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Fertility, Full-time and Part-time Female Employment in Europe

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Abstract

This paper aims to analyse the relation between women's employment patterns, more specifically part-time employment, and fertility trends in European countries, using Eurostat data. It is argued that this approach sheds an innovative light on the debate. The issue of part-time employment is put into perspective in the context of family policies and gender relations.

The fertility/employment relationship shows that the overall positive association between fertility and female employment is a consequence of the importance of part-time employment and is not related with full-time employment. Therefore, the change in sign of the fertility employment association after the 1980s could result from the increasing diversification of the labour market.

Keywords: fertility, female employment, part-time employment, full-time employment.

Introduction

Demographic changes taking place in the last decades are among the most prominent structural social trends both in contemporary Europe and other parts of the developed world. Alongside longer life expectancy, the main driver of such changes is the widespread decrease in fertility rates, bringing fertility below replacement levels in many countries.

The causes and consequences of low fertility cover different policy and social fields, from trends towards individualisation and uncertainty, changes in family life and gender relations, to transformations and challenges in labour markets and social protection. However diverse and complex, its deep implications have resulted in growing public visibility and concern; as a result the conditions for family formation and decisions have been the object of increasing academic, social and political debate over the last few decades.

Changes in labour markets and employment patterns (such as greater and more equal participation by women or pressures for flexibilisation and rising precarious and atypical employment), combined with a wide array of structural changes, have also created renewed and complex needs for reconciling work and family projects. This is why research on the relation between employment patterns, especially women's participation in the labour market, and family and fertility issues has flourished.

In short, this paper aims to analyse the relation between women's employment patterns, more specifically part-time employment, and fertility trends in European countries, using the most recent Eurostat data from 2006 to 2010. It is argued that this element sheds an innovative light on the debate in the context of family policies and gender relations.

Family policies and part-time employment

Family policies have been the focus of increasing attention in policy debates. Different types of family policy have been assessed to deal with new challenges that span from new care needs related to ageing, to the conciliation of family and work in labour markets with increasing participation of women, as well as family support and

protection in general. These issues encompass an array of fields, from social services and family support to employment, labour market and social security policies.

Not least of all, we have witnessed the revival of fertility as an autonomous policy topic. This in itself is a remarkable development given the problematic status of the issue. Fertility has often been portrayed as a standard model of private matter, which concerns the decisions and family lives of individuals and should therefore be left outside the public – and public policy – realm. Pitrou (1996) has, in turn, argued that family policies in general have had a clearly natalist root and a resonance often associated with a conservative bias and the defence of traditional family models. The historical experience of the Nordic countries seems, of course, to suggest that the picture is much more complex. But it is true that fertility has tended to be absent from the political landscape of most European countries and, often in the context of wider population policies, has been the object of negative connotations with forms of social engineering in developing and non-democratic countries – the most notorious example being the restrictive and authoritarian policies in China.

Partly on account of the worsening demographic conditions and prospects, these connotations seem to have softened and fertility has gradually re-entered public debates. This return has at least three features of note. First, fertility stands as an autonomous policy topic, due to increasing public concerns. Second, despite continuing ethical and ideological implications, this autonomy and the underlying concern have weakened the link between fertility and moral discussions about family or sexuality in favour of a more pragmatic debate, (Ellingsaeter and Leira, 2006). Third, the debate is not exclusively centred on a specific issue (such as family support, social services or other topic), but on a broad array of factors that may influence fertility decisions and patterns, as expressed earlier (Thévenon, 2011; Neyer, 2006; Neyer, 2003).

The complexity of these interplays and the “heavy” structural nature of demographic trends common to many countries (even outside Western societies), as well as the visible difficulties in reversing declining fertility levels, have led different authors to defend that the effects of policies are non-existent or, at best, very limited (Gauthier, 2007; Demeny, 2005; Demeny, 2003; Demeny, 1986). However, this argument seems to fail in light of the diversity of national situations; and if, as Kohler, Billari and Ortega (2006) have argued, fertility postponement is a rational response to the uncertainty of socioeconomic environments, why shouldn't changes in socioeconomic contexts via

policies transform the conditions for such decisions? For example, Bjorklund (2006) has argued that policies can create better conditions for anticipating fertility decisions and shortening spacing between births, possibly resulting in the rise of fertility levels. However, if this and other findings are arguably open to discussion and further research, it seems to be clear that the complexity and far-reaching and diverse nature of factors influencing low fertility prevents isolated measures from having strong impacts, making room for more integrated policy debates.

This also implies that the fertility debates have helped spread the limits of how family policies are traditionally conceived. Even though they have long been seen as linked to different policy fields, arguably fertility concerns have strengthened the links to labour market and social protection as well as fiscal issues.

Thus, if family policies are divided into different types of measure and different typologies can be used (Neyer, 2003; Hantrais, 2004), one can have stricter or wider criteria for defining family policies, depending on the decision to focus on family support or to include labour market and other fields. In the debate on fertility, it is useful to broaden the discussion so as to involve the different fields that impact on families and their conditions for having children.

- Social services: direct (public services); indirect (subsidies for institutions; subsidies for families)
- Subsidies or cash benefits (for family members (family benefits, child benefits, childcare, dependency or care benefits, vouchers for specific expenses; lump sums per birth); for institutions (such as NGOs) or professionals providing care)
- Fiscal bonuses or deductions for families (equivalent to indirect subsidies through fiscal policies); tax exemptions and special rules for institutions (non-profit or/and market-oriented)
- Parental or family leave: maternity, paternity, other care leave (Moss and Deven, 2006; Moss and Deven, 2002; Moss and Deven, 1999; Math and Meilland, 2004; Deven and Moss, 2005)
- Labour market policies: flexible vs. rigid working time – company-oriented or "combinatory security"; incentives for part-time jobs (Tangian, 2009; Tangian, 2010).

Other policies could be included in the list, such as housing policies or the range of policies revolving around sexuality and "fertility regulation", with links to both moral and public health debates – family planning, abortion laws, artificial fertilisation and related areas.

The diversity of policies is of course mirrored by a plurality of situations concerning policies actually in place; moreover, fertility rates, albeit all under desirable levels, do in fact vary. Different typologies linked to debates about "models" are now well established and common in the literature on social protection, welfare state or even capitalism models (Arcanjo, 2006; Esping-Andersen, 1989; Hall and Soskice, 2001; Hantrais, 2004; Mätzke and Ostner, 2010).

Moreover, and even though a structural common trend can be observed, country situations are significantly different. In most countries of Southern Europe, with Welfare States developed less or more recently, tradition or the incapacity of the State have meant that the family has remained largely responsible for childbearing solutions, particularly burdening women; on the other hand, in many northern European countries, "family-friendly" policies have been implemented that focus on different aspects, but mainly aimed at reducing the incompatibility between motherhood and employment for women. Diversity is also noteworthy with Nordic investment in social services enabling women to work after child birth, which has very different implications vis-à-vis the need to reduce labour market participation or part-time employment.

On the other hand, in almost every European society, women's participation in the labour market has increased, resulting in a double burden for women when policies and gender relations (namely concerning the division of work between men and women) do not keep up with this structural change. This double burden has often been associated with the current low fertility in Europe in relation to that of past decades. In this context, debates about conciliation between work and family life have become core academic and public policy issues.

As the abovementioned examples highlight, different conciliation modes and policies do exist. The availability of childcare in the first years of life has been noted as one of the most important points for the conciliation between work and family, as it promotes participation and more autonomy for women. An alternative to these are the "cash-for-care" policies which consist of subsidies for family carers, going well beyond childbearing to care for the elderly, disabled and in cases of dependency, chronic-

disease and other health-related long-term care (Glendinning and Kemp, 2006; Gulbrandsen, 2009; Himmelweit, 2008; Himmelweit and Land, 2007; Himmelweit and Land, 2008; Roit and Bihan, 2010). Labour market flexibility, in particular flexible working time arrangements linked to care and family responsibilities (labelled "combinatory security" in the context of flexicurity debates, see above) are also part of debate. Another approach to conciliation that is of particular interest here is that of part-time jobs.

Before turning to that specific reconciling strategy, it is important to stress that these solutions have very different implications from the point of view of public policy, the boundaries and relationship between the institutional spheres of the State, market, civil society and families, labour market configurations (e.g. employment rates, female employment) and, not least, gender equality both in private and market domains as mentioned by Thévenon (2009). All aim to solve the difficulties of combining work and family, but they do so by resorting to very different instruments and paying tribute to ideological or other options. We propose clarifying our perspective of part-time employment by dividing different conciliation policies into "positive and negative conciliation" policies. By "positive reconciling policies" we mean solutions that allow the true reconciliation of both worlds without sacrificing significant parts of either: individuals, men or women, are able to combine full, or close to full, involvement in both spheres, e.g. participating in the labour market in line with aspirations and projects without having to sacrifice family projects and desires, and vice versa. "Negative conciliation" implies that in the name of involvement in one sphere, there is no full involvement (if any at all) in the other, therefore imposing a trade-off between labour market participation and family projects, aspirations and responsibilities. For example, a person quits a job or reduces involvement in the labour market in order to provide adequate care for children or other relatives; or a person does not feel like having children or even decides not to have them at all, in order to pursue his or her career.

Networks of available, affordable and quality full-time social services (public or not) are one of the best-known positive conciliation policies. Equally, stronger forms of flexitime in the context of "combinatory security" that allow workers wider margins of interplay between family and work can be included. On the contrary, leaving the labour market in favour of family care (or having to reduce family involvement in the name of labour market participation) fall under the latter, as do many "cash-for-care" policies.

Part-time employment is also a solution that comes under the category of "negative conciliation", since it represents a "trade-off" between employment and family. It substantively represents a reduced involvement in the labour market, albeit in a moderate form, and it is especially so when it corresponds to a possible solution rather than to people's wishes. European data suggest that part-time work is not a desired solution (Boeri et al., 2005: , 102) but the possible outcome of reconciling needs under conditions (financial, labour market or other) that do not leave individuals – notably women - much alternative. Either way, undesired or desired solution, it means a lower individual income, less autonomy (or even well-being, namely in the case of single parents) and worsened career prospects in comparison with full-time employees –, pointing to a "negative conciliation".

For the purposes of this article, fertility and, female employment are two parts of the same demographic portrait, and they are naturally integrated in the individual's life cycle decisions. Therefore, in the context of the debate about the nexus between fertility and female employment, we will analyse the relationship between part time and full-time employment and fertility levels, in order to establish grounds for discussing the implications of these issues on sociological and public policy terms.

Women's participation in the labour market and fertility

The relationship between fertility and female employment is a well-known topic in demographic research. The traditional view pinpoints the negative association between motherhood and women's work. Whether as a consequence of the "incompatibility" between the motherhood and work roles, or parent's decisions on how many children are considered to be economically "rational", the opportunity costs for female employment are particularly significant.

This perspective is focused on the negative association, since there are causal effects in both directions between women's work and fertility. Fertility reduces the probability of having a paid job, and simultaneously employment increases the difficulty of raising children. Plus, both fertility and female employment are influenced by other societal factors, such as educational levels, cultural background, etc. The opposition between the model of male breadwinner and a dual-earner couple brings implications both on the desired family size and the woman's role in the family.

For both views, the focus is on the relation between employment and fertility at the individual level, since childbearing decisions are taken at this level. However, at an aggregate level, the correlation between fertility and female employment reversed from a negative sign to a positive value during the 1980's. At present, the association between fertility and women's labour is positive in the OECD countries - the regions with higher female employment tend to have higher fertility (Luci and Thévenon, 2010; Brewster and Rindfuss, 2000; Sleebos, 2003). At a macro level, this shift in the fertility-employment relationship has been the subject of numerous debates. Several studies reveal that this positive association observed at the macro level is not the same if the observations are individual (Engelhardt et al., 2004).

The female employment-fertility link became a major topic of research partially due to this shift in the correlation sign. Some of the studies focus on this relationship at an individual level and others at a macro level.

For individuals the relationship is more ambiguous. While the relation between fertility and female employment is negative in several studies, in others, the association is positive: a meta-analysis based on studies with individual data found a major variation in the effects of female employment depending on the institutional structures (Matysiak and Vignoli, 2008).

On the other hand, at a macro level, the studies tended to focus their attention on the econometric specification of the analysis. From this perspective centred on methodological questions, we can pinpoint several studies: the time-series analysis where no change was found in the relationship after controlling for regional diversity (Kögel, 2004); the Granger causality tests between fertility and women's work which found that a negative relation until the 1970's had subsequently weakened (Engelhardt et al., 2004); the panel data specification that reveal an initial negative effect that had thinned and become insignificant (Engelhardt et al., 2004).

As we can see, current research has identified a significant change in the traditional association between fertility and female employment, both individually and from a macro level perspective.

This change in the fertility-employment association could be the result of increasing family-friendly settings that reduce the incompatibility between the role of mother and worker. In fact, the incompatibility between the mother's and worker's roles can seemingly be diminished by the implementation of family friendly policies. These social

policies can focus on a wide-range of issues: promoting a more equal division of the parental cost by means of favouring male participation in childbearing; providing incentives for women's re-entry in the labour market; promoting part-time jobs and/or flexible work hours; creating financial and tax incentives for childbearing; and also the implementation and support of childcare.

Childcare availability, acceptability and cost are essential to reduce the potential conflict between female employment and motherhood. In most European countries, the use of childcare has become increasingly prevalent as female employment increases.

More equalitarian gender relations, more flexible work-hours from the point of view of workers, as seen above, and availability of affordable childcare are important factors to reduce women's double burden. On the other hand, it can be said that part-time employment is a more traditional solution, still incorporating elements of "negative conciliation": unlike childcare, it increases the compatibility between family and work roles for women, but participation in the labour market remains unequal and the family household tasks remain a woman's duty, since the work status and income are not uniformly distributed between both parents. In short, women's part-time employment seems to be an intermediate solution between the traditional male breadwinner model and the dual-earner couple, because part-time employment for women results in a new-traditional way of renewing the long-established and unequal family relations where part-time employees (often women) are less involved in the labour market so they can cope with family responsibilities.

Female Employment in Europe

In most European countries, increasing levels of female employment became a major trend as the proportion of women engaged in the workforce increased. At least half of the women in almost all European countries are engaged in work, although this participation in the labour market is still very diverse, ranging from very significant percentages in the Nordic Countries, Switzerland, France, Germany, Portugal, Austria, Poland and United Kingdom, to less significant percentages in South European countries like Spain, Italy and Greece. Despite the diversity within the current European context, this variety of female participation rates is unmistakably higher than in the past. This diversity is obvious in several aspects. Let's consider the age pattern of female employment. The Mediterranean, the former communist and the Nordic countries have

distinct age patterns for female employment. The Nordic countries show the highest proportion of female labour during almost all the life cycle. The western European countries reveal significant ratios of female employment, but these ratios tend to be lower among those aged 35 or more than in the Nordic countries. Mediterranean countries have the lowest levels of female employment (except for Portugal and Cyprus), and the ratios tend to be lower at younger ages than in the Western and Nordic countries. The former communist countries have distinct levels of female employment, but they have a common feature – the marked trend towards a higher labour ratio as age increases.

We can compute the correlation between fertility (total fertility rate) and the female employment ratios at different ages, in order to understand the association between these two factors.

Table 1 - Correlations between Fertility and Female Employment at different Ages (2006-10)

Age	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Correlation	.571**	.514**	.477**	.395*	.279	.241	.291

Notes: * p<0.05; ** p< 0.001;
Source: Eurostat

Although always positive, the correlations between fertility and female employment rates, at different ages, are not always significant. They are significant and higher only when women are aged between 15 and 35 years; this means that the country's fertility level is not strongly influenced by the employment level at older ages.

In addition to age patterns, there is another key factor that differentiates female employment in Europe: the size of part-time labour. In spite of the increasing trend towards paid labour by women, the global female employment rate conceals a strong diversity of forms of professional commitment, as also stressed by Thévenon (2008).

Part-time employment is common in some countries, particularly in the Netherlands; in other countries part-time jobs are rarely used. In table 2 and Figure 1, we can compare the female employment rates at a global level, and in both situations: part-time and full-time.

In this analysis, the part-time employment rate is the percentage of women in part-time jobs as a proportion of working age women (employed and not employed). It is not the ratio between part-time employed women and all employed women, as in some other analyses (Sleebos, 2003). We believe this is a more fruitful approach since, if we used the percentage of employed women working part-time, the results would be dependent on both the real relative number of women in part-time work and also on the total number in work regardless of the type. In short, this is the only way to clearly identify the significance of the relation of part-time and full-time employment with fertility.

This analysis is based on Eurostat's statistics on female employment, namely on the EU Labour Force Survey. The female employment rates used in this study refer to women aged between 15 and 39 years in part time and full-time work. The Eurostat database definition of part-time relies on women's self-categorisation of their status in the survey (i.e. not on a specific definition of the number of working hours).

The ideal choice would be to work with the part-time and full-time female employment rates for the entire range of fertile ages (between 15 and 49 years) or for the ages between 15 and 34 years old, as these are the most important for the correlation with employment, as seen above. However, given that the Eurostat data does not aggregate part-time and full-time employment in these age ranges, it is preferable to use the 15-39 age spectrum, as this is the most fertile age group and, simultaneously, when the correlation between female employment and fertility is strongest.

Nonetheless, it is important to stress that it has not been the usual option in previous studies on the fertility-employment relationship. For comparative purposes, we present another correlation analysis in annex 2 using the overall employment rates for part-time and full-time in all active ages (15-64). The trends resulting from this analysis are almost the same as those presented in this text.

In these 30 European countries, the total employment rate for women aged between 15 and 39 years ranges from 47% in Italy and Hungary to about 75% in the Netherlands, Iceland and Denmark. The total female employment rate is clearly dependent on the part-time component. Globally, it is the countries with more part-time employment for women that have higher female employment rates (table 2).

Table 2 – Female Employment (total, part-time and full-time) and Fertility in Europe (2006-10)

	Female employment	FE in Part-time	FE in Full-time	Fertility (TFR)
Austria	67.8	26.1	41.7	1.41
Belgium	56.7	19.7	37.0	1.83
Bulgaria	52.0	1.1	50.9	1.47
Czech Republic	50.6	4.4	46.2	1.45
Denmark	74.5	31.1	43.4	1.86
Germany	61.4	23.1	38.3	1.37
Estonia	54.3	6.7	47.6	1.62
Finland	62.3	15.6	46.7	1.85
Ireland	60.7	16.0	44.7	2.03
Greece	48.7	5.3	43.4	1.46
Spain	56.4	13.3	43.1	1.41
France	56.7	16.0	40.6	1.98
Iceland	74.9	27.0	47.9	2.15
Italy	46.7	13.7	33.0	1.39
Cyprus	63.7	6.1	57.6	1.45
Latvia	55.9	5.0	50.9	1.34
Lithuania	54.1	4.7	49.4	1.45
Luxembourg	57.1	15.6	41.5	1.62
Hungary	47.1	2.8	44.2	1.32
Malta	50.4	9.7	40.7	1.40
Netherlands	76.2	54.1	22.0	1.76
Norway	71.7	32.3	39.4	1.94
Poland	51.8	5.6	46.3	1.35
Portugal	61.6	5.8	55.9	1.35
Romania	50.9	4.2	46.7	1.34
Slovenia	65.1	9.0	56.0	1.46
Slovakia	48.3	1.9	46.3	1.32
Sweden	64.4	27.3	37.1	1.91
Switzerland	72.1	33.9	38.1	1.47
United Kingdom	63.8	24.5	39.3	1.91
Average	59.26	15.39	43.87	1.59
Standard Deviation	8.63	12.21	7.07	0.25
Coefficient of Variation	14.6	79.3	16.1	15.9

Source: Eurostat

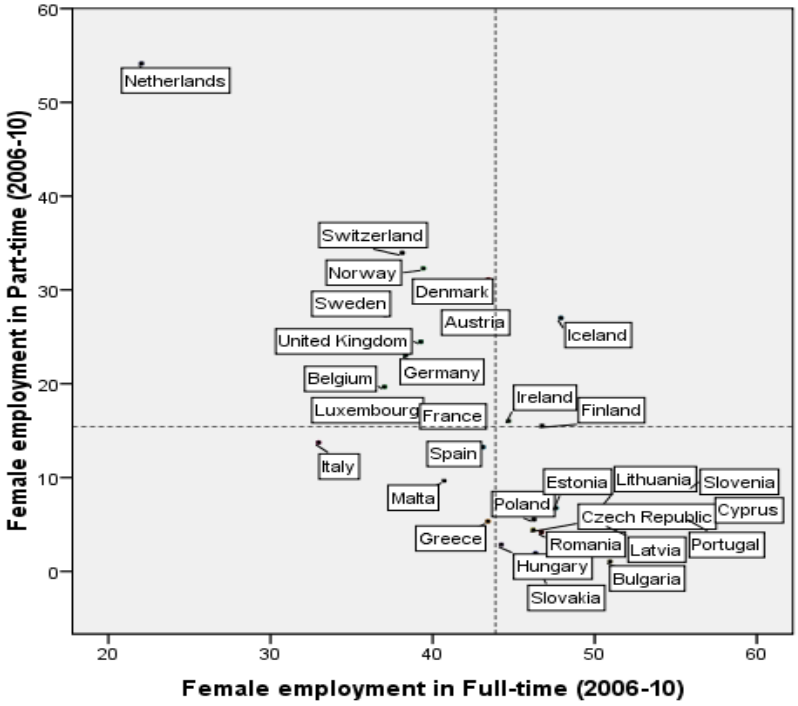
In some countries, these figures included a significant number of part-time jobs while in others this situation is unusual. For instance, in the Netherlands more than half of the women at these ages work part-time; this compares with about 30% in Switzerland, Norway, Denmark, Sweden, Iceland and Austria, and over 20% in the United Kingdom and Germany. In contrast, some countries, particularly among the ex-Soviet bloc, have almost no part time work.

We can also look at women's full-time work in the same countries. The highest rates are found in Cyprus, Portugal and Slovenia - more than 55% - and the lowest is in the Netherlands. All the countries with the highest rates of full-time female participation in the labour market – above the European average – are eastern European (ex-Soviet

bloc) and, as we can see in Figure 1, Portugal and Cyprus; the situation of these two countries is quite distinct from that of other southern European countries, like Spain, Italy or Greece, where female participation in full time work is substantially lower (as well as part-time participation). On the contrary, we can find most of the western and northern European countries with higher employment rates in part-time jobs but lower rates for women full employment.

As we can see, there is more regional diversity in the importance of part-time employment than in full-time or total employment: the coefficient of variation reveals that the standard deviation is almost 80% of the average value for these 30 European countries. This dispersion measure is relatively small for overall employment and for full-time employment (the standard deviation is around 15% of the European average).

Figure 1 - Female Employment in 30 European Countries (2006-10)



Source: Eurostat

The countries' full-time employment and part-time situation is expressed in figure 1. It clearly demonstrates the strong negative association between these two different forms of female employment. Remarkably, the countries with higher rates of full-time female employment are those with the lowest rates of part-time female labour, and vice versa. The correlation between these two types of female labour is negative and quite strong (-

0.721) and significant at 1% level – see table 3). This implies that the macro-level relation between employment and fertility must be seen separately in each of these two forms of female labour: part-time and full-time employment.

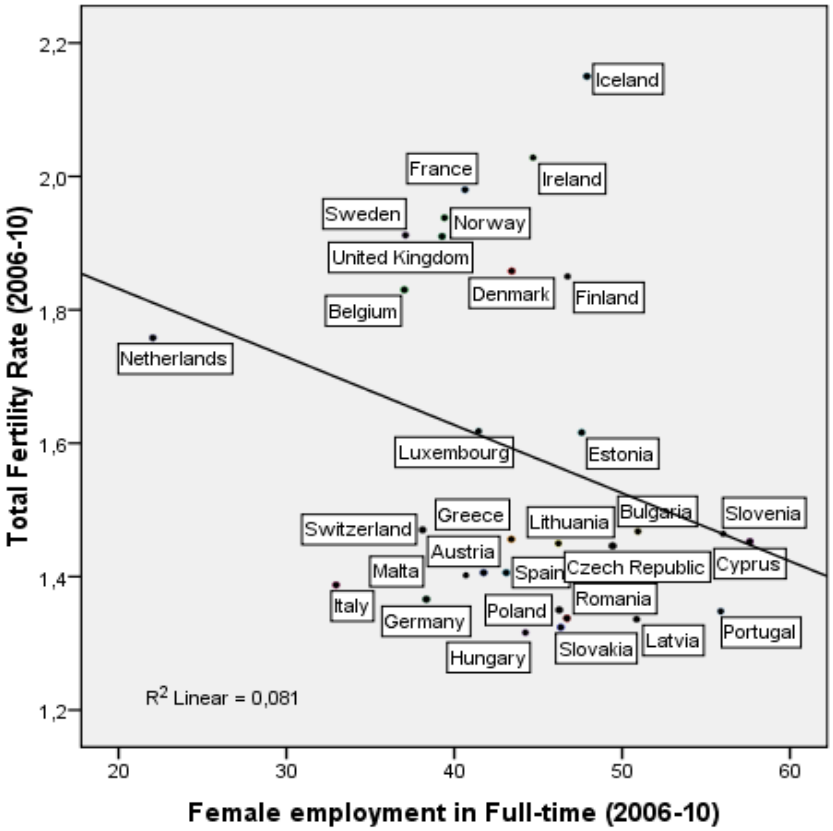
To sum up, there is quite marked geographical diversity in part-time employment, unlike the full-time labour and the total rate of female employment. On the other hand, the overall female employment rate is clearly associated with the importance of part-time labour. Simultaneously, the correlation between the two types of female employment – part-time and full-time – is negative and strong. As a result, the fertility and female labour relation must be analysed separately for each employment type, so that the current positive relation between fertility and female employment can be properly addressed.

The association between Fertility and Female Employment: Part-time and Full-time

An analysis of the association of fertility with women's part-time and full-time jobs in the European countries may shed light on this topic. We propose a breakdown of the overall relationship between female employment and fertility in two complementary analyses: the fertility bond with part-time jobs for women and the relation with full-time women's work.

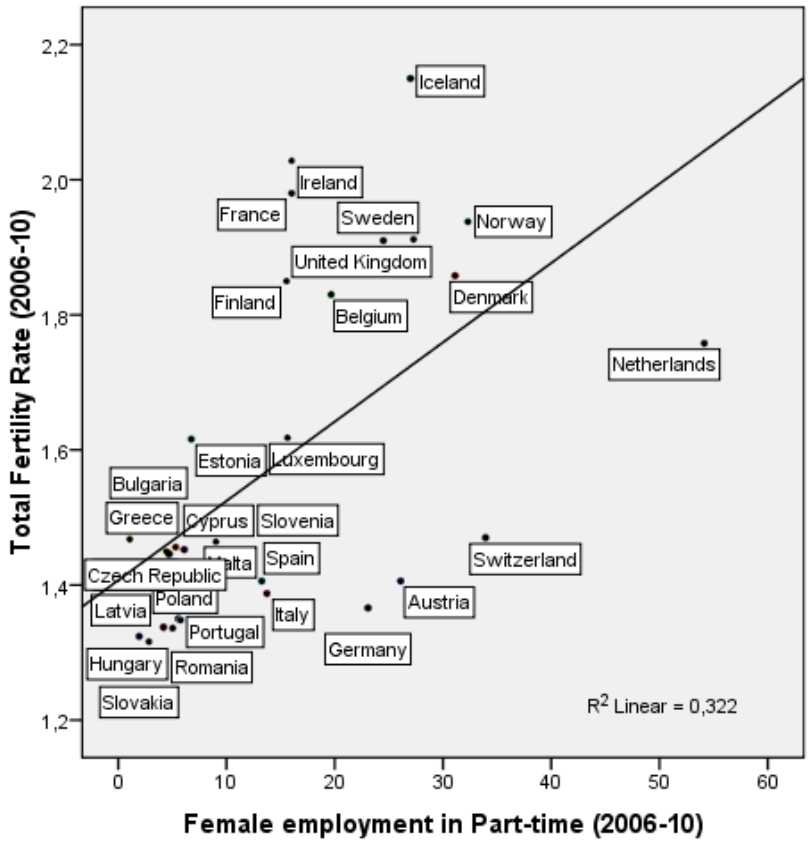
A first approach to this subject can be made by means of a correlation between fertility and both types of women's work in the recent period (Figures 2 and 3).

Figure 2 - Fertility and Full-time Female Employment (2006-10)



Source: Eurostat

Figure 3 – Fertility and Part-time Female Employment (2006-10)



Source: Eurostat

These figures show that the relation between female employment and fertility is unequivocally positive for part-time, but weak and negative for full-time female labour; this is confirmed by the correlation computed for the 30 European countries with current figures.

Table 3 - Correlations between Fertility and Employment in 30 European Countries (2006-2010)

	Total Fertility Rate	Female employment	FE in Part-time	FE in Full-time
Total fertility Rate (TFR)	1	.568**	.567**	-.285
Female Employment (FE)	.568**	1	.824**	-.201
FE in Part-time	.567**	.824**	1	-.721**
FE in Full-time	-.285	-.201	-.721**	1

Notes: * p<0.05 ; ** p< 0.001 ;
Source: Eurostat

As in the abovementioned previous studies, the correlation between fertility and female employment is currently positive and statistically significant: in 2006-10 the correlation between the countries' fertility level and the female employment for women aged between 15 and 39 years is equal to 0.568. At the same time, there is striking divergence between the association of part-time and full-time with countries' fertility rates.

The country fertility level and full-time female employment are not associated as the correlation is not significant (in fact, it is negative). On the other hand, fertility is significantly correlated with the proportion of women with part-time jobs - this correlation goes up to 0.567 – and with the overall female employment rate (0.568).

This outcome strongly supports the idea that the current positive correlation between fertility and female employment – discussed in previous studies – is determined by the extent of part-time employment in the European countries.

This means that it is in the countries with higher fertility rates that we find higher rates of part-time female participation in the labour market. But it also means that the positive correlation between fertility and women's participation is not due to it being easier to conciliate full-time commitment to work and the woman's childbearing role. On the contrary, fertility seems to be consistently associated with a higher share of part-time employment in European countries: a halfway position between the traditional housewife mother and the alternative working-mother models.

Nevertheless, the fact that the full-time female employment is not associated with fertility is relevant. At a country level, there is no evidence that fertility is currently being lowered by the difficulties of conciliating full-time work and motherhood. This warrants further study in order to shed light on the role of family policies in this conciliation between work and family.

In the current context of diversity, change and the transformation of both traditional roles and family support policies (Knijn and Saraceno, 2010), the relation of female employment with fertility has clearly been consolidated. However, the question of part-time and full-time employment is of particular interest in light of this diversity and the individual characteristics of each country as it reflects different ways of reconciling work and family life. It is even more pertinent when conjugated with the different approaches and studies that highlight the multiplicity of perspectives entailed by this relationship. In an analysis on the participation of women with children in the labour

market, Thévenon (2008) also mentions disparities between countries in terms of employment. Moreover, he notes that mothers are more likely to work "full-time" or "medium-time", and full-time employment tends to be less frequent among childless women. Although based on different assumptions from this study, Thévenon's findings underline the relationship of fertility with employment and with part-time employment in particular. Although we consider part-time employment as a negative form of conciliation, we must stress that this is the option that is associated with higher levels of fertility.

To sum up, without a positive or negative correlation with fulltime employment, the country level of fertility can only be associated with the prevalence of part-time jobs. This intermediate position in the labour market allows an additional increase for the countries' levels of fertility. Further research can probably associate this issue to a segment of women for which complete conciliation is not possible.

Conclusion

The low levels of fertility have been associated with numerous factors, such as the postponement of motherhood, the increase of job instability, high costs of the housing market, and the difficulty of conciliating family and work in particular. This is in a wider framework of socio-cultural dynamics towards individualisation, de-traditionalising and reflexivity, as well as gender equality, in which individual aspirations and autonomy tend to have an extended and reinforced presence in societal norms and values. Within this context, female employment has progressively become an established trend in European societies. However, a significant fraction of women still do not work in paid jobs – the percentage of non-workers goes from around 25% in Denmark, Iceland or Netherlands, to just over 50% in Italy and Hungary, Slovakia and Greece. The awareness of the strong trend towards higher labour participation of women also conceals considerable differences in the employment types in the European countries. Part-time jobs are available and are a real option in the life course decisions of the families in some countries; in others, the labour market is structured differently and decisions on children and jobs do not contemplate a mixed model between the male breadwinner and the dual-earner model.

The comparatively high levels of fertility in some European countries seem to be associated with the availability of an intermediate option for individuals and the availability of childcare.

This raises important and delicate questions. More equalitarian gender relations also in private life, more flexible work-hours and availability of affordable childcare are the most important factors to reduce women's double burden – not reducing involvement in either sphere of life so as to fully participate in the other and leading to a "positive conciliation" perspective. On the contrary, part-time employment is a more traditional solution than childcare: it increases the compatibility between family and work roles for women, but the family and household tasks remain largely a woman's duty and the work status and income are not uniformly distributed between both parents – what we have called "negative conciliation" in this text. Thus, women's part-time employment seems to be an intermediate or incomplete path between the traditional male breadwinner model and the dual-earner couple, because part-time employment for women results in new-traditional ways of renewing long-established family relations and patterns.

In short, the overall positive association between fertility and female employment is a consequence of the importance of part-time employment and is not related with full-time labour. Hence, the change in sign of the fertility employment association after the 1980's could result from the increase of family-friendly settings that reduce the incompatibility between the role of mother and worker, e.g. the increase in childcare availability, but it continues to be largely as a consequence of the diversification in the labour market.

This seems to point to the fact that full-time participation of women in the labour market and greater gender equality have not been fully incorporated into the institutional and policy framework of contemporary Welfare-States – leading to what Esping-Andersen (2009) has recently called "the incomplete revolution".

In many cases fertility decisions are still conditioned by labour market participation levels, in line with what we called "negative conciliation" strategies. Either by constraint or choice, and perhaps in more mitigated ways than in the past, it seems that resorting to a lesser involvement of women in the labour market continues to be a factor that affects and makes room for fertility decisions by families and individuals – at the cost of both women's autonomy and gender equality.

Thus, it can be said that the State, labour market actors and the society at large have not completed the path to adapting and recalibrating their public policies, their institutional and cultural frameworks in order to achieve a truly gender-equal society. In the context of permanent austerity that affects many developed countries and with economic and labour market pressures looming, the question remains open as to what path and which scenario will gain shape: continuing low fertility trends with full labour market participation, continuing higher fertility levels in contexts where women have a more partial involvement in the labour market, or the fulfilment of the promise of reconciling full labour market participation of both men and women with higher fertility levels.

References

Arcanjo, M. (2006). Ideal (and real) types of Welfare State. [Working Paper]. *Nº 2006-6*.

Björklund, A. (2006). Does family policy affect fertility? *Journal of Population Economics, 19*(1), 3-24.

Boeri, T., DelBoca, D., &Pissarides, C. (Eds.). (2005). *Women at Work. an Economic Perspective. A Report for the Fundazione Rudolfo Debenedetti*. Oxford: Oxford University Press.

Brewster, K., &Rindfuss, R. (2000). Fertility and women's employment in industrialized nations. *Annual Review of Sociology, 26*, 271-296.

Demeny, P. (1986). Pronatalist Policies in Low-Fertility Countries: Patterns, Performance, and Prospects. *Population and Development Review - Supplement: Below-Replacement Fertility in Industrial Societies: Causes, Consequences, Policies, 12*, 335–358.

Demeny, P. (2003). Population Policy Dilemmas in Europe at the Dawn of the Twenty-First Century. *Population and Development Review, 29*(1), 1–28.

Demeny, P. (2005). Policy challenges of Europe's demographic changes: from past perspectives to future prospects. In M. Macura, A. L. MacDonald & W. Haug (Eds.), *The New Demographic Regime. Population Challenges and Policy Responses* (pp. 1-9). New York/ Geneva: UNECE/ UNFPA.

Deven, F., &Moss, P. (Eds.). (2005). *Leave Policies and Research: A review and Country Notes* (Vol. CBGS Working Papers 2005/3). Brussels: CBGS.

Ellingsaeter, A. L., &Leira, A. (2006). Introduction: politicising parenthood in Scandinavia. In A. L. Ellingsæter & A. Leira (Eds.), *Politicising parenthood in Scandinavia: gender relations in Welfare States*. Bristol: Policy Press.

Engelhardt, H., Kögel, T., &Prskawetz, A. (2004). Fertility and Women's Employment Reconsidered: A Macro-Level Time-Series Analysis for Developed Countries,1960-2000. *Population Studies, 58*(Nº1), 109-120.

Esping-Andersen, G. (1989). *The three worlds of welfare capitalism*. Cambridge: Polity Press.

Esping-Andersen, G. (2009). *The incomplete revolution: adapting Welfare Sates to women's new roles*. Cambridge: Polity Press.

Eurostat. (2008). Eurostat newsrelease 172/2008.

Gauthier, A. H. (2007). The impact of family policies on fertility in industrialized countries: a review of the literature. *Population Research and Policy Review, 26*, 323–346.

Glendinning, C., &Kemp, P. (Eds.). (2006). *Cash and Care: Policy Challenges in the Welfare State*. Cambridge: Polity Press.

Gulbrandsen, L. (2009). The Norwegian Cash-for-Care reform, Changing behaviour and attitudes. *Early Childhood Research, Vol 2, 1*. Available via http://grundtvig.hio.no/index.php/nordiskbarnehageforskning/article/viewFile/43/24

Hall, P. A., &Soskice, D. (2001). An introduction to varieties of capitalism. In P. A. Hall & D. Soskice (Eds.), *Varieties of Capitalism. The institutional foundations of comparative advantage* (pp. 1-70). Oxford: Oxford University Press.

Hantrais, L. (2004). *Critical analysis of responses to family change: adapting the EU social policy agenda*. Paper presented at the Irish Presidency Conference on Family and Social Policy in Europe, 13-14 May

Himmelweit, S. (2008). *Rethinking care, gender equality and policies*. Paper presented at the Expert Group Meeting on “sharing responsibilities between women and

men, including care-giving in the context of HIV/Aids" October 2008. Retrieved from http://www.un.org/womenwatch/daw/egm/equalsharing/EGM-ESOR-2008-EP-7%20Susan%20Himmelweit.pdf

Himmelweit, S., &Land, H. (2007). *Change, Choice and Cash in Social Care Policies: Some Lessons from Comparing Childcare and Elder Care*. Paper presented at the Espanet Conference, Set 2007. Retrieved from http://www2.wu-wien.ac.at/espanet2007/14_Land_Hillary.pdf

Himmelweit, S., &Land, H. (2008). Reducing gender inequalities to create a sustainable care system. Available via http://www.jrf.org.uk/sites/files/jrf/2293.pdf

Knijn, T & Saraceno, C.(2010). Changes in the regulation of responsibilities towards childcare needs in Italy and the Netherlands : different timing, increasingly different approaches. *Journal of European Social Policy*, *20*(5), 443-455.

Kögel, T. (2004). Did the association between fertility and female employment within the OECD countries really change its sign? *Journal of Population Economics, 17*(1), 45-65.

Kohler, H.-P., Billari, F. C., &Ortega, J. A. (2006). Low Fertility in Europe: Causes Implications and Policy Options. In F. R. Harris (Ed.), *The Baby Bust: Who Will Do The Work? Who Will Pay The Taxes?* (pp. 48-109). Lanham: Rowman&Littlefield Publishers.

Luci, A. & Thévenon, O. (2010). Does economic development drive the fertility rebound in OECD countries. Available via http://hal.archives-ouvertes.fr/hal-00520948

Math, A., &Meilland, C. (2004). *Family-related Leave and Industrial Relations*. Dublin: European Foundation for the Improvement of Living and Working Conditions (EIROnline).

Matysiak, A., &Vignoli, D. (2008). Fertility and Women's Employment: A Meta-analysis. *European Journal of Population 24*, 363–384.

Mätzke, M., &Ostner, I. (2010). Introduction: Change and continuity in recent family policies. *Journal of European Social Policy*, *20*(5), 387-398.

Moss, P., &Deven, F. (2002). Leave arrangements for parents: overview and future outlook. *Community, Work & Family, 5* (3), 237-255

Neyer, G. (2003). Family policies and low fertility in Western Europe. Available via http://www.demogr.mpg.de/papers/working/wp-2003-021.pdf

Neyer, G. (2006). *Fertility Policies at the intersection of gender policies, employment policies and care policies*. Paper presented at the Annual Meeeting of the Population Association of America, Los Angeles, Mar30-Apr1,. Retrieved from http://www.demogr.mpg.de/papers/working/wp-2006-010.pdf

Eurostat (2012) Employment Data Base Retrieved from http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/data/database

Eurostat (2012) Fertility/Population Data Base Retrieved from http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database

P.Moss, &Deven, F. (1999). *Parental Leave: Progress or Pitfall? Research and Policy Issues in Europe Series*. Brussels: CBGS.

P.Moss, &Deven, F. (2006). Leave policies and research: a cross-national overview. *Marriage & Family Review, 39* ((3/4)).

Pitrou, A. (1996). Le mythe de la famille et du familial. In J. C. Kaufmann (Ed.), *Faire ou faire-faire? Familles et services* (pp. 25-37). Rennes: Presses Universitaires de Rennes.

Roit, B. D., &Bihan, B. l. (2010). Similar and Yet So Different: Cash-for-Care in Six European Countries' Long-Term Care Policies. *Milbank Quarterly, vol.88*(3), 286-309.

Sleebos, J. (2003). Low fertility rates in OECD countries: facts and policy responses. *OECD Social,Employment and Migration Working Papers nº 15,*. Available via http://ideas.repec.org/p/oec/elsaaa/15-en.html

Tangian, A. (2009). Six families of flexicurity indicators developed at the Hans Boeckler Foundation. *WSI Discussion Papers, 169,* ,

Tangian, A. (2010). *Flexicurity: monitoring indicators and policy proposals*. Paper presented at the 6th International Policy and Research Conference on Social Security, International Social Security Association.

Thévenon, O. (2008).Labour force participation of women with children: disparities and developments in Europe since the 1990s. Working Paper nº 15. Available via http://economix.u-paris10.fr

Thévenon, O. (2009). L'augmentation de l'activité des femmes en Europe: progrès de la conciliation ou polarisation des comportements? *Population 64* (2) 263-304

Thévenon, O. (2011). Family Policies in OECD Countries: A Comparative Analysis. *Population and Development Review 37*(1), 57-87.

Annex 1

Female employment age patterns in 30 European countries (2006-10)

	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Austria	34.2	66,8	75.6	76.6	80.2	82.5	80.4
Belgium	5.2	42.9	74.9	77.2	76.8	76.2	72.0
Bulgaria	4.4	39.9	63.3	71.7	78.3	80.9	79.3
Czech Republic	4.0	39.8	61.2	60.9	75.7	85.8	86.4
Denmark	56.8	70.4	77.0	82.1	83.7	84.6	84.3
Germany	25.0	61.2	70.1	71.3	74.2	78.1	78.0
Estonia		47.1	66.6	73.4	78.3	83.2	85.3
Finland	25.7	59.3	72.0	74.7	79.7	84.4	85.6
Ireland	18.7	62.0	74.8	71.2	65.6	63.7	66.0
Greece	4.2	31.4	62.5	63.3	64.8	65.5	60.6
Spain	9.8	47.2	68.8	68.9	66.0	64.6	62.1
France	8.3	46.5	72.5	73.6	77.1	78.8	79.8
Iceland	68.5	72.7	72.0	78.3	82.3	85.9	84.4
Italy	4.4	31.8	54.0	61.5	62.7	61.7	59.8
Cyprus	6.7	61.0	79.1	81.5	78.1	76.7	71.8
Latvia	7.5	49.0	69.3	75.6	80.6	80.8	80.8
Lithuania		38.1	75.2	80.3	81.1	81.9	79.8
Luxembourg	6.5	37.2	75.5	78.8	73.1	70.8	68.0
Hungary	2.0	31.5	60.4	60.7	68.5	74.8	74.2
Malta	19.1	67.3	68.6	54.7	42.4	37.8	30.1
Netherlands	57.1	76.5	83.5	82.4	80.2	79.7	78.3
Norway	42.1	68.5	79.4	82.3	84.2	84.4	83.4
Poland	4.6	38.2	66.1	71.5	75.0	76.1	72.6
Portugal	9.0	48.3	73.3	78.9	79.8	76.5	74.2
Romania	6.9	32.2	64.5	70.6	72.3	72.9	69.3
Slovenia	13.5	46.5	74.6	87.3	88.4	87.8	85.7
Slovakia	2.7	37.1	59.6	64.6	74.5	80.9	79.0
Sweden	24.8	58.0	74.7	81.9	83.9	85.0	84.6
Switzerland	49.2	73.3	80.6	77.3	76.8	79.3	82.3
United Kingdom	35.0	63.8	72.5	71.5	72.8	76.9	78.5
Average	19.85	51.52	70.74	73.48	75.24	76.61	75.22
Standard Deviation	19.00	14.15	6.84	7.70	8.62	9.91	11.30
Coefficient of Variation	95.7	27.5	9.7	10.5	11.5	12.9	15.0

Annex 2

Correlations between Employment for all active ages (15-64 years) and Fertility (2006-10)

	TFR	Female Employment	FE in Full-Time	FE in Part-Time
Total Fertility Rate (TFR)	1	.575**	-.149	.530**
Female Employment (FE)	.575**	1	.108	.636**
FE in Part-Time	.530**	.636**	-.699**	1
FE in Full-Time	-.149	.108	1	-.699**

Notes: * p<0.05 ; ** p< 0.001 ; data for Childcare are from 2006-09
Source: Eurostat