populations (Muenz, 2007).

In addition, this study may be socially relevant for the EU in the future. This depends on the results obtained. If I find that a country's social-political environment explains the TFR of a country, this can have policy implications for the EU when promoting 'best practices'. Best practices are promoted in the area of social family policies to address low TFRs (Vandenbroucke et al., 2011). Within this field, member states develop in their own discretion policies (Tucker, 2003). The EU can only provide guidelines based on 'best practices' discernible in one or more member states. 'Best practices' of social welfare development often come from the Nordic welfare states (Alestalo, Hort, & Kuhnle, 2009). However, their 'methods' do not have to be feasible in other EU countries. If it is the case that the social-political environment explains a country's TFR, than the EU should take this into account. This can be done by promoting best practices of a country with a specific social-political environment in countries with similar social-political environments. This allows perhaps for more feasibility. In this regard, I agree with a suggestion that is being made by Scharpf (2002). He argues for differentiated framework directives. These framework directives should have the goal to allow for parity within the European Union, but should also account for the existing diversity of national welfare regimes. The framework directives should therefore be addressed to subsets of member states, practiced within groups of countries that face similar challenges (Scharpf, 2002). In future, the EU should perhaps promote differentiated best practices in the field of social policies, but should not forget the main goal of achieving sustainable welfare states.

1.2 Research Plan: Research Questions & Research Strategy

In this study I want to find out to what extent an EU member states' total fertility rate (TFR) can be explained by its social political environment. I aim to find this out by conducting a cross-sectional study in which I compare EU member states at one point in time. The central research question that needs to be answered is:

- *To what extent does the social-political environment of EU member states explain the total fertility rate in these countries in in the year 2005?*

The units of analysis are the EU member states, because I provide the answer to my main research question on an aggregated level. The independent variable is the social-political environment of the country and my dependent variable is the TFR of the EU member states. To answer this main research

question, I will make use of sub-research questions that relate to the research I have discussed before. Previous research has made a distinction between social-political environments of countries that can be seen as being more or less traditional and they have related this to the TFR of countries (Chesnais, 1996; Inglehart & Baker, 2000). Based on this, I have formulated three sub-research questions:

1. *What is the social-political environment of the EU member states in 2005?*
2. *What is the total fertility rate of the EU member states in 2005?*
3. *What is the relationship between the social political environment and the total fertility rate of the EU member states in 2005?*

These sub-research questions help to clarify the research objective. I want to find out whether a country's social-political environment explains a country's TFR. Therefore, I first have to gather information on the social-political environment of the EU member states. Secondly, I have to find out what the TFRs are of the EU member states.

By analyzing the social-political environments of the EU member states, I rank the countries on a scale from having a more or less traditional social-political environment. These findings should then be analyzed in relation to the TFR of the countries. I have chosen for ranking, because I believe it will be highly coincidental if countries are equally traditional.

Chapter 2 Framework: Theory & Hypotheses

In this second chapter, I discuss the theory related to my interests in post-familialism and social-political environments. Moreover, I provide the hypotheses derived from the theory.

2.1 Post-Materialist Values Theory

The post-materialist values theory formulated by McDonald (2002) tries to give a probable account of the empirical situation of post-familialism. This theory stipulates that changes in the demographic behavior of individuals are driven by the growth in several values. It argues that values as individual self-realization, satisfaction of personal preferences, liberalism, family systems and freedom from traditional forces such as religion are changing the TFRs. The shift to these kinds of values has been made in modern societies where the population has emancipated itself from material concerns. It seems that the fertility decisions of women are determined by the attitudes of the population around them: a collective shift has taken place; the theory speaks of an aggregation, namely 'society'. In broader terms, the values discussed are religious -, political -, personal – and family values. The theory categorizes these values as being either more modern or traditional. Countries that have populations that are guided by traditional values are more likely to reproduce themselves than the populations of countries with more modern/liberal values. Thus countries with traditional values are likely to have higher TFRs than those countries that have not (McDonald, 2002). This theory fits the research of Inglehart and Baker (2002), while the research of Chesnais (1996) demonstrates the reverse.

The post-materialist values theory is applied to my particular study. The values mentioned by McDonald (2002) are used to conceptualize the broader notion of values that are persistent in a country and the theory will guide my research; it is the perspective lying behind my study. This means that the values of my interest can range from being more or less traditional: being traditional forms the basis of my inquiry. Below, I explain the four different values and how they are positioned within the post-materialist values theory.

2.1.1 Religious Values

For each of the values, the post-materialist values theory identifies several items. For the dimension religious values, the theory argues that countries with populations that prefer to be free from traditional forces of religion are likely to change the demographic behavior (McDonald, 2002). In this sense, this dimension is conceptualized as belonging to a religion or being religious. In both cases, people adhere to certain religious beliefs. Of interests here is also being Catholic or not. Chesnais (1996) has found that Catholicism can be linked to the TFR of a country.

2.1.2 Political Values

The theory also includes an item for political values, which is 'liberalism'. It states that countries where the people have liberal political ideas the TFR will be low. Countries with populations who are more traditionally minded are more likely to have high TFRs. These people adhere in this respect in various degrees to conservative political ideas, which are considered to be traditional (McDonald, 2002).

2.1.3 Personal Values

The items identified for the dimension 'personal values' are self-realization, satisfaction of personal preferences and being free from tradition. This dimension is being conceptualized as representing these items, or indicators. Populations that adhere to these values are less likely to reproduce themselves. On the other hand, countries with populations that adhere to traditions and customs are more likely to have high TFRs (McDonald, 2002).

2.1.4 Family Values

The post-materialist values theory mentions traditional family values. However, no items for this dimension are being provided. To conceptualize this value, I link a recently developed typology on bread winner models to the theory. This new model is called the 'synthesis' and has been developed by Haas (2005). This synthesis identifies five new types of gender regimes to understand the variations between countries on their welfare and family arrangements. Countries are categorized according to three dimensions: culture, practices and policies that relate to the balance between work and care. I am interested in the 'culture' dimension, because I want to focus specifically on values. Moreover, I leave out the other two because they are related to a different dependent variable, that of gender equality. Haas (2005) argues that values are important to consider when approaching gender roles in terms of care and work. For my conceptualization, I include the 'traditional male breadwinner model' which emphasizes traditional family values (Haas, 2005). The other four models discussed are the 'modified breadwinner model', the 'egalitarian employment model', the 'role reversal model' and the 'universal carer model'. These four are not included, because the first three focus primarily on regulations, while the last one has at its basis 'modern values'. For my research being traditional forms the basis of inquiry. The model being used conceptualizes family values as values and attitudes towards the division of labour and the caring of children. In countries with a traditional breadwinner model it is valued that the mother provides care to the children and the man is primarily responsible for paid work (Haas, 2005).

Figure 2.1 below provides the conceptualization of social-political environment, by including the nominal definition, the dimensions and some examples.

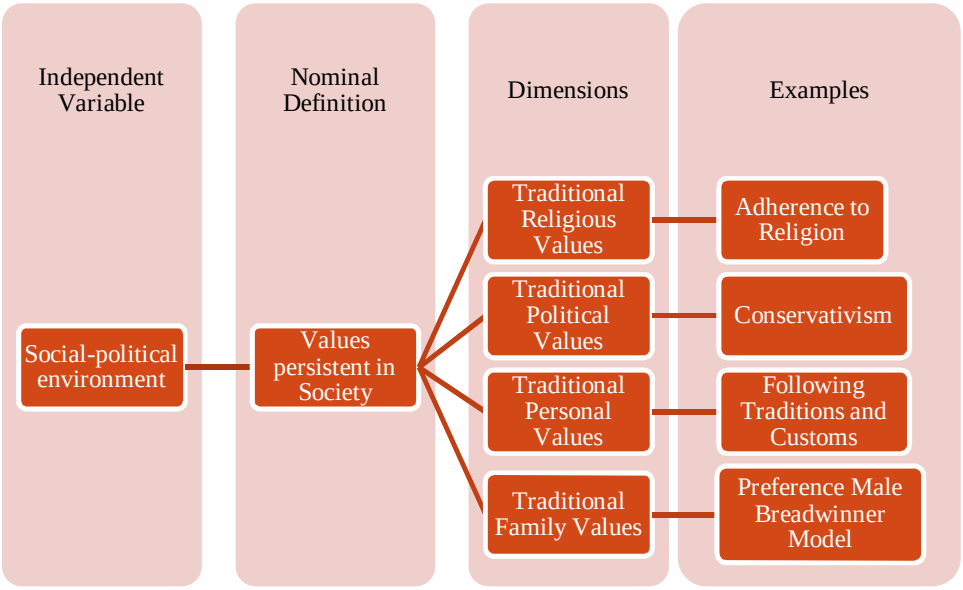

Figure 2.1 Conceptual Tree Theoretical Concept Social-Political Environment

2.2 Hypotheses

The role of the theory being used is that of verification: I test hypotheses based on theoretical expectations. The post-materialist values theory argues that countries that have populations adhering to traditional values are more likely to reproduce themselves than the populations of countries with more liberal/modern values (McDonald, 2002). This proposition is seen as the main hypothesis, which is the following:

- *The more traditional a country' social-political environment is, the higher the total fertility rate will be*

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

1. 'Religious Values':
    - *The more religious a country is, the higher the total fertility rate will be*

2. 'Political Values':
    - *The more a country values conservative political ideas, the higher the total fertility rate will be*

3. 'Personal Values':
    - *The more a country adheres to traditions and customs, the higher the total fertility rate will be*

4. 'Family Values':
    - *The more a country adheres to conservative family values, the higher the total fertility rate will be*

Chapter 3 Research Design: Focusing on the Methods

In this third chapter I discuss how I test my hypotheses. I address the concepts, the strategy I follow, how I select my cases and how I collect the data. Moreover, I discuss the issues of validity and reliability. To conclude, I describe how I will analyze the founded data.

3.1 Concepts

Previous research has tried to find out whether the social-political environment of a country influences the TFR. Based on the assumptions of the post-materialist values theory, I want to find out whether a relationship between the two variables exists. Therefore, the dependent variable in my study is the TFR of the EU member states, while my independent variable is the social-political environment of the EU member states.

3.1.1 Dependent Variable: Total Fertility Rate

My units of analysis are the EU member states. Therefore, I use the conceptualization of TFR as being used in documents and statistics issued by the research institutions of the EU. I make use of the definition of Eurostat, the statistical office of the EU ('Comparing apples with apples', n.d.). The TFR is conceptualized as follows: 'The mean number of children who would be born to a woman during her lifetime, if she were to spend her childbearing years conforming to the age-specific fertility rates, that have been measured in a given year' ('Glossary: Fertility', n.d.)

3.1.2 Independent Variable: Social-Political Environment

In providing a definition for my independent variable, I make use of a nominal definition. Literature defines the social-political environment as representing different values discernible in a country. I have chosen for this nominal definition because of the review of studies that focused on social-political environment and TFR's. One of these is the study of Castles (2003). His study conceptualizes the social-political environment of a country as the values that are persistent in a society. The social-political environment of a country is seen as a representing various values (Castles, 2003). This is a valuable way of conceptualizing the social-political environment of an EU member state, because it allows for a range of dimensions. By including various dimensions of this nominal definition, more certainty is provided when describing the social-political environment of an EU member state.

3.2 Strategy

The general strategy I follow is a cross-sectional study to compare the EU member states in the year 2005. I will analyze the social-political environment of EU member states and rank the countries with regard to the various dimensions identified of my independent variable 'social-political environment', as being more or less traditional. I want to find out to what extent a countries' social-political environment explains the TFR. I make use of survey research that has measured the values within the EU member states. I aim to include all the 27 EU member states ('EU member states', n.d.), because more countries allow me to better test the hypotheses.

3.3 Sample

The units of analysis are the EU member states. However, they are not my units of observation. I have conceptualized 'social-political environment' as representing four different values. The values within an EU member state need to be derived from their population. Therefore, the units upon which I collect the data are the populations of the EU member states. To be clear, I will not account for individual values, but for the aggregated values of the population of the EU member states.

The sample units are chosen to document diverse variations and to identify common patterns (Punch, 2006). I select EU member states that have populations that vary across my independent

variable and its dimensions. I make a comparison between countries according to their social-political environment; therefore I rank the countries by being more or less traditional.

3.3.1 Nonprobability Sampling & External Validity

The EU member states are selected by means of purposive sampling. I include the EU member states in my study of which all the necessary data is available. Therefore it does not make sense to opt for randomization, as is being done in an experiment (Gerring, 2012). An advantage of this type of sampling is that I do not have to worry about external validity threats. I only want to focus on the countries I have chosen and do not make generalizations (Babbie, 2010).

3.4 Data Collection Method

For my dependent- and independent variable, I explain how I collect the needed data. For both variables, the data comes from quantitative sources.

3.4.1 Data Collection Dependent Variable

To collect the data on my dependent variable I make use of existing statistics provided by Eurostat. Eurostat provides statistics at the European level that makes it possible to compare countries (‘Comparing apples with apples’, n.d.). Eurostat has measured the TFRs in the EU from the period of 1960 to 2011 (‘Fertility Statistics’, n.d.). It also provides the data for the year 2005, which fits in with the data collection period for my independent variable. By using their statistics on TFRs I am confident that the data used is valid for my research. Since I use the same conceptualization, I can be sure that the way Eurostat is measuring the TFR in a country reflects my concept.

3.4.2 Data Collection Independent Variable

To determine the social-political environment of the EU member states, I make use of the European Social Survey (ESS). The ESS provides information on the attitudes and beliefs of the citizens of the EU member states (‘About ESS’, n.d.) for the year that I focus on, namely 2005 (ESS2 - 2004 Summary and deviations, n.d.). The ESS describes the EU population within a single time frame by means of a cross-sectional survey (‘About ESS’, n.d.). The population under study for each country consists of persons that are 15 years and older and that are resident within private households. They are selected by means of stratified probability sampling (*Chapter II THE SAMPLE*, 2007). Of interest for my study is the rotating module of round two on ‘Family, Work and Wellbeing’ (Erikson, 2003), as well as the core module of Round Two (‘Core Modules’, n.d.). The questionnaire provides quantitative data, because it only includes closed questions.

In the following sections, I provide for each dimension the operational definition derived from the ESS that measure values. The ESS uses multiple indicators, 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). However, I include one indicator for each dimension, since this allows for a better analysis. I have decided to include the indicators that provide the respondents with answers that can be categorized as more or less on the scale of being traditional or not. These are the indicators that enable me to rank countries. Moreover, the indicators reflect my conceptualizations and sub-hypotheses.

3.4.2.1 Operationalization Religious Values

In figure 3.1 on the next page the operationalization of this dimension can be found. The religious values of the populations of the EU member states are measured by their responses to a survey question. This particular question is valuable for my study. Not everyone considers themselves to belong to a particular religion or domination; nevertheless they do consider themselves to be religious.

Thus, it does not matter whether you belong to a religion or not, it only matters to what extent you regard yourself as religious. Consequently it is useful for my hypotheses, which is: '*The more religious a country is, the higher the total fertility rate will be'*.

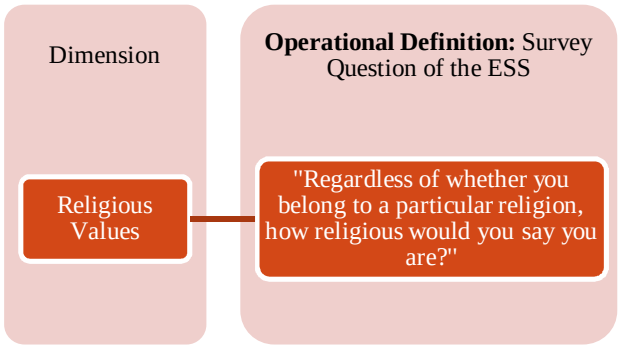

Figure 3.1 Progression of Measurement Religious Values (The European Social Survey, SELF-COMPLETION QUESTIONNAIRE S-C-A (Round 2 2004), n.d.).

3.4.2.2 Operationalization Political Values

In figure 3.2 the operationalization of this dimension can be found. The political values of the populations of the EU member states are measured by their responses to a survey statement. The statement in figure 3.2 reflects the hypothesis I want to test. My hypothesis for is: '*The more a country values conservative political ideas, the higher the total fertility rate will be'*. A country adhering to conservative political ideas prefers the government not to interfere, also in the case of differences in income level (Gallagher, Laver & Mair, 2006).

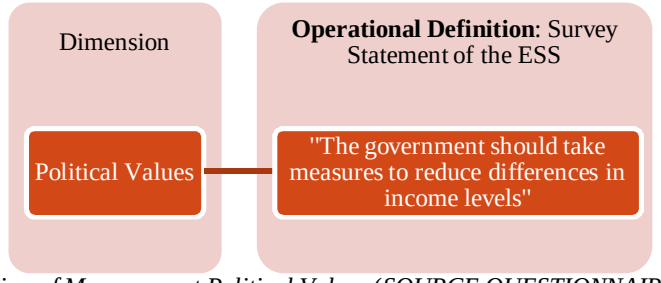

Figure 3.2 Progression of Measurement Political Values (*SOURCE QUESTIONNAIRE (Round 2, 2004/5) FINAL VERSION AMENDMENT 03 21.07.04*, n.d.).

3.4.2.3 Operationalization Personal Values

Figure 3.3 on the next page shows the progression of measurement for this dimension. The personal values of the populations of the EU member states are measured by their responses to a description of a hypothetical person. The description complies with my conceptualization and hypothesis. It already mentions the importance of tradition, which belongs to the overall idea of being traditional. It fits therefore the theory that argues that adhering to traditions will lead to high TFRs. More importantly it reflects the sub-hypothesis I want to test: '*The more a country adheres to traditions and customs, the higher the total fertility rate will be'*.

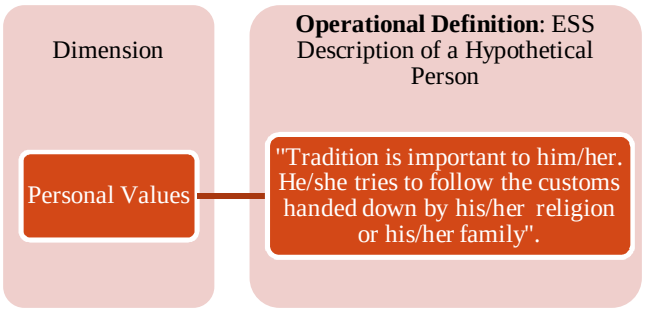

Figure 3.3 Progression of Measurement Personal Values (The European Social Survey, SELF-COMPLETION QUESTIONNAIRE S-C-A (Round 2 2004), n.d.).

3.4.2.4 Operationalization Family Values

Figure 3.4 shows the progression of measurement for this dimension. The family values of the populations of the EU member states are measured by their responses to a survey statement. This statement best fits my hypothesis and conceptualization of family values based on the traditional male breadwinner model. My hypothesis is: '*The more a country adheres to conservative family values, the higher the total fertility rate will be'*. In countries with a traditional breadwinner model it is valued that the mother provides care to the children while the man is primarily responsible for paid work (Haas, 2005).

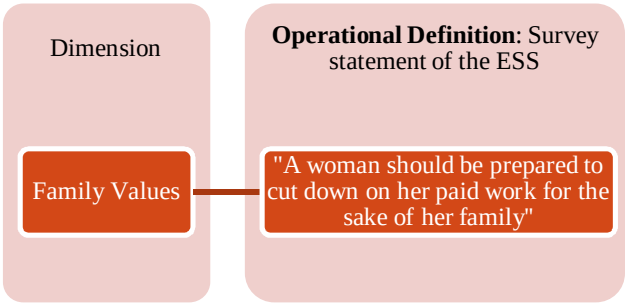

Figure 3.4 Progression of Measurement Family Values (The European Social Survey, SELF-COMPLETION QUESTIONNAIRE S-C-A (Round 2 2004), n.d.)

3.4.3 Level of Measurement Dimensions

For the dimensions 'political values' and 'family values' and their respective indicators, a five-point ordinal scale is presented from which respondents have to select their answer. An example of an ordinal scale for the dimension 'family values' can be found in figure 3.5. Religious values and personal values are assessed by questions and descriptions (*SOURCE QUESTIONNAIRE (Round 2, 2004/5) FINAL VERSION AMENDMENT 03 21.07.04*, n.d.).

'**Please indicate how much you agree or disagree with each of the following statements about men and women and their place in the family.**

iS826 "A women should not have to cut down on her paid work for the sake of her family."
Please tick one box.

Agree strongly	☐	1
Agree	☐	2
Neither disagree nor agree	☐	3
Disagree	☐	4
Disagree strongly	☐	5

Figure 3.5 Ordinal Scale Male Bread Winner Model

3.4.4 Limitations Data Collection Method

My study analyses the EU member states for the year 2005. This year has been chosen for two reasons. Firstly, this allows me to make use of the ESS Round 2, which includes the rotating module on 'Family, Work and Wellbeing'. Secondly, this year allows me to make use of the statistics of Eurostat. However, to focus on Round 2, I have to exclude countries that are currently a member of the EU as well as member states that have not been measured in this round (Member countries of the European Union, n.d.). My sample size is therefore smaller than the EU27. Based on the available data 21 EU member states are included ('ESS Cumulative Data Wizard', n.d.). This is a limitation of my study. Conclusions can only be made for these countries, because hypotheses testing can only be done for a proportion of the EU member states.

3.4.5 Content Validity

Content validity is achieved when the indicators of a concept reflect the meaning of the concepts as defined by the researcher (Drost, 2011). The study of Davidov, Schmidt & Schwartz (2008) has tested the adequacy of the ESS to measure values for 20 countries. This study has provided evidence for the equivalence of the meanings of the values across countries (Davidov, Schmidt & Schwartz, 2008). Content validity is thus assured and the ESS is therefore a good data collection source. Cross-national studies that want to make a comparison across these 20EU countries can use the data from the ESS. The ESS itself also provides information on how it maximizes the reliability and validity of the final questionnaire. The reliability of the survey is to some extent guaranteed by including a supplementary questionnaire to the main questionnaire ('Improving Question Quality', n.d.). Nevertheless, I cannot be completely confident that validity and reliability are assured. The study by Davidov et al. (2008) tested the equivalence of the meaning of values across 20 countries. Some of these countries are also included in my study, while others are not. Moreover, they have tested this for the first round of the ESS (Davidov, Schmidt & Schwartz, 2008), while I focus on the second round. Thus there is not a complete overlap between the countries selected for my study and the countries they have selected.

3.5 Data Analysis

I make use of secondary quantitative data analysis for my independent variable. The data collected from the ESS will be reanalyzed for the purpose of this study. The computer program IBM SPSS Statistics is used to reanalyze the data. This program allows me to make cross-tabulations to compare the EU member states. In short, the dependent variable will be analyzed by using existing statistics.

IBM SPSS Statistics is also used to relate my independent variable, and its dimensions, and the dependent variable. Statistical analysis is used to relate them. I include scatterplots, with on the vertical axis my dependent variable and on the horizontal axis my independent variable. My dependent variable is defined in counts, while my independent variable is defined in percentages. The four separate sub-independent variables, my dimensions, will range from being less or more traditional, the higher the percentage, the more traditional the country. Thus, the horizontal axis provides the scale for ranking the countries. Consequently, I am looking for a potential association between various explanatory variables and a response variable. A positive association between my dependent variable and the four independent variables would be indicated by a positive slope in the various scatterplots, while a negative association would indicate a negative slope in the different scatterplots. It could also be the case that no association is present, which would be demonstrated in the scatterplot by a not identifiable slope or trend ('Scatterplot', n.d.). For each of the dimensions I also include tables that provide the Pearson correlation: the quantification of the associations.

Chapter 4 Data & Analysis

In this fourth chapter I will address the analysis of my data. I analyze the data for my independent- and dependent variable and connect them by means of statistical analysis.

4.1 Selected Cases

My study includes 21 EU member states. These countries are: Austria (AT), Belgium (BE), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (GR), Hungary (HU), Ireland (IE), Italy (IT), Luxembourg (LU), the Netherlands (NL), Poland (PL), Portugal (PT), Slovakia (SK), Slovenia (SI), Spain (SP), Sweden (SE) and the United Kingdom (UK). For these countries the needed data is available ('ESS Cumulative Data Wizard', n.d.).

4.2 Social- Political Environments in EU Member States

The first sub-research question is: '*What is the social-political environment of the EU member states in 2005?* The answer to this question needs to be determined for each of the four sub-independent variables of the independent variable 'social-political environment'. For each dimension, I provide cross-tabulations including percentages that indicate per country how answers are divided per answer category. The average in percentages of the entire countries together each answer category is also provided (EU-21). These cross-tabulations can be found in Appendix A.

Not every country participating has used sample designs that give individuals the same change of being selected into the study. To correct for such sampling bias, I have applied design weights to make sure that the percentages are representative of the full population. Design weights make the sample more representative of a 'true sample' of the individuals 15 years and older in each country. In this sense, over- or under representation of people in certain types of address or household is accounted for (*Weighting European Social Survey Data*, n.d.).

For each country, I include the average outcome in percentages of the answer categories that are considered to be traditional based on the theory guiding my research. This is being done to reduce the impact of outliers in the further analysis. I want to rank countries as having a more or less traditional social-political environment. The countries considered to be more traditional score above average and are highlighted.

4.2.1 Traditional Religious Values

Figure 4.1 demonstrates the ESS question the respondents have to answer for the dimension 'religious values'. For this indicator, the respondents can choose a number to indicate how religious they are.

ASK ALL

C13 CARD 21 Regardless of whether you belong to a particular religion, how religious would you say you are? Please use this card.

Not at all religious									**Very religious**	**(Don't know)**
00	01	02	03	04	05	06	07	08	09	10	88

Figure 4.1 ESS 2004 Degree Being Religious

In Appendix A, cross tabulation 7.1, we can see how the answers are divided per country. The outcomes indicate that countries differ in their degree of being religious. For example, France (FR) and the Czech Republic (CZ) have a modern social-political environment in this sense, since they have a high percentage of people (23.2% and 35.5% respectively) stating that they are *not at all religious*. On the other hand, a country as Greece (GR) has a social-political environment quite the

opposite. A high percentage of respondents within this country (69.8%) fall in the last four answer categories. People in Greece are to a large extent strongly religious. Another country that can be seen as highly religious is Ireland (IE). For the answer categories 5 to 8, the country scores above average. Moreover, for the first three answer countries the country is ranked below the average found among the EU member states. Other countries can be considered more of a mixture. For example, the United Kingdom (UK) and Slovenia (SI) do not score outstandingly for any of the answer categories. The respondents within these countries are more or less equally divided among the answer categories. These countries have, overall, populations considered to be moderately religious.

For the purpose of hypothesis testing, I have chosen to include the average percentages of respondents within a country that have chosen for last four answer categories. The reason for selecting the average of these numbers is that they fall on the traditional side of the scale. This means that the average can be considered quite traditional. Table 4.1 provides the average percentages for these answer categories: the countries that score above average are highlighted. For example, in Slovakia (SK), 11.2% of the respondents within this country believe they are to a large extent religious.

EU Member State	Average Strongly Religious	EU Member State	Average Strongly Religious
Austria (AT)	8.5%	Italy (IT)	11.7%
Belgium (BE)	8.3%	Luxembourg (LU)	5.9%
Czech Republic (CZ)	3.2%	The Netherlands (NL)	9.8%
Denmark (DK)	5.6%	Poland (PL)	14.0%
Estonia (EE)	3.9%	Portugal (PT)	8.7%
Finland (FI)	10.0%	Slovakia (SK)	11.2%
France (FR)	4.6%	Slovenia (SI)	7.4%
Germany (DE)	6.3%	Spain (ES)	6.2%
Greece (GR)	17.5%	Sweden (SE)	4.1%
Hungary (HU)	6.0%	The United Kingdom (UK)	6.4%
Ireland (IE)	11.4%	**EU-21**	**8.1%**

Table 4.1 Outcomes Traditional Religious Values

4.2.2 Traditional Political Values

The political values of the respondents are measured by their responses to the statement: *'The government should take measures to reduce differences in income level'*. They can select their answer from a five-point ordinal scale that looks the same as the one for the dimension 'family values' (see figure 3.5). Table 7.2 in Appendix A shows how the populations of the EU member states are divided among the answer categories. Within each country, a high percentage of respondents have indicated that they agree that the government should reduce differences in income level. The average percentage for this answer category is high, namely 43.1%. However, some countries score higher in other answer categories. In Hungary (HU) and Greece (GR), more than half of the respondents (50.7% and 53.4% respectively) within these countries agree *strongly* that the government should take control in reducing income differences. The opposite in this respect is demonstrated by Denmark. 'Only' 9.7% of the respondents in this country agree strongly with this statement. Moreover, a large part of the respondents (30.2%) disagree that the government should take responsibility for this goal. The country also scores remarkably high in the last answer category compared to the other EU member states: 9% of the respondents within this country disagree *strongly* with the statement. Denmark appears to take a conservative stance towards this statement, compared to, *inter alia*, Greece and Hungary that appear to be more liberal.

For my data analysis, I have selected the answers 'disagree' and 'disagree strongly'. A country adhering to conservative political values moderately opposes government interference, thus also in the case of differences in income level. Both answers comply with this viewpoint. I have to

include the average of percentages of the two answer categories, because conservatism is not a stance that can be considered extremely traditional, as the as the word 'moderately' above indicates. Table 4.2 provides the outcomes: the percentages of people within a country that to a large extent disagree that the government should take measures to reduce differences in income level. The countries that score above average are highlighted.

EU Member State	Moderately Disagreeing	EU Member State	Moderately Disagreeing
Austria (AT)	6.9%	Italy (IT)	3.4%
Belgium (BE)	9.5%	Luxembourg (LU)	10.3%
Czech Republic (CZ)	9.9%	The Netherlands (NL)	13.3%
Denmark (DK)	19.6%	Poland (PL)	5.2%
Estonia (EE)	3.9%	Portugal (PT)	1.4%
Finland (FI)	6.5%	Slovakia (SK)	5.3%
France (FR)	4.1%	Slovenia (SI)	2.8%
Germany (DE)	12.3%	Spain (ES)	3.9%
Greece (GR)	1.2%	Sweden (SE)	6.4%
Hungary (HU)	2.6%	The United Kingdom (UK)	9.0%
Ireland (IE)	6.8%	**EU-21**	**6.9%**

Table 4.2 Outcomes Traditional Political Values

4.2.3 Traditional Personal Values

The indicator I have chosen to determine the personal values within the countries is the description that can be found in figure 4.2 below. For this ESS description, the respondents can choose a box that shows how much each person is like him/her.

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.

T Tradition is important to him/her. He/she tries to follow the customs handed down by his/her religion or his/her family.

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 4.2 Question Indicator Traditions and Customs (SOURCE QUESTIONNAIRE (Round 2, 2004/5) FINAL VERSION AMENDMENT 03 21.07.04, n.d.).

Table 7.3 in Appendix A shows how the populations of the EU member states are divided among the answer categories. Within each country there is not a high percentage of respondents that think that it is *not like them* or *not like them at all* to follow customs handed down and to believe that tradition is important. These views are primarily absent in Poland (PL) and Greece (GR) where the percentage of respondents for these answer categories are very distant from the EU-21 average. Interesting, these countries score above average in the first category. Almost half of the respondents in Greece (47.8%) and more than a quarter of the respondent in Poland (28.4%) believe that the description is *very much like them*. This view is also highly present in Italy (IT) and Ireland (IE). Based on this data, these countries appear to attach importance to tradition. An interesting country in this category is Estonia (EE), where this view is very small, 'only' 8.6% of the respondent in this country think that it is *very*

much like them to follow traditions and customs. Countries as Spain (ES), Belgium (BE) and Denmark (DK) score more or less average for each of the answer categories.

For the purpose of my study, I have selected the first three answer categories. They all fall on the traditional side of the answers that can be chosen. The average outcomes of these answer categories can be considered traditional, but not too traditional so as to only obtain small percentages. Table 4.3 provides the average outcomes for the answers: the percentages of people within a country that believe it is like them to follow customs handed down by their religion or family and for whom tradition is highly important. The cross-tabulation illustrates for example that in Italy, on average, a great percentage of the respondents (30.3%) follow customs and traditions, while in France this percentage is 'only' 18.6%.

EU Member State	Follow Customs and Traditions	EU Member State	Follow Customs and Traditions
Austria (AT)	23.1%	Italy (IT)	30.3%
Belgium (BE)	23.7%	Luxembourg (LU)	22.8%
Czech Republic (CZ)	24.1%	The Netherlands (NL)	25.3%
Denmark (DK)	24.4%	Poland (PL)	29.9%
Estonia (EE)	21.4%	Portugal (PT)	25.1%
Finland (FI)	22.1%	Slovakia (SK)	27.8%
France (FR)	18.6%	Slovenia (SI)	25.7%
Germany (DE)	19.4%	Spain (ES)	24.7%
Greece (GR)	31.6%	Sweden (SE)	20.7%
Hungary (HU)	26.0%	The United Kingdom (UK)	22.4%
Ireland (IE)	26.6%	**EU-21**	**24.5%**

Table 4.3 Outcomes Traditional Personal Values

4.2.4 Traditional Family Values

The family values for each country are measured by their populations' responses to the statement: *'A women should be prepared to cut down on her paid work for the sake of her family'*. The respondents can select their answer from a five-point ordinal scale. Table 7.4 in Appendix A shows how the populations of the EU member states are divided among the answer categories. The percentages of respondents within the answer categories 'Neither agree nor disagree' and 'disagree' do, on average (EU-21), not really differ (22.2% vs. 23.0%). However, some countries are real outliers within these categories. For example, 42.8% of the respondents in Denmark (DK) do *not agree* that women should cut down their work to take care of the family. A modern stance towards the division of paid- and care work between men and women is taken. In Italy (IT) this position is totally opposite. High percentages for this country can be found in the first two answer categories. Within this country, 46.8% of the respondents agree that women should cut down on paid work for the sake of her family. It seems that the people in Italy are more traditionally minded when it comes to the division of work within a household.

For my data analysis, I have selected the answers 'agree strongly' and 'agree', because they comply with my conceptualization of traditional family values. The answers indicate that it is the woman who should do the housekeeping and take care of the children, while the men have the main responsibility for paid work. By focusing on the average outcome of these two categories, I make sure that the analysis does not give a biased view, which would be the case if I focused only on the first category. Then, only extremes values would be included. Table 4.4 on the next page provides the average outcomes: the percentages of people within a country that greatly agree that women should be prepared to cut down on paid work for the sake of the family. The cross-tabulation illustrates that in Hungary a great percentage (31.1%) of the respondents highly agrees with this view, while in Denmark (DK) and Sweden (SE) this view is almost absent (9.9% and 10.9% respectively).

EU Member State	Agree Strongly/Agree	EU Member State	Agree Strongly/Agree
Austria (AT)	23.5%	Italy (IT)	33.5%
Belgium (BE)	18.8%	Luxembourg (LU)	30.3%
Czech Republic (CZ)	28.2%	The Netherlands (NL)	18.6%
Denmark (DK)	9.9%	Poland (PL)	24.6%
Estonia (EE)	29.7%	Portugal (PT)	33.9%
Finland (FI)	12.2%	Slovakia (SK)	21.2%
France (FR)	25.1%	Slovenia (SI)	21.6%
Germany (DE)	24.8%	Spain (ES)	27.9%
Greece (GR)	22.3%	Sweden (SE)	10.9%
Hungary (HU)	31.1%	The United Kingdom (UK)	22.7%
Ireland (IE)	23.8%	**EU-21**	**23.5%**

Table 4.4 Outcomes Traditional Family Values

4.2.5 Conclusion Social-Political Environment 21EU Member States

At the beginning of this section, I asked the question: '*What is the social-political environment of the EU member states in 2005?*' Table 7.5 in appendix B integrates all data for the indicators into one cross-tabulation. For each indicator, the EU member states considered to be traditional are highlighted.

In figure 4.3 I have ranked the countries from having either no traditional social-political environment to having the most traditional social-political environment. In the first group, the countries are included which are not considered to be traditional. For each subsequent group, countries are ranked that score traditional on one or more indicators. As can be seen, no country scores traditional on all the four indicators. I expect that the countries falling within the fourth group are to have the highest TFRs. That is what my main hypothesis is suggesting: '*The more traditional a country' social-political environment is, the higher the total fertility rate will be'*.

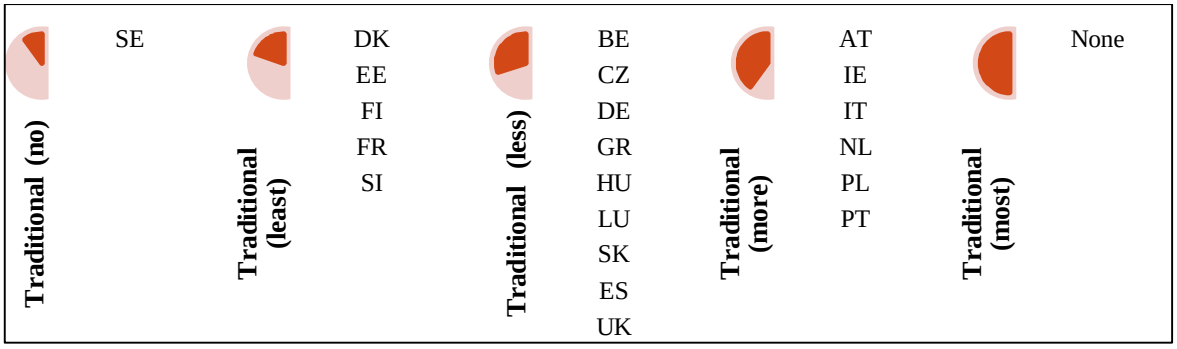

Figure 4.3 Ranking Countries according to Social-Political Environment

4.3 Total Fertility Rates in EU Member States

The second sub-research question that needs to be addressed is: '*What is the total fertility rate of the EU member states in 2005?*' The table below (continues on page 19) provides the TFRs for the 21 EU member states.

EU Member State	TFR 2005	EU Member State	TFR 2005
Austria (AT)	1.41	Italy (IT)	1.32
Belgium (BE)	1.76	Luxembourg (LU)	1.63
Czech Republic (CZ)	1.28	The Netherlands (NL)	1.71
Denmark (DK)	1.80	Poland (PL)	1.24
Estonia (EE)	1.50	Portugal (PT)	1.40

Finland (FI)	1.80	Slovakia (SK)	1.25
France (FR)	1.94	Slovenia (SI)	1.26
Germany (DE)	1.34	Spain (ES)	1.34
Greece (GR)	1.33	Sweden (SE)	1.77
Hungary (HU)	1.31	The United Kingdom (UK)	1.78
Ireland (IE)	1.86	**EU-21**	**1.53**

Table 4.5 TFR 21 EU member States 2005(Total Fertility Rate, 1960-2011 (live births per woman). png, n.d.).

The average TFR (EU-21) is the reference point for my dependent variable. The member states with a TFR below the average are considered to have low TFRs; member states with a TFR above the average are considered to have high TFRs. I have highlighted the countries that are considered to have a high TFR. Based on my hypotheses; I expect that the countries highlighted are also the ones that are ranked as being more traditional for the dimensions of the independent variable.

4.4 TFRs & Social-Political Environments in EU Member States

In this section I relate the four dimensions of the independent variable with my dependent variable by means of statistical analysis. Four separate scatterplots are included to analyze the link between the indicators and the TFRs. On the vertical axis, the TFRs in counts are displayed and on the horizontal axis the percentages of respondents choosing the particular answer category. I have also included the average TFR of the countries and the average score on the indicators (EU-21). The first one is shown by the horizontal line, while the latter is shown by a vertical line. A trend line is drawn to show the trend between the two sets of data. It indicates the strength and the direction of the correlation. The precise direction and strength of the correlation between the variables can be found in the tables 4.7 to 4.10 and is indicated by the Pearson correlation. This correlation is the benchmark for finding a relationship in the case of variables with a ratio or interval measure. Pearson's correlation ranges between -1 and 1 and the further away it is from 0, the stronger the relation between the variables. It provides the quantification of the associations: a '+' indicates a positive association, while a '-' indicates a negative association. The strength of the relationship between the variable is also demonstrated by the Pearson correlation. IBM SPSS Statistics uses stars to indicate the strength of the relationship: relationships that are marked by two stars (**) are statistically significant. This means that the statistic is reliable (Social Science Research Lab, n.d.).

Not every selected EU member state is included in the scatterplots: I have omitted the deviant cases, the countries that score unusual (Punch, 2006). My sample size is too small to account for control variables. I expect that the graphs for each dimension will show that the more traditional a country' social-political environment is, the higher the TFR will be. In Appendix C, the scatterplots can be found which include the data for all the 21EU member states.

Before continuing with the analysis, an important remark has to be made in relation to the exact measurements of my dimensions or sub-independent variables. The sampling of respondents for the ESS brings with it some level of uncertainty. Problems identified in this respect relate to *inter alia* non-response, which challenges the representativeness of the population in the sample (*Chapter II The Sample*, 2007). The standard error of the estimate is a measure of the accuracy of the predictions and demonstrates to what extent the sample measures are a reliable representation of the full population. When the standard error of the estimate is small, the error in measurement is small, while when the standard error of the estimate is large, the error in measurement is large. Consequently, the smaller the error the better the measurement represents the full population (McHugh, 2008). Table 4.2 on the next page shows the standard error of the estimate for each dimension of my independent variable derived by statistical analysis. As can be seen, each independent variable is measured with some error. This

means that the measurements do not give a completely reliable representation of the full population within the sample.

Independent Variables	Standard Error of the Estimate
Strongly Religious	0.22227
Moderately Disagreeing Reduce Differences	0.17214
Follow Customs and Traditions	0.17535
Agree Strongly/Agree Work	0.16444

Table 4.6 Standard Error of the Estimate per Dimension

4.4.1 Traditional Religious Values & TFRs

I expect that the more religious a country is, the higher the TFR will be. Figure 4.4 demonstrates the relationship between the indicator 'Strongly Religious' and the TFRs of the member states. The countries that are omitted are France (FR), Greece (GR) and Ireland (IE).

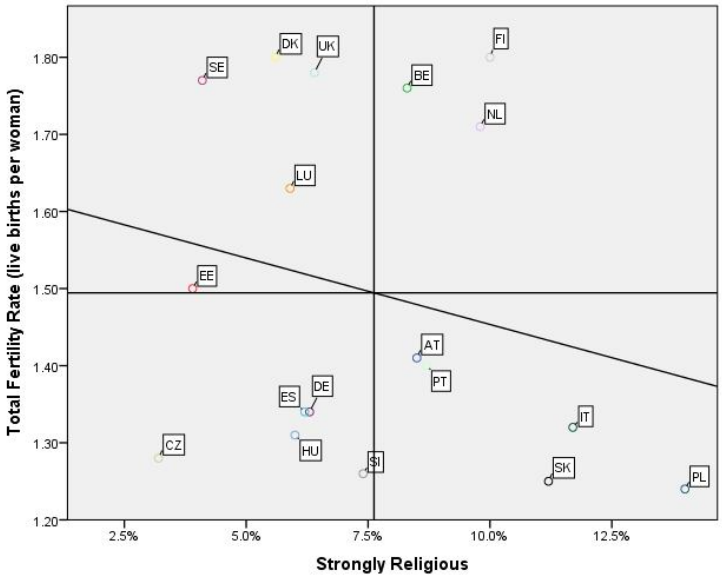

Figure 4.4 Scatterplot Relationship 'Strongly Religious' and TFR

The trend line shows that the higher the percentage of respondents within a country that believe they are to a large extent religious, the lower the TFR of the countries. The trend line indicates a negative direction. Furthermore, the graph shows that the countries are not clustered around the trend line: it therefore demonstrates a weak association. This is also demonstrates in table 4.7 on the next page. Here we can read that the correlation between the two variables is -0.226. Moreover, the relation between the two variables is not statistically significant. Consequently, a weak negative correlation is present between the variables. Some countries comply with this finding based on the trend line. These countries are *inter alia* Greece (GR), Italy (IT) and Luxembourg (LU). However, for several countries the argument does not hold. For example, within the Netherlands (NL) a large percentage of respondents (9.9%) argues that they are to a large extent religious, nevertheless an above average TFR is found (1.71). On the other hand, Spain (ES) is one of the least traditional countries for this indicator and also has a below average TFR (1.31). These two countries indicate what is to be expected from the hypothesis.

Correlations

		Total Fertility Rate (live births per woman)	Strongly Religious
Total Fertility Rate (live births per woman)	Pearson Correlation	1	**-.226**
	Sig. (2-tailed)		.366
	N	18	18
Strongly Religious	Pearson Correlation	**-.226**	1
	Sig. (2-tailed)	.366	
	N	18	18

Table 4.7 Correlation Traditional Religious Values and TFR

This analysis indicates that the hypothesis weakly holds for the data in the graph, because of the weak negative association between the variables. It is not completely the case that the more religious a country is, the higher the TFR is. Only the countries in the square left-below and right-above comply with this assumption. The other countries indicate the reverse: the more religious a country is, the lower the TFR. Greece (GR) provides a perfect example. It has a low TFR (1.33) with a high percentage of the respondents (17.6%) within the country believing they are to a large extent religious.

4.4.2 Traditional Political Values & TFRs

I expect that the more a country values conservative political ideas, the higher the TFR is. Figure 4.5 shows the relationship between the indicator and the TFRs of the member states. The countries that are omitted are Germany (DE), Denmark (DK), France (FR) and the Czech Republic (CZ).

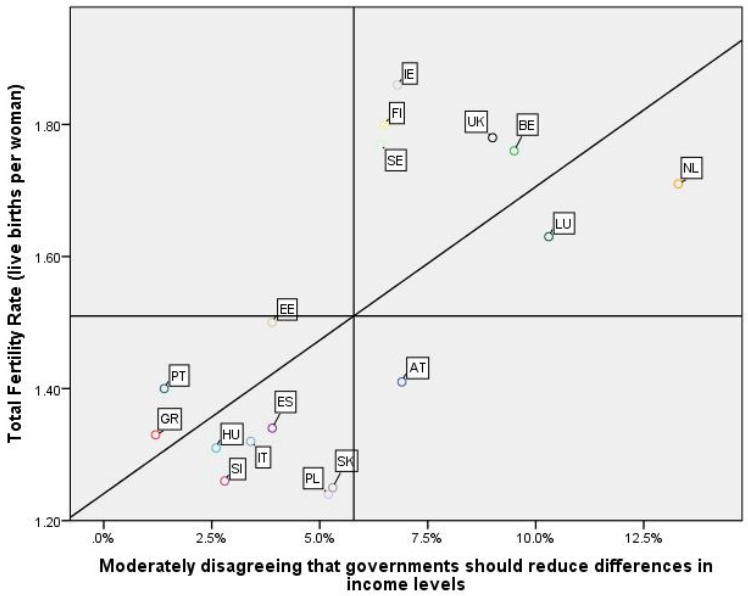

Figure 4.5 Scatterplot Relationship 'Moderately Disagreeing Reduce Differences' and TFR

The trend line in the graph indicates that the higher the percentage of respondents within a country disagreeing to a large extent that the government should take measures to reduce differences

in income level, the higher the TFR of the countries. The trend line shows a positive direction. Moreover, the trend line demonstrates a strong moderate association, because most countries are to some extent clustered around the line. This is also demonstrates in table 4.8 below. Here we can read that the correlation between the two variables is 0.680 and that the relationship between the two variables is statistically significant. Consequently, a strong moderate positive correlation is present between the variables. For some countries it is indeed the case that the higher the percentages of respondents within a country disagreeing with the statement, the higher the TFR in that country. This applies to for example Greece (GR) and Belgium (BE). However a country as Austria (AT) shows the reverse. Compared to Ireland (IE) around the same percentages of respondents within these countries value conservative political ideals, nevertheless the TFR (1.41) of Austria is rather low.

Correlations

		Total Fertility Rate (live births per woman)	Moderately disagreeing
Total Fertility Rate (live births per woman)	Pearson Correlation	1	**.680****
	Sig. (2-tailed)		.003
	N	17	17
Moderately disagreeing	Pearson Correlation	**.680****	1
	Sig. (2-tailed)	.003	
	N	17	17

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.8 Correlation Traditional Political Values and TFR

This analysis indicates that the hypothesis moderately holds. For a large amount of countries, it is the case that the more a country adheres to conservative political ideals, a high TFR is to be found. For a few countries this is not the case. As already said, Austria demonstrates the reverse. Moreover, some countries score exceptional: Ireland (IE) is not considered to be the most traditional, but does have the highest TFR.

4.4.3 Traditional Personal Values &TFRs

I have hypothesized that the more a country adheres to traditions and customs, the higher the TFR will be. Figure 4.6 on the next page demonstrates the relationship between the indicator and the TFRs of the member states. I have omitted France (FR), Ireland (IE) and Germany (DE).

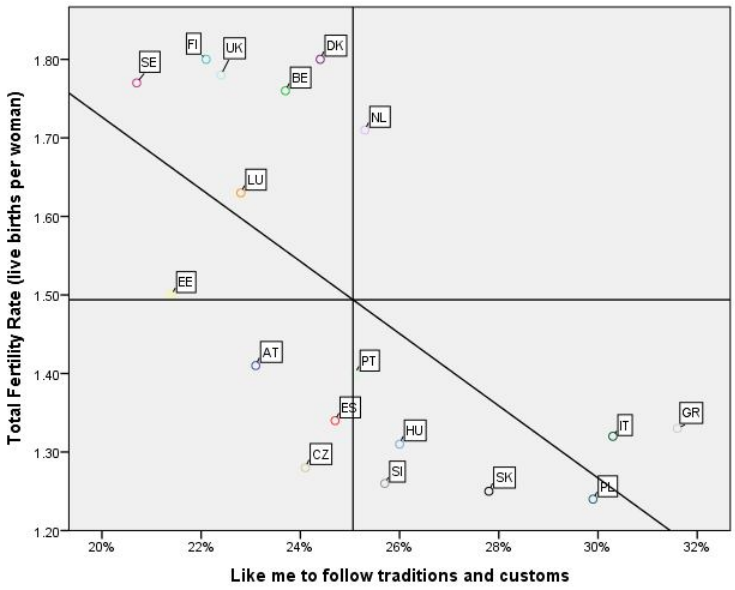

Figure 4.6 Scatterplot Relationship 'Follow Customs and Traditions' and TFR

We can read from the trend line that the higher the percentage of respondents within a country arguing that it is like them to follow the customs handed down by their religion or their family and for whom tradition is important, the lower the TFR of the countries. The trend line has a negative direction. The trend line demonstrates a moderate association, because the countries are to some extent clustered around the trend line. This is also demonstrates in table 4.9. Here we can read that the correlation between the two variables is -0.642. Furthermore, the two stars indicate that the relationship is statistically significant. Consequently, a moderate negative correlation is present between the variables. Some countries indeed comply with the trend line: *inter alia* Luxemburg (LU) and Italy (IT) are examples for which the finding holds. Nevertheless, other countries do not comply with the finding. A country that demonstrates the reverse is for example Austria (AT). Within this country, a low percentage of respondents follow customs and traditions. However, compared to other countries that score similarly on this indicator, see the United Kingdom (UK) and Luxembourg, the country has a low TFR.

Correlations

		Total Fertility Rate (live births per woman)	Like me to follow traditions and customs
Total Fertility Rate (live births per woman)	Pearson Correlation	1	**-.642****
	Sig. (2-tailed)		.004
	N	18	18
Like me to follow traditions and customs	Pearson Correlation	**-.642****	1
	Sig. (2-tailed)	.004	
	N	18	18

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.9 Correlation Traditional Personal Values and TFR

This analysis indicates that the hypothesis does not hold for the data in the graph, because of the moderate negative correlation between the variables. It is not totally the case that the more a country adheres to traditions and customs, the higher the TFR is. Only the countries in the square left-below comply with this assumption. The other countries indicate the reverse: the more a country adheres to customs and believes tradition is important, the lower the TFR. A clear example of this is provided by Poland (PL). This country shows that it has a low TFR (1.24) with a high percentage of the respondents (29.9%) within the country stating that traditions and customs are important for them.

4.4.3 Traditional Family Values & TFRs

I have hypothesized that the more a country adheres to conservative family values the higher the TFR will be. Figure 4.7 below demonstrates the relationship between the indicator and the TFRs of the member states. Ireland (IE), France (FR) and Luxembourg (LU) are omitted in this graph.

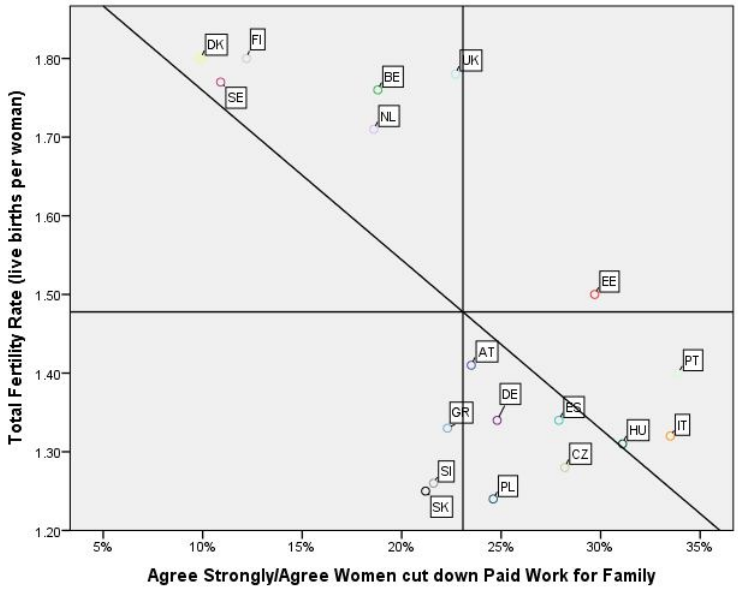

Figure 4.7 Scatterplot Relationship 'Average Agree Strongly/Agree Work' and TFR

The trend line indicates that the higher the percentage of respondents within a country agreeing quite strongly that a woman should be prepared to cut down on paid work for the sake of the family, the lower the TFR of the countries. The direction of the trend line is negative. Moreover, the trend line demonstrates quite a strong association, because most countries are clustered around the line. This is also demonstrates in table 4.9, which can be found on the next page. In this table we can read that the correlation between the two variables is -0.695. In addition, the strength of the relationship is strong, because the relationship is statistically significant. Consequently, a strong moderate negative correlation is present between the variables. For most of the EU member states included it is the case that the higher the average percentage of respondents agreeing to a large extent, the lower the TFR is.

Correlations

		Total Fertility Rate (live births per woman)	Agree Women cut down Paid Work for Family
Total Fertility Rate (live births per woman)	Pearson Correlation	1	**-.695****
	Sig. (2-tailed)		.001
	N	18	18
Agree Women cut down Paid Work for Family	Pearson Correlation	**-.695****	1
	Sig. (2-tailed)	.001	
	N	18	18

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.9 Correlation Traditional Family Values and TFR

This analysis indicates that the hypothesis does not hold for the data in the graph. It is not the case that the more a country adheres to conservative family values the higher the total fertility rate is. If this would be the case, the countries being less traditional in this sense should be situated in the square left-below where the low TFRs are to be found. On the other hand, countries that are more traditional on this indicator should be situated in the right-above square where the high TFRs are to be found. Nevertheless there are some exceptions: for example Estonia (EE), Slovakia (SK) and Slovenia (SI) do comply with what I expected. Slovenia has one of the lowest TFRs, namely 1.26, but is scores quite average on the independent variable (21.6%) The respondents within this country share quite a conservative view towards the division of paid work and caring within a household.

Compared to the other dimensions, the data for this dimension and the TFRs of the EU member states most strongly refutes my hypothesis. Therefore, I like to go more into detail in providing an explanation with regard to the 'family values'. A possible explanation for this finding is perhaps the female labour market participation within the countries. The study by Thévenon (2011) has found that the period TFRs in 2005 are the highest in the Anglo-Saxon and Nordic countries compared to Southern European countries and many Continental countries (Thévenon, 2011). This corroborates with my findings of 2005: Finland, Sweden, Denmark, Ireland and the United Kingdom have above average TFRs. Low TFRs are *inter alia* being found in Spain, Italy, Poland and Slovakia. Thévenon (2011) has discovered that the countries with the highest TFRs are also the countries that provide beneficial contexts for maternal employment. Especially for the Nordic and Anglo-Saxon countries a great co-variation is being found between fertility and female employment rates (age 25-49). On the other hand, the number of one-earner families is larger in Southern and Eastern European countries. The reason for this difference seems to be that families in the Nordic and Anglo-Saxon countries are better supported in finding a balance between work and family life. For example, childcare supports increases the percentages of female wage earners. Overall, the study finds a great co-variation between the fertility rates of 28 OECD countries in 2005 and their female labour market participation in 2007 (Thévenon, 2011). In figure 4.8 below, I have related the female employment rate and the TFRs of the EU member states. I have used the TFRs of 2005 from Eurostat and the data on female employment rates in 2007 of the EU member states included in the study of Thévenon (2011).

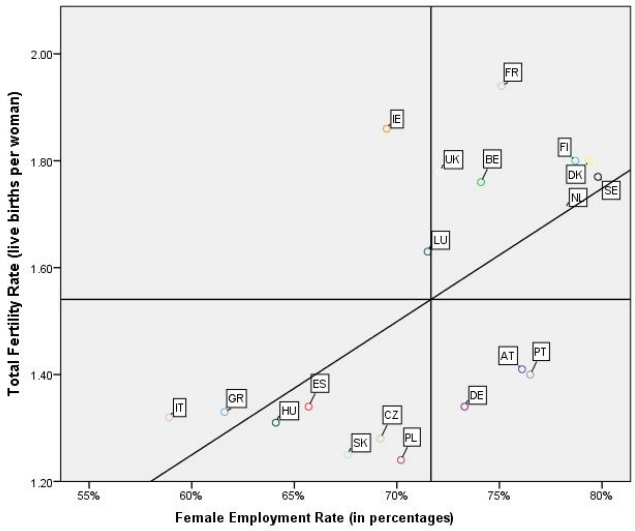

Figure 4.8 Scatterplot Relationship Female Employment Rate and TFR

The trend line demonstrates that the higher the female employment rate, the higher the TFR. Overall, a moderate positive correlation is found. In this sense, it can indeed be the case that the female employment rates of the countries have influenced my findings for the dimension 'family values'.

4.5 Findings & Main-Hypothesis

In this part, I will summarize my findings from the analyses above. For the dimension 'traditional religious values', I have found a weak negative correlation between the indicator and the TFR: the higher the percentage of respondents within a country that believe they are to a large extent religious, the lower the TFR of the countries. I expected the reverse; therefore the hypothesis for this dimension does not strongly hold and is therefore falsified.

For the dimension ' traditional political values', I have found a quite strong moderate positive correlation: the higher the percentage of respondents within a country disagreeing that the government should take measures to reduce differences in income level, the higher the TFR of the countries. I expected that the more a country values conservative political ideas, the higher the total fertility rate is. Based on the correlation, this finding thus corroborates my hypothesis.

For the dimension 'traditional personal values', I have found a moderate negative correlation: the higher the percentage of respondents within a country arguing that it is like them to follow the customs handed down by their religion or their family and for whom tradition is important, the lower the TFR of the countries. I expected the reverse: the hypothesis is therefore falsified.

For the dimension 'traditional family values', I have found a quite strong negative correlation: the higher the percentage of respondents within a country agreeing strongly that a woman should be prepared to cut down on paid work for the sake of the family, the lower the TFR. I expected that in countries with a high percentage the TFR would be high. The finding thus falsifies my hypothesis for this dimension.

Based on the data, three of the four sub-hypotheses are falsified. Only the hypothesis: *'The more a country values conservative political ideas, the higher the total fertility rate is'* is corroborated by my data. Based on these findings, I believe that the main hypothesis for my study is falsified; in fact a reverse pattern is identifiable. Instead of countries having a traditional social-political environment are the ones having high TFRs, it are in general the countries having low TFRs, leaving aside some exceptions.

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 social-political environment of EU member states explain the total fertility rate in these countries in in the year 2005?'

I have made use of previous research that has tried to find out whether there is a link between the TFR of a country and its social-political environment. In these studies, the social-political environment of country is described as being more or less traditional and it is conceptualized as representing different kind of values. In my study, the same nominal definition is used: I have included religious-, political-, personal – and family values. Consequently, this allowed me to make use of the post-materialist values theory, which tries to explain why countries differ in their TFRs. It stipulates that countries adhering to traditional values are more likely to reproduce themselves than countries where traditional values are less adhered to. This theory has formed the perspective lying behind my research.

In my research, I have compared the social-political environments and TFRs of 21 EU member states in the year 2005. Eurostat has been used to collect the TFRs, while I have made use of the ESS Round 2 to collect the data for the four values. For each dimension of the independent variable, I have made cross-tabulations that provide the data per country for the answer considered to be traditional. Based on these findings, I have ranked the EU member states as being more or less traditional. Furthermore, I related the indicators/values with my dependent variable 'TFR' in four scatterplots. I expected that the graphs would show that the more traditional a country' social-political environment is, the higher the TFR is. However, for the dimensions 'religious values', 'personal values' and 'family values', the findings indicated the reverse: the more traditional a country's social-political environment, the lower the TFR. Only the dimension 'political values' complied with what I expected.

Based on the data analysis for each indicator, the answer to be given to the main research question is that to a *moderate* extent the social-political environment of EU member states explains the TFR of these countries for the year 2005. I have found different strengths for the link between the independent- and dependent variable. The data analyses for the dimensions 'political-', 'personal-' and 'family values', indicates a moderate correlation, with a *strong* moderate correlation for the dimension 'family values'. A weak correlation was being found for the dimension 'religious values'. In this sense, we can state that to a *moderate* extent the social political environment can explain the TFR based on the data of the selected EU member states.

To be noted, I have conceptualized the social-political environment as being more or less traditional. The operationalization and the findings are based on this ranking. Thus the answer to my main research question can only be derived from the fact that I have chosen for this conceptualization.

5.2 Implications: Research & Policy

I have tried to find out why it is that some EU member states are more affected by low TFRs than others. Previous research has tried to find out whether the social-political environment of a country might explain this 'empirical puzzle'. While some researchers have found a pattern, including

Inglehart and Baker (2002) and Chesnais (1996), others have not, for example Castles (2003). My study has also found a link between the social-political environment of EU member states and their TFRs. Just like Chesnais (1996), the data for my study demonstrates that countries adhering to traditional family values have lower TFRs than countries where a smaller percentage of the respondents adhere to these values. My study, on the other hand, indicates the reverse from what is being argued by Inglehart & Baker (2002). They have found that societies with a social-political environment of traditional values have higher TFRs than those adhering less to these values (Inglehart & Baker, 2002). My overall finding is that countries adhering to traditional values are in fact the countries with low TFRs. Nevertheless, for the dimension 'political values' my finding does correspond with the study of Inglehart & Baker (2002). I have found that the more a country adheres to conservative political ideas, the higher the TFR is. This is an interesting finding, since only for this dimension I have found a positive correlation. The other three dimensions all indicate a negative correlation for their link with the TFRs of the EU member states.

In part 5.1, I have discussed the findings of my study. But what is the theoretical relevance of these findings? In general they indicate that the social-political environment of EU member states is to some extent correlated with their TFR. More specifically, my findings indicate that the post-materialist values theory does not really hold for my data. This is most strongly the case for the dimension 'family values'. The strongest correlation is being found for the data on conservative family values and the TFRs. The link between the two variables is negative: countries adhering to traditional family values have lower TFRs than within countries where this value is less adhered to. A possible explanation for this finding might be the female labour market participation within the countries. Is seems that the EU member states with the highest TFRs are also the countries where the female labour market participation is high. These are the countries that provide beneficial contexts for maternal employment, such as childcare support. The theory guiding my research only holds for the dimension 'political values'. It does not hold under all 'circumstances', thus the values identified and the associated data in my study. Overall, my findings suggest that parts of the research problem require further investigation. The theory does not seem to explain the outcomes for the dimensions 'religious-', 'personal values' and 'family values'.

I believe that my findings are not only theoretically, but also socially relevant. I am of the opinion that my findings prove to be an interesting insight in the light of policy implications for the EU. My study can be relevant for the EU when promoting 'best practices' in the area of social family policies to combat the threat of low TFRs. The data-analyses demonstrate that to a moderate extent the social-political environment of EU member states is correlated with the TFR of these countries. I suggest the EU to take into account the findings when promoting 'best practices'. In this sense, the EU can try to promote differentiated framework directives. The EU should first determine how the countries rank on the scale from being more or less traditional with regard to their social political environment and then especially for the family values in the countries, since here the correlation is the strongest. The EU should take this 'ranking' into account, because being traditional has formed the basis of my inquiry. Since low TFRs form a serious threat to the goals the EU in providing sustainable welfare states (Vandenbroucke et al., 2011), it might be advisable for the EU to take my findings into account. This 'new social risk' may be lessened when the EU promotes promote differentiated best practices in the field of social family policies. This can be done by promoting best practices of a country with a specific social-political environment within countries with similar social-political environments. I suggest the EU should give it a try as long as it does not forget the main goal of achieving sustainable welfare states.

5.3 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 am not completely confident that the data collection on my independent variable is valid and reliable. The study of Davidov, Schmidt & Schwartz (2008) has tested the adequacy of the ESS to measure values for 20 countries. Their findings assure that content validity is assured. However, there is not a complete overlap between the countries selected for my study and the countries they have selected. Thus, content validity is not completely assured. Moreover, since I only use one indicator per dimensions, validity is compromised. With regard to the reliability of my findings, I am not completely confident that my measurements give a reliable representation of the full population within the sample. Each dimension demonstrates a standard error of the estimate.

Secondly, I have not been able to include control variables so as to make sure that the countries to be compared are as similar as possible. I believe this is the biggest limitation of my study. Based on the relevant data, I 'only' included 21 EU member states in my study. This sample size is too small to allow for degrees of freedom. Therefore, it may be the case that confounders have influenced the outcomes. Consequently, I can only speak of correlations and the findings should thus be interpreted with some caution.

Based on these limitations, I have some recommendations for future research within this field. Firstly, subsequent studies should focus on a more recent year if they also want to do research on EU member states. I focused on the year 2005, because the ESS only provides data on family values within the EU member states for this year. However, this year does not include the data for all of the current 27 EU member states. If one wants to focus on different dimensions to determine the social-political environment of EU member states, I suggest choosing a more recent year so that the data for all the measured EU member states becomes available. Round 5 of the ESS, which includes data for the year 2010, also measures the views and attitudes of respondents from Lithuania, Bulgaria, Cyprus and Croatia are also being measured ('ESS5 – 2010 Data Download', n.d.). Nevertheless, this would still be a small sample size.

Secondly, a better suggestion would be to not focus on EU member states. Even if future research focuses on a more recent year, the sample size would still be small and therefore no control variables can be included. Future studies can better select all the European countries, or the industrialized countries. This allows for a big sample size and thus for including control variables. Instead of finding a correlation, perhaps a 'true answer' can be found to the research question, which can be seen as a full-blown explanation.

Thirdly, to increase the validity of the study, future research should try to include multiple indicators to measure the various dimensions. As Munck & Verkuilen (2002) argue, multiple indicators increase the certainty that the measurements actually measure they they are supposed to measure. Instead of ranking, future research should then focus on scaling.

To conclude, to limit the size of the standard error of the estimate, further research should try to draw many samples from the population of interests. In this way, the reliability of the measures of the variables can be increased. Still, this requires a lot of time and money and it is therefore not possible for every researcher to do so (McHugh, 2008).

Bibliography

About ESS. (n.d.). In *European Social Survey*. Retrieved March 20, 2013, from http://www.europeansocialsurvey.org/

Alestalo, M., Hort, S.E.O., & Kuhnle, S. (2009). The Nordic Model: Conditions, Origins, Outcomes, Lessons [electronic version]. Retrieved March 26, 2013 from http://www.hertie-school.org/fileadmin/images/Downloads/working_papers/41.pdf

Babbie, E. (2010). *The Practice of Social Research*. Wadsworth, ON: Cengage Learning

Castles, F.G. (2003). The world turned upside down: below replacement fertility, changing preferences and family-friendly public policy in 21 OECD countries [electronic version]. *Journal of European Social Policy, 13,* 209-227.
doi: 10.1177/09589287030133001

Chapter II THE SAMPLE (2007). In *European Social Survey.* Retrieved July 10, 2013, from http://www.europeansocialsurvey.org/index.php?option=com_docman&task=cat_view&gid=96&Itemid=80

Chesnais, J.C. (1996). Fertility, Family, and Social Policy in Contemporary Western Europe [electronic version]. *Journal of Development and Population Review, 22,* 729-739. Retrieved March 29, 2013, from http://s07.middlebury.edu/ECON0428A/Conferences/Women/articles/family-fertility.pdf

Comparing apples with apples (n.d.). In *Eurostat.* Retrieved March 20, 2013, from http://epp.eurostat.ec.europa.eu/portal/page/portal/about_eurostat/introduction/what_we_do

Core Modules. (n.d.). In *European Social Survey*. Retrieved March 20, 2013, from http://www.europeansocialsurvey.org/index.php?option=com_content&view=article&id=63&Itemid=649

Davidov, E., Schmidt, P., & Schwartz, S.H. (2008). BRINGING VALUES BACK IN: THE ADEQUACY OF THE EUROPEAN SOCIAL SURVEYTO MEASURE VALUES IN 20 COUNTRIES [electronic version]. *Public Opinion Quarterly, 72,* 420-445.
doi:10.1093/poq/nfn035

Drost, E.A. (2011). Validity and Reliability in Social Science Research [electronic version]. *Education, Research and Perspectives, 35,* 105-123. Retrieved April 5, 2013, from http://erpjournal.net/wp-content/uploads/2012/07/ERPV38-1.-Drost-E.-2011.-Validity-and-Reliability-in-Social-Science-Research.pdf

Erikson, R. (2003). European Social Survey Round 2 module. Proposal Family, Work, and Welfare in Europe [electronic version]. Retrieved March 20, 2013, from http://www.europeansocialsurvey.org/index.php?option=com_content&task=view&id=221&Itemid=310

ESS (2004). *SOURCE QUESTIONNAIRE (Round 2, 2004/5) FINAL VERSION AMENDMENT 03 21.07.04*. Retrieved April 12, 2013, from http://ess.nsd.uib.no/ess/round2/

ESS1 - 2004 Summary and deviations (n.d.). In *European Social Survey* .Retrieved March 21, 2013, from http://ess.nsd.uib.no/ess/round2/

ESS2 - 2004 Data Download (n.d.) In *European Social Survey*. Retrieved May 22, 2013, from http://ess.nsd.uib.no/ess/round2/download.html

ESS5 – 2010 Data Download (n.d.). In *European Social Survey*. Retrieved May 31, 2013, from http://ess.nsd.uib.no/ess/round5/download.html

EU member states (n.d.). In *European Social Survey* . Retrieved March 30, 2013, from http://www.publicserviceeurope.com/eu-member-states

Fertility Statistics (n.d.). In *Eurostat.* Retrieved May 11, 2013, from http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Fertility_statistics

Gallagher, M., Laver, M., & Mair, P. (2006). *Representative Government in Modern Europe: Institutions, Parties, and Governments.* New York, ON: McGraw-Hill

Gerring, J. (2012). *Social Science Methodology: A Unified Framework.* Cambridge, ON: Cambridge University Press

Glossary: Fertility (n.d.). Retrieved March 30, 2013, from http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Total_fertility_rate

Haas, B. (2005). The Work-Care Balance: Is it Possible to Identify Typologies for Cross-National Comparisons? [electronic version]. *Journal of Current Sociology, 53*, 487-508. doi: 10.1177/0011392105051337

Inglehart, R., & Baker, W.E. (2002). Modernization, Cultural Change, and the Persistence of Traditional Values [electronic version]. *Journal of American Sociological Review, 65*, 19-51. Retrieved March 29, 2013, from http://www.jstor.org/stable/10.2307/2657288

Kotkin, J., Shroff, A., Modarres, A., & Cox, W. (2012). The Rise of Post-Familialism: Humanity's Future? [electronic version]. Retrieved February 26, 2013, from http://www.newgeography.com/files/The%20Rise%20of%20Post-Familialism%20(ISBN9789810738976).pdf

Lutz, W., O'Neill, B.C., & Scherbov, S. (2003). Europe's Population at a Turning Point [electronic version]. *Science Magazine, 299,* 1991-1992. doi: 10.1126/science.1080316

Member Countries of the European Union (n.d.). In *Europe*. Retrieved May 3, 2013, from http://europa.eu/about-eu/countries/member-countries/index_en.htm

McDonald, P. (2002). Sustaining Fertility Through Public Policy: The Range of Options [electronic version]. *Journal of Population, 57,* 417-446.
doi: 10.3917/pope.203.0417

McHugh, M.L. (2008). Standard error: meaning and interpretation [electronic version]. *Biochemia Medica, 18,* 7-13.
doi: 10.11613/BM.2008.002

Muenz, R. (2007). Aging and Demographic Change in European Societies: Main Trends and Alternative Policy Options [electronic version]. Retrieved March 15, 2013, from http://www.monitoringris.org/documents/tools_reg/agingdemochange.pdf

Munck, G.L. & Verkuilen, J. (2002). Conceptualizing and Measuring Democracy: Evaluating Alternative Indices [electronic version]. *Comparative Political Studies, 35,* 5-34.
doi: 10.1177/001041400203500101

Punch, K.F. (2006). *Developing Effective Research Proposals*. London etc.: SAGE.

Rodriguez, R., Warmerdam, J., Triomphe, C.E., Gács, J., Kwiatiewicz, A., Erhel, C., Voss and Havess, E., Clavo, J., & Pond, R. (2010). The Lisbon Strategy 2000 – 2010: An analysis and evaluation of the methods used and results achieved [electronic version]. Retrieved March 2, 2013, from http://www.europarl.europa.eu/committees/en/studies.html

Scatterplot (n.d.). In *Statistics Yale University.* Retrieved May 6, 2013, from http://www.stat.yale.edu/Courses/1997-98/101/scatter.htm

Scharpf, F.W. (2002). The European Social Model: Coping with the Challenges of Diversity [electronic version]. *Journal of Common Market Studies, 40,* 645-670.
DOI: 10.1111/1468-5965.00392

Social Science Research lab (n.d.). SPSS Bivariate Statistics [electronic version]. Retrieved July 25, 2013, from http://www.american.edu/ctrl/upload/SPSS_Bivariate_Statistics_Spring_2010-2.pdf

The European Social Survey: SELF-COMPLETION QUESTIONNAIRE S-C-A (Round 2 2004). (2004). In *European Social Survey*. Retrieved April 7, 2013, from http://ess.nsd.uib.no/ess/round2/

Thévenon, O. (2011). Family Policies in OECD Countries: A Comparative Analysis [electronic version]. *Population and Development Review, 37,* 57-87.

Total Fertility Rate, 1960-2011 (live births per woman).png (n.d.). In *Eurostat*. Retrieved May 17, 2013, from http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Total_fertility_rate,_1960-2011_(live_births_per_woman).png&filetimestamp=20130129121040

Tucker, C.M. (2003). The Lisbon Strategy and the Open Method of Coordination: A New Vision and the Revolutionary Potential of Soft Governance in the European Union [electronic version]. Retrieved March 25, 2013, from http://www.eurosfaire.prd.fr/7pc/doc/1225463928_lisbon_ideology_omc_apsa_paper_tucker.pdf

Vandenbroucke, F., Hemerijck, A., & Palier, B. (2011). The EU Needs a Social Investment Pact [electronic version]. Retrieved March 5, 2013, from http://www.ose.be/files/OpinionPaper5_Vandenbroucke-Hemerijk-Palier_2011.pdf

Weighting European Social Survey Data (n.d.). In *European Social Survey.* Retrieved July 10, 2013, from http://ess.nsd.uib.no/ess/round2/

Appendices

Appendix A Division of Answers per Answer Category for each Country

EU M.S.	Not at all Religious	1	2	3	4	5	6	7	8	9	Very Religious
AT	8.9%	4.3%	6.0%	7.7%	8.2%	20.5%	10.3%	12.8%	10.8%	5.1%	5.4%
BE	15.5%	5%	6.2%	7.3%	5.9%	16.3%	10.5%	12.5%	10.2%	4.4%	6.2%
CZ	35.5%	13.7%	9.9%	7.1%	5.0%	11.1%	5.0%	4.1%	4.0%	2.2%	2.4%
DK	9.2%	8.3%	10.9%	10.6%	8.2%	21%	9.8%	11.1%	7.2%	2.2%	1.7%
EE	19.6%	10.4%	10.5%	13.6%	8%	15.3%	6.8%	7.5%	3.7%	1.9%	2.6%
FI	4.3%	6.2%	7.2%	8.7%	5.9%	15.7%	12.2%	15.8%	14.3%	5.7%	4%
FR	23.2%	5.2%	8.2%	9.8%	6.4%	21.4%	7.6%	6.6%	6.6%	2.0%	3.0%
DE	16.9%	5.5%	7.8%	9.5%	8.2%	16.7%	10.1%	10.3%	8.9%	2.8%	3.2%
GR	1.2%	0.9%	1.3%	2.4%	2.8%	12.0%	9.6%	18.8%	19.4%	15.8%	15.8%
HU	19.6%	7.7%	7.1%	9.5%	7.2%	18.2%	6.8%	6.7%	8.7%	3.1%	5.4%
IE	3.3%	2.7%	3.9%	6.3%	7.4%	17.4%	13.5%	16.0%	18.5%	6.3%	4.7%
IT	4.6%	2.9%	3.9%	5.2%	6.4%	14.6%	15.8%	15.3%	15.3%	5.6%	10.4%
LU	18.1%	6.0%	7.7%	8.4%	6.0%	23.6%	6.8%	8.1%	6.6%	2.6%	6.2%
NL	15.0%	3.6%	4.7%	6.4%	5.1%	11.3%	14.8%	17.9%	12.1%	4.7%	4.3%
PL	2.7%	1.3%	2.3%	3.7%	5.2%	17.4%	11.7%	16.3%	18.4%	8.9%	12.2%
PT	6.2%	4.2%	5.8%	7.2%	9.4%	17.7%	14.8%	15.0%	9.9%	4.3%	5.4%
SK	8.1%	4.1%	4.8%	6.5%	3.5%	19.7%	8.4%	11.2%	12.2%	7.5%	13.9%
SI	10.8%	4.9%	5.6%	7.8%	6.9%	25.2%	9.1%	11.4%	9%	4.4%	4.7%
ES	14.6%	5.6%	7.8%	8.6%	7.9%	20.2%	10.5%	10.0%	7.2%	2.2%	5.3%
SE	19.0%	10.1%	10.5%	11.8%	7.1%	17.1%	7.9%	7.2%	5.2%	1.7%	2.3%
UK	11.4%	7.7%	10.2%	10.6%	10.6%	15.2%	8.8%	8.6%	9.0%	4.3%	3.7%
EU-21	**12.8%**	**5.7%**	**6.8%**	**8.0%**	**6.7%**	**17.5%**	**10.0%**	**11.6%**	**10.3%**	**4.7%**	**5.9%**

Cross Tabulation 7.1 Outcomes Dimension Religious Values (ESS, 2004)

EU M.S.	Agree Strongly	Agree	Neither Agree nor Disagree	Disagree	Disagree Strongly
AT	25.4%	41.6%	19.3%	10.4%	3.3%
BE	23.2%	42.4%	15.3%	15.4%	3.6%
CZ	28.5%	34.4%	17.3%	13.2%	6.6%
DK	9.7%	28.3%	22.7%	30.2%	9.0%
EE	29.0%	49.2%	14.0%	7.1%	0.7%
FI	31.2%	35.3%	20.6%	10.0%	3.0%
FR	48.6%	34.2%	9.1%	5.9%	2.3%
DE	14.2%	40.8%	20.3%	19.9%	4.7%
GR	53.9%	39.7%	4.0%	1.7%	0.7%
HU	50.6%	36.7%	7.6%	4.4%	0.7%
IE	18.5%	53.4%	14.5%	12.7%	0.9%
IT	33.7%	46.9%	12.6%	5.5%	1.2%
LU	20.8%	42.2%	16.2%	15.5%	5.0%
NL	15.8%	39.8%	17.8%	23.8%	2.8%
PL	37.5%	44.5%	7.7%	8.8%	1.5%
PT	35.0%	51.1%	11.2%	2.2%	0.5%
SK	25.4%	50.9%	13.2%	9.3%	1.2%
SI	41.9%	43.4%	9.3%	4.3%	1.2%
ES	7.0%	52.7%	12.6%	6.5%	1.2%
SE	17.1%	49.6%	20.6%	11.0%	1.7%
UK	15.4%	43.8%	22.8%	15.3%	2.6%
EU-21	**27.7%**	**42.9%**	**14.7%**	**11.1%**	**2.6%**

Cross Tabulation 7.2 Outcomes Dimension Political Values (ESS, 2004)

EU M.S.	Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not like me at all
AT	16.4%	29.1%	23.8%	16.6%	9.4%	4.8%
BE	17.1%	31.1%	22.8%	15.1%	8.4%	5.5%
CZ	15.5%	31.1%	25.7%	14.1%	7.6%	6.0%
DK	23.0%	32.0%	18.3%	14.0%	9.3%	3.4%
EE	8.6%	31.0%	24.5%	17.0%	14.8%	4.3%
FI	11.4%	27.2%	27.7%	17.4%	12.3%	4.0%
FR	18.9%	18.3%	18.5%	19.9%	16.3%	8.1%
DE	1.7%	33.3%	23.1%	14.3%	13.0%	4.6%
GR	47.8%	34.9%	12.1%	3.8%	1.2%	0.2%
HU	25.1%	30.4%	22.5%	10.9%	7.8%	3.3%
IE	30.9%	30.9%	18.0%	11.8%	6.3%	2.1%
IT	33.8%	38.6%	18.6%	5.9%	2.1%	1.0%
LU	18.0%	32.0%	18.3%	15.5%	11.2%	5.0%
NL	13.0%	35.0%	27.8%	12.6%	9.0%	2.7%
PL	28.4%	45.8%	15.6%	6.6%	2.9%	0.7%
PT	18.4%	29.4%	27.4%	17.7%	5.8%	1.3%
SK	15.7%	39.4%	28.2%	9.0%	5.6%	2.1%
SI	16.3%	36.7%	24.1%	11.2%	8.6%	3.2%
ES	21.1%	33.5%	19.6%	12.2%	9.7%	4.0%
SE	10.8%	26.5%	24.9%	19.0%	13.2%	5.5%
UK	17.8%	32.5%	16.9%	13.5%	15.4%	3.9%
EU-21	**19.5%**	**32.3%**	**21.8%**	**13.2%**	**9.0%**	**3.6%**

Cross Tabulation 7.3 Outcomes Dimension Personal Values (ESS, 2004)

EU M.S.	Agree Strongly	Agree	Neither agree nor disagree	Disagree	Disagree Strongly
AT	11.1%	35.9%	28.4%	17.5%	7.1%
BE	12.3%	25.3%	18.1%	31.9%	12.4%
CZ	17.3%	39.1%	23.6%	14.4%	5.6%
DK	3.9%	15.9%	18.7%	42.8%	18.7%
EE	10.9%	48.4%	23.3%	15.3%	2.1%
FI	5.1%	19.3%	26.9%	34.9%	13.8%
FR	20.7%	29.4%	20.8%	15.9%	13.2%
DE	9.0%	40.5%	24.1%	19.2%	7.3%
GR	13.2%	31.3%	23.9%	24.6%	7.1%
HU	21.2%	40.9%	14.6%	18.4%	4.9%
IE	6.4%	41.1%	20.3%	26.6%	5.5%
IT	20.2%	46.8%	21.8%	9.7%	1.4%
LU	14.4%	46.2%	18.9%	15.3%	5.2%
NL	5.5%	31.7%	17.1%	34.7%	11.0%
PL	4.9%	44.2%	20.1%	18.5%	2.3%
PT	13.3%	54.5%	18.7%	10.3%	3.3%
SK	5.3%	37.1%	26.4%	28.1%	3.0%
SI	7.0%	36.2%	25.3%	26.8%	4.7%
ES	11.5%	44.2%	18.9%	18.1%	7.2%
SE	1.6%	20.1%	27.0%	39.4%	12.0%
UK	8.3%	37.0%	28.8%	20.9%	5.0%
EU-21	**10.6%**	**36.4%**	**22.2%**	**23.0%**	**7.3%**

Cross Tabulation 7.4 Outcomes Dimension Family Values

Appendix B Outcomes Indicators per Country

EU Member State	Strongly Religious	Moderately disagreeing Reduce Differences	Follow Customs and Traditions	Agree Strongly/Agree Work
AT	8.5%	6.9%	23.1%	23.5%
BE	8.3%	9.5%	23.7%	18.8%
CZ	3.2%	9.9%	24.1%	28.2%
DK	5.6%	19.6%	24.4%	9.9%
EE	3.9%	3.9%	21.4%	29.7%
FI	10.0%	6.5%	22.1%	12.2%
FR	4.6%	4.1%	18.6%	25.1%
DE	6.3%	12.3%	19.4%	24.8%
GR	17.5%	1.2%	31.6%	22.3%
HU	6.0%	2.6%	26.0%	31.1%
IE	11.4%	6.8%	26.6%	23.8%
IT	11.7%	3.4%	30.3%	33.5%
LU	5.9%	10.3%	22.8%	30.3%
NL	9.8%	13.3%	25.3%	18.6%
PL	14.0%	5.2%	29.9%	24.6%
PT	8.7%	1.4%	25.1%	33.9%
SK	11.2%	5.3%	27.8%	21.2%
SI	7.4%	2.8%	25.7%	21.6%
ES	6.2%	3.9%	24.7%	27.9%
SE	4.1%	6.4%	20.7%	10.9%
UK	6.4%	9.0%	22.4%	22.7%
EU-21 (in %)	**8.1%**	**6.9%**	**24.5%**	**23.5%**

Cross Tabulation 7.5 Integrated Cross-Tabulation Outcomes Indicators

Appendix C Scatterplots including all Cases

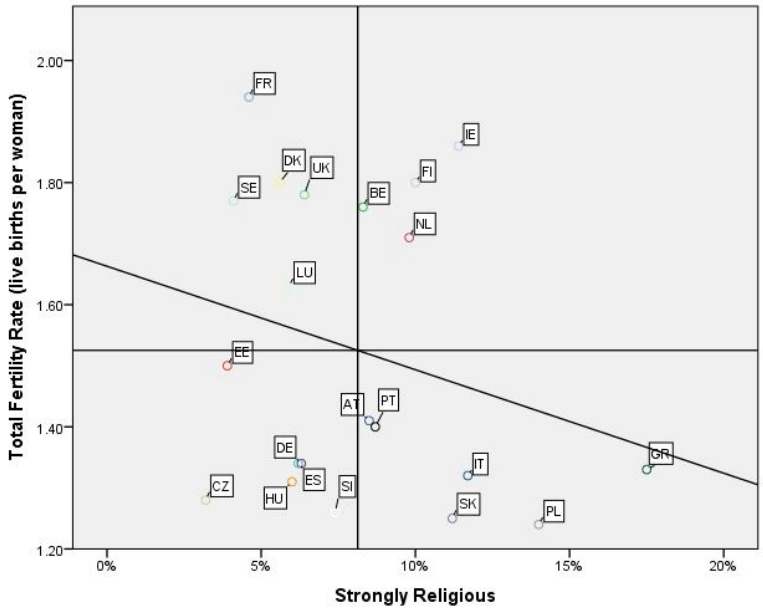

Figure 7.1 Scatterplot Relationship 'Strongly Religious' and TFR

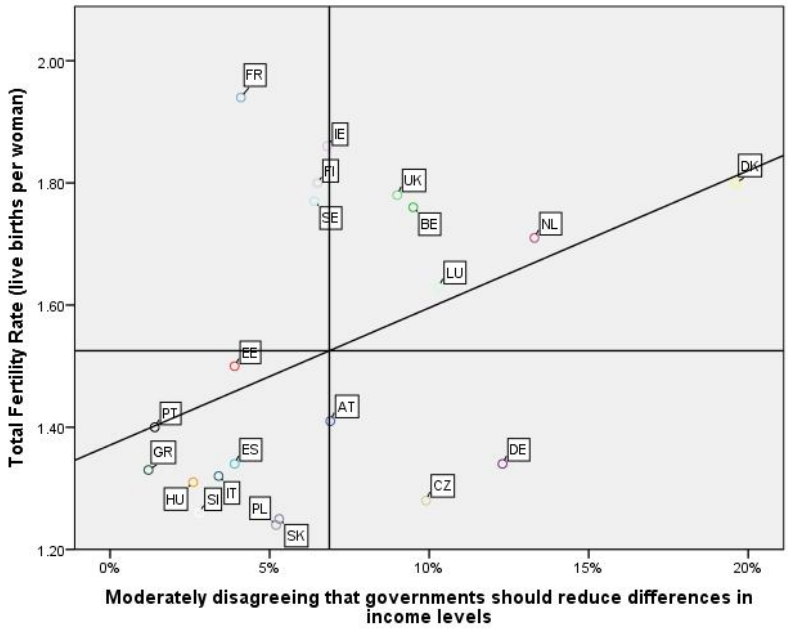

Figure 7.2 Scatterplot Relationship 'Moderately disagreeing reduce Differences' and TFR

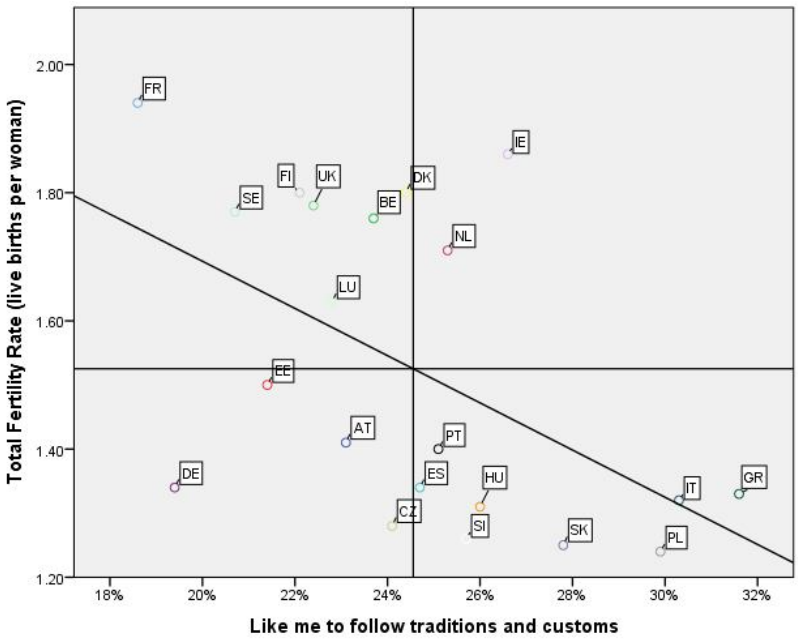

Figure 7.3 Scatterplot Relationship 'Average Very much like me/ Like me/ Somewhat like me: Traditions and Customs' and TFR

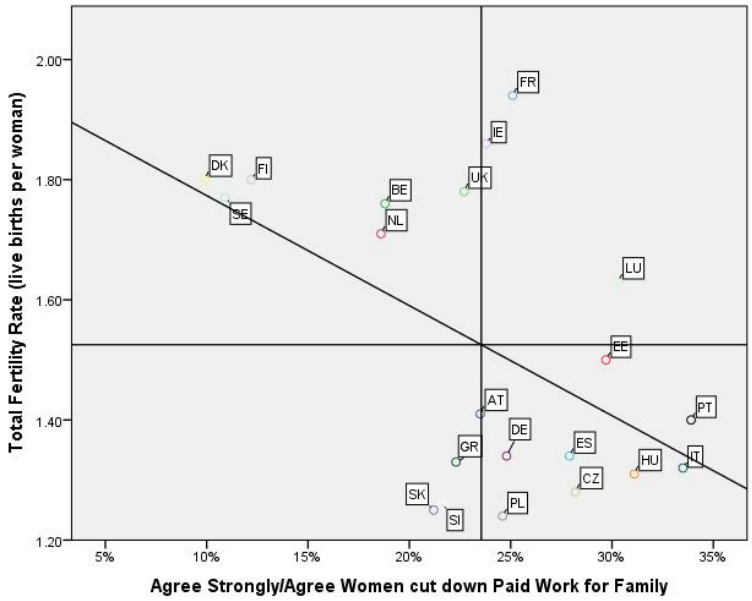

Figure 7.4 Scatterplot Relationship 'Average Agree Strongly/Agree Work' and TFR