Workers, Mothers, Women!

The correlation between fertility and female employment in Italy

*Author: Alessandro Rossi*
Abstract

This study focuses on the difference between northern and southern Italy concerning the correlation between total fertility rate (TFR) and female employment rate (FER) using provincial-level data. Theories demonstrate that the correlation can either be negative or positive, although it has been showed in the past decades that this correlation between nations is positive throughout the developed countries. This phenomenon has been described by van de Kaa (2002) and Lesthaeghe (2010) as the second demographic transition. With regards of Italy, previous studies focusing on the country’s 20 regions have also found a positive correlation (Rondinelli and Zizza 2010). Furthermore, the Italian context is explained with special regards towards the deep cultural and socio-economical differences between northern and southern Italy. The divide is confirmed by statistical data. Furthermore, a regression analysis controls the correlation between TFR and FER against relevant variables and finds surprisingly a positive correlation in the north and a negative correlation in the south, where a fertility postponement mechanism is present. Conservative gender roles and economic underdevelopment can be seen as the cause of this divide, although there are signs of change.

Key words

Fertility, Employment, Second demographic transition, Italy, Provinces, Regression.
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Introduction

The correlation between fertility and female employment has been the object of a colourful debate among scientists and politicians. Most studies have been written with focus on a cross-national level and many state that women’s position in modern society, their place in the labour market and the achievement of conciliating work and childrearing is a fundamental matter regarding the sustainable development and maintenance of social states (Del Boca and Repetto-Alaia 2003). Although, this raises many questions of social, economical, cultural and ethical impact.

In this study I am going to focus on the causes of different fertility behaviours in one single country. Some countries have demonstrated that it is possible for women to reach their ambitions both inside and outside the household. Therefore, I consider the analysis of those examples, where this conflict is yet to be resolved, of primary importance. Among these examples there is Italy, a country that with such a variegated spectrum of nuances of sociological interest, is an outstanding candidate for this analysis.

Aim

The aim of this essay is to achieve a deeper understanding for the correlation between total fertility rate (TFR) and female employment rate (FER). Previous studies loosely use the nomenclature female labour participation (FLP) (Ahn and Mira 2002, Brewster and Rindfuss 2000, Da Rocha and Fuster 2006, Matysiak and Vignoli 2006), and therefore FLP is used whenever explaining theories or researches that uses this term. However, the more correct FER is preferred in this study.

Past empirical research has primarily focused on cross-national analysis about the correlation on a nationwide level in order to understand the implication of these demographic changes throughout the developed countries. However, this leaves many unanswered questions regarding different demographic patterns in one single country. In this study, I assess whether the patterns found cross-nationally can also be found between regions of a single country. Such an analysis can strengthen and give nuance to previous findings.
Italy is known for its deep regional differences on a political and socio-economic level, especially between the northern and the southern part, and thus the perfect subject for this kind of study. Italy’s political unification was not completed until 1861 and territorial changes have continued until the loss of Istria in 1945. Therefore, I am going to analyse the correlation between TFR and FER with regard of the Italian labour market and the socio-cultural, historical and economical differences between the northern and the southern part.

**Question**

The question that I will try to answer in this study is whether there are differences between the northern and southern regions regarding the correlation between TFR and FER. I will also try to find the reason of these possible differences with help of relevant theories, early studies and statistical models.

**Theoretical framework**

The theoretical framework for this study has been developed around theories concerning economic rationality, which also take into account the male breadwinner model. Nevertheless, even theories regarding planned actions and behaviour have been considered.

*The theory of planned behaviour*

In the 1970’s, Martin Fishbein and Icek Ajzen developed what is now known as the *theory of reasoned action* (Ajzen and Fishbein 1970) in order to understand the socio-psychological implementations of human behaviour (Billari et al. 2009). This theory was then developed into a new one called the “theory of planned behaviour (TPB)” (Ajzen 1991). The idea behind a revision of the theory of reasoned action was found in the aggregation of behaviours, which means the idea that any behaviour is not only influenced by the surrounding general disposition but also by other multiple factors (Ajzen 1991). One single aggregate behaviour instead of many different ones results in a more valid measurement (Ajzen 1991). Each behaviour is preceded by an intention determined by three factors, as depicted in figure 1 (Ajzen 1991).
Attitudes toward the behaviour indicate to which level an individual has a positive or negative judgement of the behaviour (Ajzen 1991). Subjective norm indicates the perceived social pressure towards the behaviour (Ajzen 1991). Perceived behavioural control indicates the level of ease or difficulty towards a particular behaviour by an individual, according to his or her previous experiences or predicted impairments (Ajzen 1991). The intention, as a prerogative of the behaviour, indicates the individual’s will towards the behaviour. The stronger the intention, the more probable the behaviour will actually be performed (Ajzen 1991).

The new home economics

Gary Becker is one of the most important economists within the theorisation of family structures and father of the new home economics. In his revised version of *A Treatise of the Family* from 1991 he discusses the effects of gender differentiation within married couples and the outcomes of their decisions regarding labour and work distribution within the household.

Becker embraces economy within rational choice perspective. He assumes that preferences are logically applied. He also believes that preferences are more than a selfish pursuit of goods and are indeed influenced by a wider range of values than just self-interest (Becker 1991).

Becker (1991) describes households as sites of production where the products of a married heterosexual couple are children. He goes further and explains the general economic assumption of rationality and efficiency within the household. In economic theory rationality is put in force in order to optimize utility.

Rationality and efficiency affects even the distribution of labour between the couple where one individual becomes specialized into particular tasks (Becker 1991). This distribution of labour is traditionally divided according to accepted gender roles:

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*Fig. 1 Source Ajzen 1991 p. 182*
women take usually care of childrearing and household work while men usually have full time work outside the household (Becker 1991). Becker argues first that this is the consequence of biological and social features only to include later even the assumption that this could be due to gender employment discrimination. Biological features include the fact that women are after all biologically advantaged since only they can breastfeed and consequently are more adequate to childrearing and household work. Out of a rational perspective women develop a specialization in household work because they have features that men do not thus women more productive in the household (Becker 1991).

With the same logic men are more productive in market work because they earn higher wages than women (Becker 1991). Becker does not discuss this very much out of gender discrimination prospective, but suggests that men earn higher wages because they are more continuously employed. Women, on the other hand, have to interrupt and put on hold their market-working career whenever they give birth to children, subsequently slowing down their wage development and therefore earning lower wages than men (Becker 1991).

Parents usually pass this normative gender pattern to their children, thus recreating it from generation to generation: for example girls are taught to develop skills that are relevant to household work such as cooking and cleaning (Becker 1991). Nevertheless women’s employment has risen dramatically in the past decades.

*The Easterlin model*

In the 1970’s, Richard A. Easterlin analysed the economical background of fertility developments. He assumes that fertility is determined by three factors: The demand for children, the potential output of children, and the costs of fertility regulation.

The demand for children is the number of children parents would have if fertility regulation did not cost anything. It is delimited by income, prices, which are externally determined, and tastes, which are subjective to the household members (Easterlin 1975).

The potential output of children is the number of children parents would have if they did not regulate their fertility. It is influenced by the frequency of intercourse, fecundity and involuntary fetal mortality (Easterlin 1975).
The cost of fertility regulation includes subjective costs and objective costs. The subjective costs are constituted by the psychological discontent of regulating fertility and the normative costs of being affected by a certain ruling norm about childrearing and the woman’s position in the society. The objective costs include the monetary costs of birth control, in order to limit fertility, and raising children (Easterlin 1975). In this matter Easterlin means that it is both economical and social factors that affect fertility, since children are seen as normal goods (Easterlin 1975). Therefore, if the household total income is higher than aspirations, this will lead to higher fertility rates. On the other hand, if the household total income is lower than aspirations, fertility rates will decrease (Easterlin 1976).

Hence, the correlation between TFR and FER can be either negative or positive. Ajzen’s theory on planned behaviour implies that norms affect individual wills and behaviours; and, has been applied before in order to explain fertility intentions (Billari 2009). Becker’s new home economics theory implies that female employment leads to lower fertility due to difficulty combining work outside and in the household. It indicates also that there are conflicts regarding the opportunity costs of lost wages and career due to childrearing. This theory has been used intensively in population economics but it can seem to be antiquated as it still retains a traditional view over gender roles. On the other hand, the Easterlin model suggests a positive correlation since higher TRF leads women, and subsequently the household, to have higher income and thus more children.
Background

Second demographic transition

Since the European economic boom in the 1960’s, and more specifically 1965, the demographic situation in Europe has changed dramatically, both in terms of childrearing and family constitution (van de Kaa 2002). One of the major signs of this demographic transition is that fertility rates declined under the reproduction level. Van de Kaa states that the first markers of this transition from an old to a new demographic pattern were pretty unexpected (van de Kaa 2002). He identifies a change in the family model from what he calls bourgeois to an individualistic one. The bourgeois family model, writes van de Kaa, grows stronger during the first demographic transition while in the second one this family model gets weakened. The amount of marriages declines while those who end in a divorce grows and informal unions, such as cohabitation, spread themselves outside the Nordic countries to the rest of the European continent (van de Kaa 2002).

The basis for the relationships between women and men changes as per mutual love is considered the most important prerogative (van de Kaa 2002). Childrearing becomes, in that matter, an expression the love relationship (van de Kaa 2002). A consequence is that frictions inside the relationship flourish since the need of self-fulfilment lies now on an individual level (van de Kaa 2002).

Lesthaeghe (2010) finds the sexual revolution among the causes of this second demographic transition. Views on sex outside the marriage change when sex act’s final aim is no longer childrearing. Women liberate themselves from this burden and take control over their own biological autonomy in order to be able to decide over their own childrearing (Lesthaeghe 2010).

Secularisation has also contributed to the decay of otherwise conservative Christian values of marriage as a basis for the model of family formation. Instead, both socialists and liberals are creating new secular values. These new values are based on new social structures out of humanistic prospectives (Lesthaeghe 2010).

Women’s achievements regarding independence and a newfound individualism have concurred with lower fertility rates. Southern Europe has not been an exception to the second demographic transition, even though old traditional systems survive there. Lesthaeghe (2010) calls it the strong family type, which endures in Southern Europe.
whereas the strong family bonds contribute to the fact that children leave the parents’ household almost only in the event of marriage. Women play an important role in the household where old cultural patterns put them automatically in charge of childcare (Lesthaeghe 2010).

Social policy has been very weak in these countries since it is assumed that the strong family type will not cease to exist (Esping-Andersen 1999).

Fertility rates have therefore reached extremely low levels due to women’s desire for self-fulfilment, under the form of market work career, has grown stronger but at the same time very little efforts have been made to give them the possibility to conciliate this with childrearing (Lesthaeghe 2010).

There are also other structural obstacles against family formation and childrearing under the form of poor job security where the possibility of a part-time job, which would promote female labour participation, is very weak. Also, the housing market is characterised, to a large extent, by private investors that encourage ownership instead of renting. Housing prices are therefore very high and, consequently, yet another impediment to family formation and childrearing (Lesthaeghe 2010). He (2010) eventually notices that the 2001 Italian census has shown an increase in different forms of cohabitation, in both urban and rural areas of north Italy but still very low levels of births outside marriage.

The correlation between total fertility rates and female labour participation

The correlation between TFR and FLP has been studied since the early 1960’s. In his neoclassical model, Malthus predicted, over 200 years ago, a positive correlation between wealth and population growth (Ahn and Mira 2002), although history would eventually prove him wrong.

The increase of income, first in the developed countries and later even in developing countries, has led to a decrease in fertility rates (Ahn and Mira 2002). Right from the start, it has been urged for new models that would explain this new demographic pattern. Many researchers agree that an increase in female labour participation and female wages has caused a drop in fertility rates, thus a negative correlation (Ahn and Mira 2002, Engelhardt et al. 2001).

Although women have in facts worked outside the household even before the industrial revolution, and male breadwinner families came only after it (Esping-
Andersen 1999), Brewster and Rindfuss (2000) allege that women have culturally and historically always been in charge of household work and childrearing, and that during the industrial revolution women got again the chance to work even outside the home.

Nevertheless, after the economic boom in the 1960’s, childrearing and market work became more and more incompatible (Ahn and Mira 2002). This has been proven on a cross-national level, where those countries with the highest FLP had the lowest TFR (Ahn and Mira 2002). This negative correlation was considered reliable also out of a secular prospective that was then eradicating itself throughout the developed countries (Ahn and Mira 2002) and the so-called maternal role incompatibility hypothesis developed by Stycos and Weller in the 1960’s predicted a continue fall of TFR as FLP rose (Brewster and Rindfuss 2000).

It came therefore with a surprise that the correlation suddenly became positive during the mid-1980s (Ahn and Mira 2002, Brewster and Rindfuss 2000, Da Rocha and Fuster 2006, Matysiak and Vignoli 2006). This is due, according to most studies (Engelhardt et al. 2001, Galor and Weil 1996, Kögel 2003), to changes of the socio-economical context according to the theory of the second demographic transition, such as more positive attitudes towards working mothers and a growth in childcare availability. Thus now the countries with the highest TFR are the ones with the highest FLP (Brewster and Rindfuss 2000).

But, there are differences in these changes of correlation. Brewster and Rindfuss, in their study from 2000, compare the cross-national correlation between TFR and FLP in 1970 with one from 1996. It shows that while all countries increased their FLP, some countries like the Nordic countries and USA maintained their high TFR and other countries in Southern Europe like Italy, Spain and Greece declined to a lowest-low level, defined as TFR under 1.3.

The Italian regions

The Italian Republic, as it is officially known, consists currently of 20 regions, 110 provinces and about 8000 municipalities. However, since the data set used in this study is from 2009, consequently even statistics regarding population and number of provinces is from that year. Here are the 20 Italian regions according to geographical areas. The Italian name is indicated whereas it differs from the English exonym.
### Table 1: The Italian regions in 2009

<table>
<thead>
<tr>
<th>Area</th>
<th>Regions</th>
<th>Prov.</th>
<th>Population</th>
<th>TFR</th>
<th>FER</th>
</tr>
</thead>
<tbody>
<tr>
<td>North West</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Piedmont Piemonte</td>
<td>8</td>
<td>4 432 571</td>
<td>1.40</td>
<td>60.5</td>
</tr>
<tr>
<td></td>
<td>Aosta Valley Valle d’Aosta</td>
<td>*1</td>
<td>127 065</td>
<td>1.62</td>
<td>62.7</td>
</tr>
<tr>
<td></td>
<td>Lombardy Lombardia</td>
<td>11</td>
<td>9 742 676</td>
<td>1.53</td>
<td>60.0</td>
</tr>
<tr>
<td></td>
<td>Liguria</td>
<td>4</td>
<td>1 615 064</td>
<td>1.32</td>
<td>59.1</td>
</tr>
<tr>
<td>North East</td>
<td></td>
<td>22</td>
<td>11 473 120</td>
<td>1.48</td>
<td>60.9</td>
</tr>
<tr>
<td></td>
<td>Trentino-Alto Adige</td>
<td>2</td>
<td>1 018 657</td>
<td>1.57</td>
<td>62.5</td>
</tr>
<tr>
<td></td>
<td>Veneto</td>
<td>7</td>
<td>4 885 548</td>
<td>1.46</td>
<td>57.6</td>
</tr>
<tr>
<td></td>
<td>Friuli-Venezia Giulia</td>
<td>4</td>
<td>1 230 936</td>
<td>1.39</td>
<td>57.8</td>
</tr>
<tr>
<td></td>
<td>Emilia-Romagna</td>
<td>9</td>
<td>4 337 979</td>
<td>1.50</td>
<td>65.1</td>
</tr>
<tr>
<td>Centre</td>
<td></td>
<td>21</td>
<td>11 798 328</td>
<td>1.38</td>
<td>57.3</td>
</tr>
<tr>
<td></td>
<td>Tuscany Toscana</td>
<td>10</td>
<td>3 707 818</td>
<td>1.35</td>
<td>60.2</td>
</tr>
<tr>
<td></td>
<td>Umbria</td>
<td>2</td>
<td>894 222</td>
<td>1.34</td>
<td>59.0</td>
</tr>
<tr>
<td></td>
<td>Marche</td>
<td>4</td>
<td>1 569 578</td>
<td>1.42</td>
<td>59.8</td>
</tr>
<tr>
<td></td>
<td>Latium Lazio</td>
<td>5</td>
<td>5 626 710</td>
<td>1.38</td>
<td>54.5</td>
</tr>
<tr>
<td>South</td>
<td></td>
<td>23</td>
<td>14 147 444</td>
<td>1.35</td>
<td>36.5</td>
</tr>
<tr>
<td></td>
<td>Abruzzo</td>
<td>4</td>
<td>1 334 675</td>
<td>1.27</td>
<td>48.3</td>
</tr>
<tr>
<td></td>
<td>Molise</td>
<td>2</td>
<td>320 795</td>
<td>1.11</td>
<td>45.7</td>
</tr>
<tr>
<td></td>
<td>Campania</td>
<td>5</td>
<td>5 812 962</td>
<td>1.43</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td>Apulia Puglia</td>
<td>5</td>
<td>4 079 702</td>
<td>1.33</td>
<td>34.9</td>
</tr>
<tr>
<td></td>
<td>Basilicata</td>
<td>2</td>
<td>590 601</td>
<td>1.18</td>
<td>41.4</td>
</tr>
<tr>
<td></td>
<td>Calabria</td>
<td>5</td>
<td>2 008 709</td>
<td>1.28</td>
<td>35.1</td>
</tr>
<tr>
<td>Islands</td>
<td></td>
<td>17</td>
<td>6 708 800</td>
<td>1.35</td>
<td>38.1</td>
</tr>
<tr>
<td></td>
<td>Sicily Sicilia</td>
<td>9</td>
<td>5 037 799</td>
<td>1.42</td>
<td>34.9</td>
</tr>
<tr>
<td></td>
<td>Sardinia Sardegna</td>
<td>8</td>
<td>1 671 001</td>
<td>1.13</td>
<td>47.9</td>
</tr>
<tr>
<td>Italy</td>
<td></td>
<td>107</td>
<td>60 045 058</td>
<td>1.41</td>
<td>51.1</td>
</tr>
</tbody>
</table>

Tab. 1. Source: ISTAT 2010, ISTAT 2012. *Aosta Valley has officially no provinces but counts as one.

15 of these regions are known as regions with ordinary statute, which means that they are regulated by similar statutes and administrated in a similar way. The remaining five regions are called regions with special statute, which means that they have peculiar statutes with different levels of autonomy. This is for different reasons: they are either formed by islands off the Italian continental coast such as Sicily and
Sardinia, or they have strong language minorities such as Aosta Valley, Friuli-Venezia Giulia and Trentino-Alto Adige.

The causes of cultural and socio-economical differences in Italy

Much of the socio-economical and cultural differences between Italy’s different regions are a consequence of the political unification process between the 1800’s and the 1860’s (Hearder 2001). Italy had been divided in a multitude of different kingdoms and city-states ever since the fall of the Roman Empire leaving the Italian soil weakened and often the object of foreign occupations and conquests (Duggan 1994). During the 19th century, romantic and nationalist movements throughout Europe inspired the birth of a struggle for unification (Duggan 2007).

The fact that the unification and proclamation of the Kingdom of Italy in 1861 was achieved by Piedmontese forces led by the, until then, King of Sardinia with Turin as his capital, has been in later years debated whether it should actually be considered a colonialist act (Duggan 2007). In the decades following, the King, government and bureaucrats who ruled Italy were of Piedmontese origin. Wealthy entrepreneurs from Piedmont and Lombardy, at the time the most industrialised regions of the north, had shaped and influenced the implementation of liberal politics (Duggan 1994). The south, on the contrary, was seen as a dangerous and underdeveloped countryside, which was militarily occupied from 1861 to 1865 in order to put an end to gang plundering also known as brigandage (Duggan 1994).

Illiteracy was widespread throughout all the Italian population at that time, albeit with regional differences. For example, in 1861, Piedmont, Liguria and Lombardy had a primary school attendance rate above 90%. In the central regions of Tuscany and the Papal States, the rate was down to between 25 and 35% while in the Kingdom of the Two Sicilies it reached only 18% (Duggan 1994). Southerners were therefore seen as
barbaric primitives keen to crime and violence, who had nothing to do with the development of a modern Italian state (Levy 1996). It was in this context that the south, left outside the political and economic development by the rest of the state, saw the emergence of the mafia, a system of protection and guarantees that would otherwise not have been provided by the social institutions (Levy 1996).

Conservatism and tradition in the South and the Islands

The social conservatism and backwardness continues until today and are visible in many examples of modern history. The end of the fascist dictatorship after World War II led to great hostility towards the monarchical rule and the King, which were accused of having favoured the ascension of Mussolini to the power (Hearder 2001). A constitutional referendum between the monarchy and the republic was subsequently held on June 2 1946, which saw the win by 54% of the republican side (Hearder 2001). Albeit the fact that the king was of Piedmontese origin and thus descendant of that same political powers that disadvantaged the south, it was in the south where the monarchy, symbol of a conservative rule, was supported by vast majority of votes (Hearder 2001).

Even recently, conservative attitudes have been shown in different surveys. Regional differences have been brought into light even in the latest CENSIS survey published in March 2012 about the values shared by the Italian population. Although questions about religion and the value of religion in Italy have not shown big differences, when speaking about family the opinions diverge: In the Northwest 55.1% agree with the statement that family is a value shared by most Italians, whereas in the South and Islands 75.2% agreed (CENSIS 2012).

Despite the small discrepancy of attitudes regarding religion, signs of secularism appear in the 2009 data about the percentage of civil weddings performed that year from the Italian National Institute of Statistics (ISTAT). In 2009 in the Northwest, Northeast and Centre a share between 44 and 50% of all weddings were stipulated with a non-religious ceremony. Furthermore, this share reduces to 20.1% in the South and to 27.6% in the Islands. Differences can be seen even within the Islands whereas Sicily has a share of civil marriages closer to the South and Sardinia has a quota closer to the Centre (ISTAT 2009).
Table 2: Civil weddings and survey about Italian people’s values

<table>
<thead>
<tr>
<th>Civil weddings</th>
<th>Agrees that family is a value shared by most Italians</th>
<th>Agrees that religious tradition is a value shared by most Italians</th>
<th>Says religion is important for a better social understanding in Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
<td>2012</td>
<td>2012</td>
</tr>
<tr>
<td>Northwest</td>
<td>48.6%</td>
<td>55.1%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Northeast</td>
<td>50.2%</td>
<td>58.9%</td>
<td>25.4%</td>
</tr>
<tr>
<td>Centre</td>
<td>44.1%</td>
<td>69.2%</td>
<td>18.0%</td>
</tr>
<tr>
<td>South</td>
<td>20.1%</td>
<td>75.2%</td>
<td>25.4%</td>
</tr>
<tr>
<td>Islands</td>
<td>27.6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tab. 2. Source: ISTAT 2009, CENSIS 2012 and own calculations

Economic disadvantages in the South and the Islands

The economic disparities between the different Italian areas are demonstrated in the 2007 Eurostat comparison of GDP between the different regions of the European Union. While both the Northwest and the Northeast score GDP averages comparable to the national average of Denmark and Sweden, the South and the Islands suffer from economic underdevelopment, with a GDP comparable to the national average of Hungary (Eurostat, 2010).

According to ISTAT’s 2011 (a) report La situazione del Paese 2010 (The situation of the country 2010) the percentage of unsecure jobs, consisting of time-limited contract work, collaboration contracts and apprenticeship, is higher in the South and the Islands. At the same time, the total employment rate scores between 61 and 65 % in the Northwest, the Northeast and the Centre, while only 43.9% in the South and Islands (ISTAT 2011a). Consequently, the unemployment rate in the South is more than double that of the Northwest and Northeast (ISTAT 2011a).

Relative poverty rate is also considered in the ISTAT’s national report for the year 2009. The threshold for the relative poverty for a two-person household was set to 983.01 euros per month in 2009, the most recent year available (ISTAT 2011a). The combined data for the North and the Centre score levels range from 4.9 to 5.9 % while in the combined data for the South and the Islands reaches 22.7% of households.
under the relative poverty line, confirming high disparities between the northern and southern parts of Italy.

*Table 3: Economy and working market*

<table>
<thead>
<tr>
<th>Region</th>
<th>GDP (100 = EU 27) 2007</th>
<th>Work force with unsecure contract 2010</th>
<th>Total Employment rate (15-64) 2010</th>
<th>Unemployment rate (15-64) 2010</th>
<th>Relative poverty rate 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest</td>
<td>125.9</td>
<td>9.6%</td>
<td>64.5%</td>
<td>6.3%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Northeast</td>
<td>124.1</td>
<td>10.9%</td>
<td>65.8%</td>
<td>5.6%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Centre</td>
<td>115.2</td>
<td>12.4%</td>
<td>61.5%</td>
<td>7.7%</td>
<td>5.9%</td>
</tr>
<tr>
<td>South</td>
<td>68.6</td>
<td>14.7%</td>
<td>43.9%</td>
<td>13.5%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Islands</td>
<td>69.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tab. 3. Source: Eurostat 2010, ISTAT 2011a

*FLP and the Italian labour market*

According to Del Boca (2002b) the Italian labour market is characterised by rigidities and the extreme rarity of part-time employment, which further makes the combination of work and family difficult. Nevertheless, part-time jobs have risen to higher levels during the past ten years (Italia Lavoro 2011). Institutional rigidities include a high level of regulation where firing workers is enormously restricted. The labour market is also limited to a small number of employment arrangements (Del Boca 2002b). Efforts have been made towards a wider flexibility in the labour market, but other factors such as higher employment costs for part-time workers than full-time workers have weakened these policies (Del Boca 2002b).

FER in Italy was 51.1% in 2009, male employment rate was 68.6% while the unemployment rate was 9.3% for women and 6.8% for men. Between the ages 15-24 unemployment rates were 28.7% for women and 23.3% for men (Salvadori 2011). For instance the participation rate among mothers with an age between 25-64 is 48.9% while among fathers with the same age it is 82.4% (ISTAT 2011b).

FER for partnered mothers is visibly higher in the north than in the south, with similar rates around 60% in the North West, North East and Centre, while the combined rate for the South and the Islands was almost the half of that (ISTAT 2010).
27.9% of working women and 5.1% of working men have a part-time employment (Italia Lavoro 2011). Female part-time employment shows similar values for the Northwest, Northeast, Centre and Islands with slightly lower values for the South, although Sardinia has a data closer to the one in the Centre and Sicily one closer to the south. 9% of all working women and 8% of working men consist of foreign immigrants. Among foreign working men, 93% of them have a full-time job, while among women 40% have a part-time job (Salvadori 2011). 60% of all foreigners work in northern Italy, which comprises Northwest and Northeast, 27% in the Centre and only 12% in the South.

According to ISTAT (2011b) in 2010 FER for mothers with one child is 58.5%, with two it is 54% and with three it is 33.3%. 38.4% of the Italian population over 15 years declared of regularly taking care of another cohabitant family member such as children under 15, other disabled adults or elders. Women take care of other family members more frequently than men, 42.3% and 34.5% respectively.

17.5% of all women and 8.6% of all men aged 55-64 take care of a non-cohabitant child under 15. This represents in most of the cases a grandparent taking care of his or her grandchild (ISTAT 2011b). 35.8% of all workers who take care of other family members say that they wish a more flexible employment in order to have more time with their families (ISTAT 2011b).

It is therefore clear that women in Southern Italy find it more problematic to conciliate work and childrearing (Rondinelli and Zizza 2010). This is confirmed by the 2007 CENSIS survey about the Italian family. This statement can sound strange at first, considering the fact that only 23.9% of mothers in the South and the Islands affirms that they find it hard to conciliate work and family versus around 36% in both North West and North East. Although this can be considered perfectly logical since the FER among mothers is lower in the Southern part than in the Northern part of Italy.
Table 4: FER and working mothers’ conditions

<table>
<thead>
<tr>
<th>Region</th>
<th>FER 2009</th>
<th>Wish to have children</th>
<th>Already have children</th>
<th>Employment rate for partnered mothers with children (25-64) 2009</th>
<th>Female part-time employment 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest</td>
<td>60.0</td>
<td>30.0%</td>
<td>50.0%</td>
<td>33.2% 36.1%</td>
<td>60.2% 28.6%</td>
</tr>
<tr>
<td>Northeast</td>
<td>60.9</td>
<td>43.6%</td>
<td>41.0%</td>
<td>25.9% 36.7%</td>
<td>59.3% 29.7%</td>
</tr>
<tr>
<td>Centre</td>
<td>57.3</td>
<td>44.1%</td>
<td>51.2%</td>
<td>31.6% 33.9%</td>
<td>61.5% 28.8%</td>
</tr>
<tr>
<td>South</td>
<td>36.5</td>
<td>48.6%</td>
<td>39.0%</td>
<td>38.6% 23.9%</td>
<td>32.6% 24.1%</td>
</tr>
<tr>
<td>Islands</td>
<td>38.5</td>
<td></td>
<td></td>
<td></td>
<td>28.5%</td>
</tr>
</tbody>
</table>


TFR development in Italy

TFR developments in Southern Europe have been regarded as surprising since no one had forecast such an abrupt change in fertility rates (Chesnais in White et al. 2007). Italy went rapidly from being a high fertility country to a lowest-low fertility in the early 1990’s. TFR in Italy peaked during the economic boom in the 1960’s only to decline to its lowest level in 1995 (Caltabiano 2008).

This development is not unique, as many others Southern and Eastern European countries have followed the same path (Billari and Kohler 2002). One of the main reasons is found as a rational reaction to socio-economical changes. Great incentives for higher education levels, high youth unemployment and high housing prices have contributed to a postponement of establishing new independent households and thus a postponement of childrearing (Billari and Kohler 2002). The result is that now what was considered traditional family oriented countries have lower TFR levels than the more secular northern ones (White et al., 2007).

Although Italy has followed this pattern on a cross-national level, regional differences have been noticed (Caltabiano 2008). Using data of different cohort-specific TFRs it has been noticed a stop in the fertility decline in the northern part and an increase of TFR for the cohorts born in the early 1980’s (Caltabiano 2008). South Italy, on the other hand, has not showed this reversal yet and it is also predicted that it will
continue its decline (Caltabiano 2008). Immigration also plays a role in this development, as foreign immigrants are attracted to the most developed regions in the north (Caltabiano 2008).

**Paid paternal leave and childcare in Italy**

Parental leave policy in Italy is in line with most developed countries (Ray 2009). Paid maternity leave includes 5 months leave at 100% of the original wage plus an optional 6 months leave at 30% of the original wage (Ray 2009). During the child’s first year of life it is also possible to reduce the working schedule by 2 hours per day. Paid paternal leave includes 3 months leave at 80% of the original wage (Ray 2009).

Childcare has been regarded, until recent years, with very low attention in Italy (Del Boca and Locatelli 2005). The quality standards of public childcare in Italy are usually very high and often inexpensive, albeit characterised by very low availability (Del Boca 2002:02). The consequence is that a very high proportion of Italian households have to rely on informal childcare, often provided by close relatives (Del Boca and Locatelli 2005). Furthermore, public childcare availability is also limited in terms of opening hours and remarkably a private childcare system has not been developed (Del Boca and Locatelli 2005).

Childcare availability for children from 3 years and up is widespread, while childcare for children under 3 years is extremely limited. This is because childcare for children over 3 years is provided both by the state and by the municipalities, while childcare for children under 3 years is provided only by the municipalities (Del Boca and Locatelli 2005). The result is that 95 % of children over 3 years use childcare facilities, one of the highest rates in Europe, while only 6 % of those under 3 years do so (Fondazione degli Innocenti 2002). The high proportion of children over 3 years attending public childcare is due to the fact that many children grow up without siblings and childcare is considered, by an extreme majority of parents, as an important opportunity for education and socialisation (Del Boca and Locatelli 2005). Regardless of this national development, regional differences exist. Public childcare is used by about 15% of children under the age of 3 in the Northern part, while the rate is only 1-2% in the Southern part. Strong cultural factors in Southern Italy speak against formal childcare as the mother is usually seen as the best caretaker (Del Boca and Locatelli 2005).
Private childcare for children under the age of 3 is still used by a very limited range of children, between 0.23 to 1.24 % (Fondazione degli Innocenti 2002). When this data is compared to the actual applications for public childcare in Italy it is shown that only 70 % of the requests are satisfied (Del Boca and Locatelli 2005).

Even the availability of public childcare can sometimes not be enough. The opening hours are often limited to 7-7.5 hours and thus not enough for a full-time working mother (Del Boca and Locatelli 2005). The consequence is that often working mothers must rely on other informal childcare besides public childcare (Del Boca and Locatelli 2005).

Childcare for children under the age of 3 is more widespread in the northern part, both for working and non-working mothers. Also informal childcare is more common in the northern part than in the southern, supposedly due to the higher levels of FER.

*Table 5: FER and childcare*

<table>
<thead>
<tr>
<th>Region</th>
<th>FER 2009</th>
<th>Working mothers who used any form of childcare</th>
<th>Non-working mothers who used any form of childcare</th>
<th>Informal childcare</th>
</tr>
</thead>
<tbody>
<tr>
<td>North West</td>
<td>60.0</td>
<td>48.6%</td>
<td>26.1%</td>
<td>38.7%</td>
</tr>
<tr>
<td>North East</td>
<td>60.9</td>
<td>55.7%</td>
<td>27.0%</td>
<td>32.7%</td>
</tr>
<tr>
<td>Centre</td>
<td>57.3</td>
<td>53.6%</td>
<td>19.0%</td>
<td>29.3%</td>
</tr>
<tr>
<td>South</td>
<td>36.5</td>
<td>37.8%</td>
<td>17.3%</td>
<td>22.1%</td>
</tr>
<tr>
<td>Islands</td>
<td>38.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Tab. 5. Source: ISTAT (2010)*
Data and methods

I use province-based data from different statistical reports by the Italian National Institute of Statistics (ISTAT). The reports regarding population, civil weddings, TFR and FER come from ISTAT’s online database called GeoDemo (ISTAT 2012). The choice of using province-based data instead of region-based was to give some sensitivity to the analysis and to increase case numbers and thus give more reliability to the regression analysis. The administrative division of Italy is organized in 20 regions, which consist of a total of 110 provinces. Three provinces were established after 2009 (Barletta-Andria-Trani, Fermo, Monza-Brianza) while one region, Aosta Valley, has formally no provinces, which gave in the end 107 data units for the year 2009.

I decided to use data from 2009 because it was the most recent year for which all the relevant statistics where available at provincial level. Most of the earlier studies and statistical reports use region-based data, because it is usually the easiest to find relevant data for. This extension to the province level increases the level of specificity and the accuracy of the analysis.

The boundary between what is considered the north or the south of Italy is often not that clear, hence the division of Italy in this study has been done according to the Nomenclature of Territorial Units for Statistics (NUTS) developed by the European Union. It includes three levels of NUTS regions: NUTS-1, NUTS-2 and NUTS-3. Italy is thus divided in five NUTS-1 areas: Northwest, Northeast, Centre, South and Islands. ISTAT uses this method in most of their statistics. Although many other reports show an aggregate value for the northern part, defined as Northwest plus Northeast, or an aggregate value for the southern part, defined as South plus Islands. In this study the nomenclature Northwest, Northeast and so on is used according to the NUTS definition. Whereas speaking in general terms, for example regarding historical or cultural differences, the terms south Italy or the northern part have been preferred.

The analysis for this study is made through a regression analysis in SPSS version 20 of two different models, one for the northern part and one for the southern part in order to directly see the difference between these areas. Therefore, Italy has been divided into two macro areas: The North-Centre, which includes the NUTS-1 Italian regions Northwest, Northeast and Centre for a total of 67 data units; and the South-
Islands, which includes the NUTS-1 Italian regions South and Islands for a total of 40 data units. This division is made according to previous empirical studies; see Del Boca and Repetto-Alaia (2003). The correlation between TFR and FER is controlled for other variables. Here is the list of the chosen variables for my study and their nomenclature used in the regression table:

**Total fertility rate (TFR)**
This is the dependent variable for this study. It is the sums of all specific fertility rates calculated by reporting, for all the age-specific fertility rates (14-50), the number of live born by the female population. The TFR tells how many children an average woman could expect to have where she to follow the age-specific fertility rates over her childbearing years.

**Female Employment Rate (FER)**
This is the most important independent variable for this study. It is the percentage of employed women over the whole female active population (ages 15-64). To be considered employed ISTAT’s definition requires that a person must have been enrolled during the reference week in at least one hour of paid work, or unpaid if usually working in the family business. If not working on the reference week one individual can still be considered employed if her absence from the working place is not longer than three months, or if during her absence she still gets at least 50% of her salary. Self-employees are counted in if they are maintaining their business during their absence.

**Percentage of children born by foreign mothers (Foreign mothers)**
This variable is used in order to measure the effects of immigration on the correlation between TFR and FER. ISTAT has no official definition to identify immigrants or individuals with immigrant background. Anyone who is not an Italian citizen is considered a foreigner. Since Italian law requires ten years of residence in order to obtain the citizenship, and because mass immigration is a quite new phenomenon in Italy (Salucci 2009), this should not affect the reliability of this data.
Percentage of civil weddings over all weddings celebrated that year (Civil weddings).
This variable is used in order to measure secularisation and the differences in cultural attitudes throughout the Italian provinces. I have chosen this variable because marriage is still considered an important prerogative to childrearing in Italy (Del Boca and Repetto-Alaia 2003) and also because the data are available for all 107 territorial units in 2009. The percentage of civil weddings gives an idea of cultural attitudes in the overall population.
Marriage in Italy can be validated in two ways: In front of the judicial authority or during a ceremony by a government-recognised religious society. The state of matrimony between two individuals of the opposite sex is currently the only formal union considered by the Italian legislation. Other forms of civil unions do not exist on a nation-wide level and therefore only marriage is considered in Italian statistics. This is the only variable available on provincial level in order to measure secularisation. It would have been better to have more specific variables, for example out of a survey, but this has not been possible to find.

Mother’s age at childbirth (Age).
This variable is used in order to control for fertility postponement. It is the mother’s mean age at childbirth.

The most used variable in the majority of studies and essays is female labour participation (FLP), although the definition is somewhat ambiguous. Some might include both employment rate and unemployment rate in FLP, while others may consider only employment in FLP. I have decided to use statistics regarding the quota of employed women since most of the theoretical framework discusses employment and without considering unemployment. Thus the nomenclature female employment rate (FER) is preferred out of a more correct theoretical starting point.
Reports about Italians’ attitudes towards religious and family values come from a recent survey by Centro Studi Investimenti Sociali (CENSIS, Center for Social Investments Studies), called I valori degli Italiani 2012 (The Italian people’s values 2012). Another important report from CENSIS is Rapporto sulla situazione sociale del Paese 2008 (Report of the social situation of the country 2008).
Maps and images used in this study come from Wikipedia’s Wikimedia Commons Database since most of images and pictures on Wikimedia can be freely used. Copyright licencing has been checked for all images contained in this study.

**Past empirical research**

A few studies have focused on fertility in Italy. Del Boca (2002a) studied the effect of childcare and part-time jobs on fertility decisions. The conclusions were that Italian mothers find it hard to conciliate career and childrearing due to limited availability of part-time employment and childcare (Del Boca 2002a). Public childcare positively affects the decision of working and having a child at the same time but also the presence of other relatives, who might contribute to informal childcare, increase this chance (Del Boca 2002a). Del Boca (2002a) finally states that more flexible employment relationships would make market work more attractive to women.

Childcare choices in Italy were even discussed in a study in 2005 (Del Boca et al. 2005). Their result was that Italian women have to rely on formal childcare in order to compensate a relatively short parental leave, the number of children is positively affected by the presence of public childcare while that the presence of a close relative living nearby decreases the use of private childcare (Del Boca et al. 2005). Informal childcare would also been preferred ahead of private childcare if public childcare became more expensive (Del Boca et al. 2005). Nevertheless mothers with higher education tend to prefer the choice of public and private childcare despite informal childcare (Del Boca et al. 2005).

Many studies suggest a negative correlation between TFR and FER: Bratti (2003) analyses the impact of education on labour force participation and marital fertility of Italian women. Bratti (2003) states that strong institutional rigidities regarding the employment market makes female employment unattractive to women who desire to have children, making men the breadwinners. Therefore he finds Del Boca’s (1997) definition of the traditional family model more appropriate in the Italian context (Bratti 2003). He also assumes that the husband’s income affects women’s reproductive decisions (Bratti 2003). Consequently, he includes variables according to the Easterlin model into the study’s analysis (Bratti 2003).
The conclusions are that higher education increases female employment but does not affect women’s fertility, since highly educated women tend to postpone childbirth at first but better job positions and career enables them to afford having children (Bratti 2003).

Even Modena et al. (2011) study the effects of employment and economic insecurity on fertility planning in Italy. The persistence of the male breadwinner model is confirmed since job instability has a significant negative effect on women’s propensity to childbirth, while it is not significant for men (Modena et al. 2011). Job instability is defined by the multitude of flexible working contracts created in recent years in Italy in order to encourage female and youth employment (Modena et al. 2011).

They notice that although employment rates have been rising in these two categories, the lack of social protection, in form of maternity or sick leave, has restrained women’s possibility to childbirth (Modena et al. 2011).

White et al. take a deeper look into regional differences in fertility in Italy in a study from 2007. They take into account the strong socio-economical differences between the more secular north, where divorce rates and FER are higher, and the more conservative south (White et al. 2007). They find the cause of these differences in the fragmentation of Italy, until 1861, into several different states with different languages and costumes (White et al. 2007).

Using data from the Italian Households Panel, they analyse fertility attitudes towards first and second birth by Italian women from three different areas, the Northwest, the Centre and the South (White et al. 2007). Their results were that there are significant differences in birth attitudes between north and south in simpler models but there is no explanation when controlling for other variables, thus calling for more accurate research on the cultural aspects of regional differences (White et al. 2007).

Caltabiano (2008) has also studied the differences between Italian regions regarding the fertility decline experienced during the past decades. Analysing age-specific fertility rates he notices that fertility decline has stopped in north Italy with an increase in fertility of cohorts born in the 1970’s and persisting even for the first cohorts of the 1980’s (Caltabiano 2008).

In south Italy, on the other hand, the fertility decline continues for cohorts born in the 1970’s and no clear development has been shown for those born in the 1980s (Caltabiano 2008). However, differences emerge between the different regions of
southern Italy, with Abruzzo and Molise showing tendencies closer to northern Italy (Caltabiano 2008). The conclusion confirms the disparities between Italian regions in fertility, which stem from the socio-economical gap between the north and the south (Caltabiano 2008).

Importantly for this study, Rondinelli and Zizza (2010) have observed, plotting the different Italian regions, a reversal, from negative in 1993 to positive in 2008, of the correlation between female labour participation and fertility. Analysing different multiple regression, it is noticed that women in southern Italy have more difficulties conciliating work and family (Rondinelli and Zizza 2010). This suggests a similar development in Italy as in macro-studies regarding the correlation between TFR and FER, and between the north south divide where the correlation may differ.

**Hypothesis**

According to the theoretical framework and previous research, it is expected to find a difference in the correlation between FER and TFR from the two defined areas: the North-Centre and the South-Islands, as past research suggests. My hypothesis is that the correlation will be more positive in the North-Centre and more negative in the South-Islands. This means that the correlation does not need to be positive in the North-Centre nor negative in the South-Islands, as this hypothesis concerns only the difference between these two areas.
Analysis

Table 6 presents four regression analyses for the North-Centre, while table 7 presents four regression analyses for the South-Islands. The interaction between the models has been controlled and it is significant.

Table 6: FER and TFR in the North-Centre: Regression analysis

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>FER</td>
<td>0.010**</td>
<td>0.005*</td>
<td>0.006*</td>
<td>0.006*</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Foreign mothers</td>
<td>0.011**</td>
<td>0.002**</td>
<td>0.010**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Civil Weddings</td>
<td>-0.002</td>
<td>-0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>-0.020</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.031)</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.899</td>
<td>0.903</td>
<td>0.916</td>
<td>1.569</td>
</tr>
<tr>
<td></td>
<td>(0.128)</td>
<td>(0.108)</td>
<td>(0.107)</td>
<td>(1.010)</td>
</tr>
</tbody>
</table>

Tab. 6. Significance at † 90%, * 95%, ** 99%. Standard errors in parenthesis

Table 7: FER and TFR in the South-Islands: Regression analysis

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>FER</td>
<td>-0.011**</td>
<td>-0.014**</td>
<td>-0.014**</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Foreign mothers</td>
<td>0.014*</td>
<td>0.014*</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.004)</td>
<td></td>
</tr>
<tr>
<td>Civil Weddings</td>
<td>-0.001*</td>
<td>0.000</td>
<td></td>
<td>-0.159**</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.001)</td>
<td></td>
<td>(0.021)</td>
</tr>
<tr>
<td>Age</td>
<td>1.639</td>
<td>1.663</td>
<td>1.664</td>
<td>6.226</td>
</tr>
<tr>
<td></td>
<td>(0.085)</td>
<td>(0.078)</td>
<td>(0.079)</td>
<td>(0.613)</td>
</tr>
</tbody>
</table>

Tab. 7. Significance at † 90%, * 95%, ** 99%. Standard errors in parenthesis

The first model is a simple linear regression between TFR and FER. It is interesting to see that in the North-Centre (fig. 2) there is a positive and significant correlation while in the South-Islands (fig. 3) there is a negative and significant correlation. This is also clearly visible in the plotted regression graphics with the regression lines from the statistical program SPSS.

The second model controls for the percentage of children born to foreign mothers. The correlation between TFR and FER weakens but remains positive and significant in the North-Centre while it gains strength and remains negative and significant in the
South-Centre. It is interesting to notice that the variable for foreign mothers is positive and significant in both areas, this means that foreign women have more children. However since the estimate for FER becomes weaker, it suggests that they also work more due to the fact that there is a positive correlation between FER and TFR.

The third model controls for the percentage of children born to foreign mothers and the percentage of civil weddings performed that year. The correlation gains some strength and remains positive and significant in the North-Centre while the effect of foreign mothers weakens but remains positive and significant. On the other hand the variable for civil weddings is not significant.

In the South-Islands the variables for FER and foreign mothers remain unchanged, while the new variable civil weddings is negative and significant. Civil weddings may indicate that in more secularised provinces in the South-Islands women have fewer children since the negative correlation between FER and TFR does not change.

The fourth model controls for the percentage of children born to foreign mothers, the percentage of civil weddings performed that year, and the mother’s age at childbirth. In the North-Centre the correlation between TFR and FER and the control variable for foreign mothers remain positive and significant. On the other hand the control variables for civil weddings and the mother’s age are not significant. In the South-Islands the correlation TFR-FER and the control variables foreign mothers and civil weddings lose significance. Nevertheless the new control variable for age is negative and significant.
Discussion

The results for model 1 support the hypothesis. The correlation is positive in the northern part of the country, and negative in the southern. Rondinelli and Zizza (2005) wrote about an inversion from negative to positive when taking into consideration the whole country with help of all 20 Italian regions. Although now, thanks to the data of 107 provincial units, we can see that this inversion is not equally implemented all over Italy. However, this situation does not seem static. Caltabiano’s remark (2008) on Abruzzo and Molise’s changing towards more northern Italian-like demographic pattern seems to confirm this.

Besides, surveys have shown that women in south Italy find it more difficult to conciliate work and childrearing than women in the northern part (CENSIS 2007). It appears that southern Italy is yet to fully enter the second demographic transition, due to the fact that in those provinces where women work more, they have fewer children. Caltabiano’s study (2008) give strength to this assumption since he finds that cohort specific fertility rates have started to rise in north Italy, while there is no sign of this in the South.

Becker’s new home economics is more relevant for the south Italian case, since it appears that women are obliged to chose either to work or have children. In an economically unstable south, women are still trapped into the male breadwinner model confirmed by Modena et al. (2011). On the other hand, Becker’s theory does not to seem to apply as well in the north. Nevertheless, the Easterlin model suggests that higher FER raises the household’s income and, combined with a higher presence of childcare possibilities, makes the correlation with TFR positive (Del Boca and Locatelli 2005) and even when controlled for children born to foreign mothers the results do not change. Despite Bratti’s (2003) interpretation of Del Boca’s (1997) traditional family model, it seems to really only apply to southern Italy.

The percentage of civil weddings used to measure the provinces’ level of secularisation, which shows significance only in the third model for South-Islands, indicates that women living in more secularised provinces have less children. This agrees with White et al.’s (2007) and Del Boca and Locatellis’s (2005) assumption of a higher level of conservatism in the southern part where normative beliefs still see women and mothers as the best caretaker for their children, hence the negative correlation between TFR and FER. According to Ajzen (1991), norms affect
an individual’s will and behaviour and therefore I assume the presence of two different norms in Italy: One set of norms in the north, where women can work outside the household and have children at the same time, and another one in the south where women must decide between either working without children nor having children without working.

When controlling for the variable age in the South-Islands, a fertility postponement mechanism is suggested: Working mothers have supposedly children later in life since they have to gain resources in order to afford childrearing. This leads to lower TFR in the South-Islands. This is not happening in the North-Centre, where it appears easier for them to conciliate work and childrearing; hence, they do not need to postpone fertility as much.

Albeit the interesting results from this study, it is important to point out the fact that many important variables are missing. It would have been interesting to have access to other control variables such as education level, income, the use of childcare and surveys about the attitudes of Italians towards religion or norms. Although whenever this data even was available, it has never been possible to find it on provincial level in order to use them in the regression analysis.

Surveys from CENSIS, in the regards of questions about religion and family values, are too vague for fully reflecting norms and values, especially when these values are used in order to explain the outcome of the analysis. When doing this, Ajzen’s theory is implemented, although its use is rare in demographic studies (Billari et al. 2009), in an effort to try to use new theories. Becker’s theory, on the other hand, is very used in demographics, though its rationalisation of the male breadwinner model can seem out-dated nowadays.
Conclusion

It is now clear that the north south-divide in Italy is yet again given proof of by the different fertility patterns present in these two areas. This divide is due to conservative norms and socio-economical backwardness in the south, which affect women in their choices regarding work and childrearing. Women in the south are forced to a fertility postponement as suggested by previous empirical studies.

The fact that the correlation between TFR and FER is positive in the north and negative in the south is of great scientific interest. However many questions remain unanswered and are for future researchers to find.

This study has been focused on macro level data. It has not been possible to find all desired variables at a provincial level and thus weakening the whole analysis. It would be interesting for future research to focus on micro level data, in the sense of understanding fertility decision in both north and south Italy on a more individual level. This result also calls for new studies and perspectives in order to explain the Italian case and the outcomes of the second demographic transition. It is not sufficient to use a cross-national comparison, as big variations are present in one country, like Italy.
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