

Economic resources and marital childbearing in Italy between 1994 and 2004*

Elisabetta Santarelli¹

Abstract. The aim of this work is to analyse associations among economic resources, in particular income, and fertility of married couples in Italy during the period 1994-2004. We identify different typologies of couples with respect to economic status and fertility. Then, we explore associative structures among variables expressing such features and investigate whether they changed during the period 1994-2004. To such aims, we analyse two different cross-sectional samples. The first is drawn from the first wave of ECHP (1994), the second one from the first wave of EU-SILC (2004). Our results show a weak negative association between income from work and fertility both in 1994 and 2004 and that associative structures did not substantially change during the decade under study.

Keywords: fertility, income, multiple correspondence analysis.

1 Introduction and objective

During last decades Italy was characterized by important socioeconomic and demographic changes. Firstly, an increase of educational level was registered. In 1997 the proportion of the population having completed at least upper secondary education was 39.6% and it was 53.3% in 2008. In addition, great labour market shifts were taking place. Women are increasingly present in the labour force: female employment was 36% in 1996 and 47.2% in 2007, thus provoking a rise of dual earner couples.

During this period part time jobs (i.e. jobs with reduced working hours) have been growing, especially among women. Female part time jobs went from 12.9% in 1996 to

* This research is part of the project “Il difficile passaggio alla vita adulta in Italia: famiglia e figli fra costrizioni materiali e culturali”, financed by the University of Rome La Sapienza and coordinated by Professor Antonella Pinnelli.

¹ PhD in Demography. Contact: esantarelli@inwind.it

27.9% in 2007 (Eurostat 2009). However, part time jobs in Italy are rare with respect to other European countries and often characterized by short term contracts and high precariousness. Thus, this choice might be refused, especially by highly educated women who prefer more qualifying jobs (Del Boca 2002).

Temporary and other fixed-term contracts are largely increasing, with the result of making the labour market more precarious. The percentage of limited-duration contracts was 7.4% in 1996 and 13.3% in 2008 (Eurostat 2009).

Economic transformations occurred with important changes in demographic behaviours. The prolonged investment in education and the long search for a stable job cause the postponement of all the phases of transition to adulthood. Leaving parental home is increasingly postponed and closely associated with first union, mostly coincident with marriage. As a consequence, age at first marriage is very high in Italy: in 2008 it was 29.7 years for women and 32.8 for men. Since the usual setting to have a child in Italy is marriage, the postponement of marriage delays parenthood. Hence, female mean age at birth is 31.5 years in 2008 (Istat 2009), one of the highest in Europe. Childbearing postponement is one of the elements causing the lowest-low fertility in Italy (Billari and Kohler 2004). In recent years TFR showed a slight increase - from 1.19 in 1995 to 1.41 in 2008 (Istat 2009) - due to the higher fertility of immigrant couples and a recover among the youngest generations and more educated women (Caltabiano et al. 2009).

Economic resources are important prerequisites to have children. However, we take into account that not only economic considerations are involved in the decision of giving birth. Rather, having achieved a minimal level of economic security may be regarded as an important condition to be fulfilled before childbearing, but it is not the only one (Bernardi and Nazio 2001).

Together with economic elements, institutional support is needed to provide couples with flexible arrangements to reconcile time for family and for work. Del Boca et al. (2005) showed that, at micro level, the scarce availability of affordable child care, the rigidity of the labour market and the reduced number of part time jobs lead to a negative relation between female participation and fertility in Italy. Such phenomenon might also be the indicator of traditional gender roles within couples. In traditional contexts like Italy, women devote their time to the family and men to the labour market. With respect to this, institutions might promote an equal distribution of paid and unpaid work between men and women (Neyer 2006). However, relatively generous social insurance schemes and strict labour market regulations strongly support the male breadwinner model, whose sustainability is becoming increasingly difficult as the number of dual earner couples rises.

In this work we analyse associations between economic resources, in particular income, and fertility among married couples in Italy. We classify income in: *income from work*, from *private* and *social transfers*. Such relations are relevant from a theoretical point of view on the one hand and to inform policy makers on the other. So far, however, there has been no much investigation into the association between fertility and income (see, e.g., Giraldo et al. 2004, Rondinelli et al. 2010), mostly due to a lack of data on income in demographic surveys. Along with the New Home Economics theory (Becker 1991), in this work we consider children as consumption goods and assume that partners pool their incomes and decide rationally whether and when to have children.

2 Data and methods

To the aim of this study, we analyze cross-sectional data on two samples of married couples drawn respectively from ECHP (wave 1994) and from EU-SILC (wave 2004). We use a couple approach, as we believe that fertility models with only women's features are mis-specified. Couples' reproductive strategies, the interconnection between male and female careers with fertility, the division of tasks and roles, the partners' opinions and attitudes towards childbearing are important elements when studying fertility.

We select married couples with women between 40 and 45 years, because they are almost at the end of their reproductive period, in the same phase of their individual life-cycle and with an almost definitive status in the labour force (active or inactive).

EU-SILC is the new Eurostat project on Community Statistics on Income and Living Conditions, the successor of ECHP. EU-SILC is an instrument aiming at collecting timely and comparable cross-sectional and longitudinal multidimensional micro data on income, poverty and social exclusion.

The analysis is performed by a multiple correspondence analysis (MCA), a descriptive method that depicts a static picture of a sample. It allows to reduce the number of categorical variables and to identify latent (unobservable) structures, without any hypothesis on variables' distribution. The identification of such structures allows comparisons of the same sample over time (or, as it is better said, in different *occasions*) and of different samples at the same moment in time or at different occasions. In our work we are interested in a comparison over time. We include as *active variables*: man's age, spouses' education, couples' employment model and working features, woman's income from work and couples' income from social and private transfers. We consider as *illustrative variables*: couples' income from work, marriage duration, number of children and area of residence.

In ECHP and EU-SILC most variables are defined in the same way, so that they are totally comparable. To make a reasonable comparison, we just select and use equally defined variables.

3 Results

The results of MCA are illustrated in figures 1 to 4.

The 1994 factorial plan defined by the active variables is shown in figure 1. For the analysis of the plan we dwell upon the comments of results related to the first factorial plan (constituted by the first two axes), because the amount of information provided by further plans is negligible².

The horizontal axis is mainly defined by variables on couples' working features. It mainly expresses the *couples' employment model*. On the left side we find single earner couples (weakly characterized by the male status in employment, "employee" or "self employed"), while dual earner couples are on the opposite side. Two incomes couples

² The reproduced variability (or inertia) of this plan, calculated with Benzecri's formula, is 97.7%, mostly provided by the horizontal axis.

are highly differentiated by female conditions on the labour market (wage and working time), but not by status in employment. Only couples with less common employment arrangements (“man employee and women self employed” or “both self employed”) seem to be different from the others³.

The vertical axis is mainly defined by *women’s working features* (income from work and working time) and *spouses’ educational level*. On the top right quadrant we find couples with women working part time and earning low-medium wages inferior to those of men. On the bottom there are couples with women working full time and earning high wages. Single earner couples are mainly low educated, while dual earner ones have medium-high educated spouses. The factorial plan shows that the educational homogamy is very high (low educated men marry low educated women and vice versa). Men’s age doesn’t highly characterize couples, just a weak association is found among men’s age, couples’ employment model and education: couples with younger husbands are mostly dual earner and medium-high educated.

Selected couples are not different according to the amount of welfare benefits and private transfers⁴: only an association is found between receiving social benefits and being low educated.

To sum up, three different typologies of couples can be observed on the 1994 plan. Firstly, the single earner couples on the left, which constitute a very homogenous cluster. Secondly, on the top right quadrant there are dual earner couples with less common working arrangements and women mostly working part time. Finally, in the bottom right quadrant we find dual earner couples with women working full time and earning high wages.

The demographic variables of our study have been projected on the above described factorial plan together with couples’ income. Results are shown in figure 2. Marriage duration does not highly characterize selected couples. Couples with the highest income are on the right side, where the plan is characterized by dual earner couples. The number of children is associated with the employment model: dual earner couples are mostly childless or have one child, male breadwinner ones have two or more children. Dual income couples reside mostly in the North, while single earner ones are more frequent in the South and Islands. The Centre is close to the barycentre, thus expressing a profile very close to the average. This analysis shows the divergence between North and South of Italy both from economic and reproductive points of view. Southern couples have high fertility associated with male breadwinner model and low economic conditions (South and Islands appear quite different), while Northern couples are in the opposite situation. Concerning the focus of the analysis, we find that the association between income and fertility is weakly negative.

We now turn to the description of the 2004 active plan of the sample drawn from EU-SILC (figure 3). The variability reproduced by the first plan is 97% and it is mostly provided by the horizontal axis (95%). At a first glance, the associative structure shown by figure 3 is very similar to that of the 1994 active plan.

The horizontal axis represents mainly the *couples’ employment model*: male breadwinner couples are on the left, while dual earner ones on the right. Single earner couples are a homogenous cluster, while dual earner ones are more differentiated by female working features. In fact, as in 1994, we find that women’s income and working time characterize dual income couples.

³ The position of this category on the plan might be due to the low frequency.

⁴ Private transfers were not included in the plan, because they are precisely on the barycentre.

The vertical dimension mainly represents *women's working features*, i.e. working time and income. Women's working time characterizes couples' economic features more in 2004 than in 1994. Not surprisingly, women working part time have a medium income and have husbands that mostly contribute to the financial support of the family. Contrary to 1994, couples' status in employment scarcely characterizes this plan ("self employed" or "employee") and this is also true for men's age and education.

To summarize, the 2004 active plan shows an associative structure that is not very different from that of 1994. Some differences come from the fact that in 2004 couples' status in employment, social benefits and education are less relevant in the characterization of the plan than in 1994.

Finally, we project the demographic variables and the couples' income on the plan to see how they are associated with economic conditions (figure 4). The picture emerging from the illustrative plan is very similar to that of 1994. Couples with the best economic situation are on the right side of the plan. They are typical of the North of Italy, where the dual earner model is more spread. Distance between North West and North East is almost the same of 1994, while that between South and Islands is shorter, showing that such macro-areas are becoming more and more similar. The Centre is associated with an average profile. Concerning the association between income and fertility, we observe again a weak and negative link.

Our analysis shows that the associative structures during the period 1994-2004 have not substantially changed. Both in 1994 and in 2004 traditional male breadwinner couples are associated with high fertility and low economic conditions and are typical of the South of Italy. The North is characterized by dual income couples, good economic conditions and low fertility. During the 10 years period, income and fertility are weakly and negatively associated.

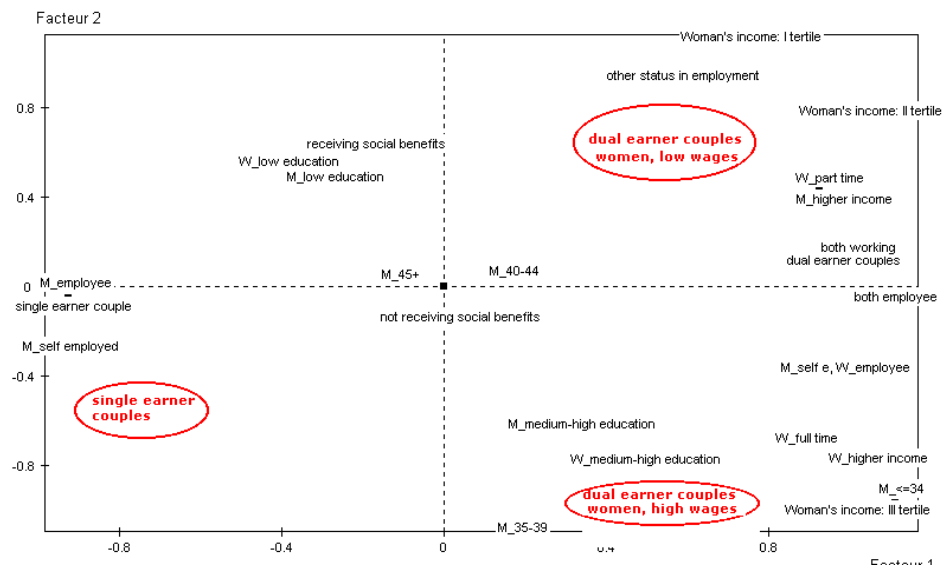
The present analysis is cross-sectional and no causal relationships can be inferred from the results. We investigate the connections between economic resources and fertility among married couples and their eventual changes in the decade 1994-2004, focusing on couples with women between 40 and 45 years, because most of them are at the end of their reproductive period. MCA "took a picture" of the samples and allowed comparing them. The "pictures" appear very similar and reflect a slow change underway in Italy. New roles and new behaviours are certainly taking place, but the situation is still traditional, both on the occupational and demographic point of view. The scarce differences might also be due to the fact that generational changes are slower than period changes.

From the cross-sectional analysis it appears that income is weakly and negatively associated with fertility. We argue that the income-fertility link is highly mediated by work and this suggests that changes that aim at combining work and family are firstly needed. They should increase flexibility and allow partners to manage the time for family and work: more part time jobs, extended parental leaves, more child care services. Furthermore, actions to provide couples with *secure* earnings are needed: this would guarantee the necessary economic stability to face a life-long commitment like parenthood.

Traditional differences among geographical areas are confirmed. Furthermore, in 2004 a higher similarity between Islands and South is observed. It will be interesting to check the trends in next years with more recent data, when the share of single and dual earner couples is supposed to reach the same level. At this moment, we expect that the convergence of employment models might imply the convergence of fertility choices as

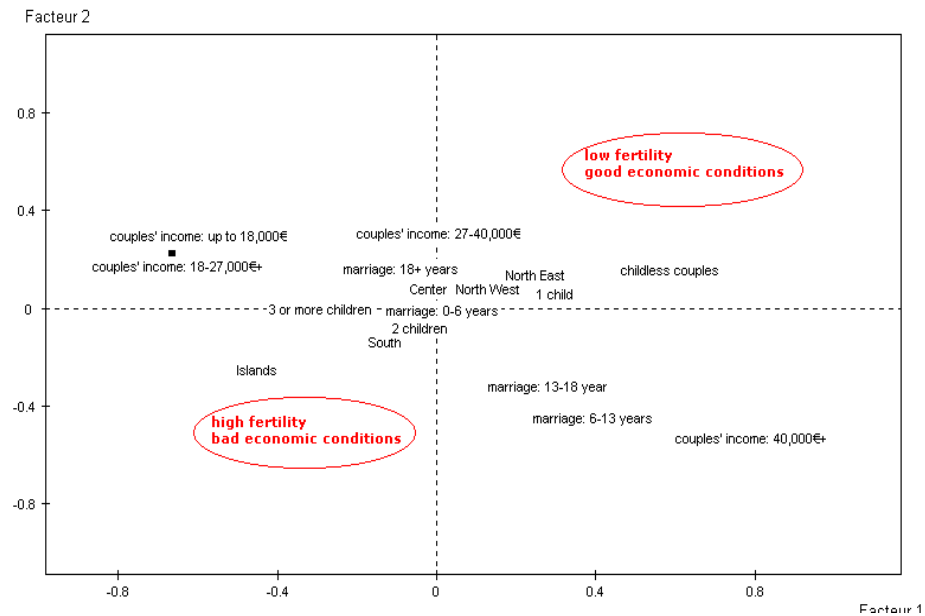
well. Future evolutions of this work should go in the direction of verifying such hypothesis.

Figure 1: Active variables on the factorial plan, ECHP 1994.

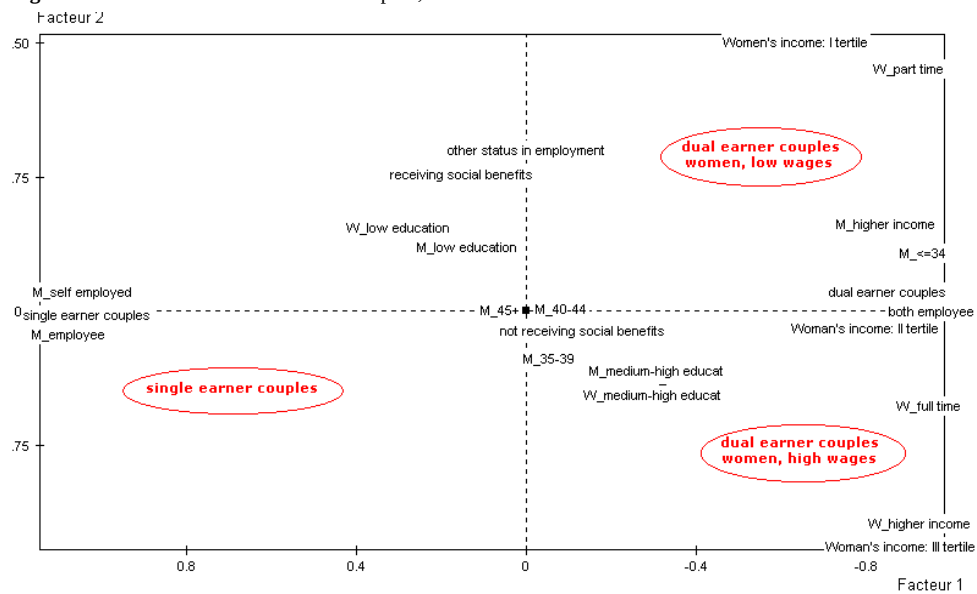


Source: our elaboration on ECHP data.

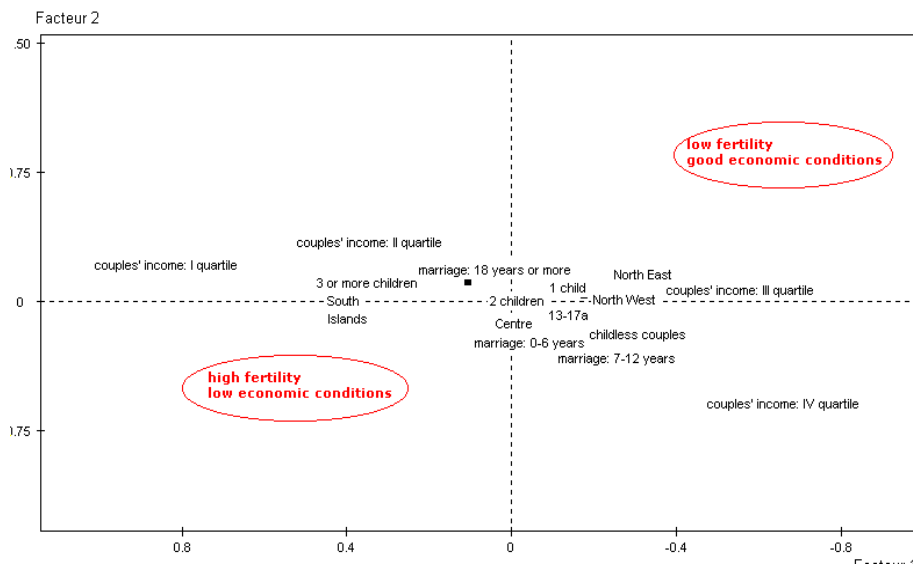
Figure 2: Illustrative variables on the factorial plan, ECHP 1994.



Source: our elaboration on ECHP data.

Figure 3: Active variables on the factorial plan, EU-SILC 2004.

Source: our elaboration on EU-SILC data.

Figure 4: Illustrative variables on the factorial plan, EU-SILC 2004.

Source: our elaboration on EU-SILC data.

References

1. Becker, G. S.: A treatise on family. Harvard University Press, Cambridge (1991).
2. Bernardi, F., Nazio, T.: Globalization and the transition to adulthood in Italy. In: Blossfeld, H.-P., Klijzing, E., Mills, M. (eds.) *Globalization, uncertainty and youth in society*, Chapter 14, pp. 349-374. Globalife, London & New York (2001).
3. Billari, F., Kohler, H.-P.: Patterns of lowest low fertility in Europe. *Popul. Stud.* 58, 2, 161–176 (2004).
4. Caltabiano, M., Castiglioni, M., Rosina, A.: Lowest-low fertility: signs of a recovery in Italy?. *Demogr. Res.* 21, 23, 765-802 (2009).
5. De Santis, G., Drovandi, S., Mencarini, L.: Tipologie socioeconomiche delle famiglie. In: De Sandre, P., Pinnelli, A., Santini, A. (eds.) *Nuzialità e fecondità in trasformazione: percorsi e fattori del cambiamento*, Il Mulino, Bologna (1999).
6. Del Boca, D.: The effect of child care and part time opportunities on participation and fertility decisions in Italy. *J. Popul. Econ.* 15, 3, 549–573 (2002).
7. Del Boca, D., Pasqua, S., Pronzato, C.: Fertility and employment in Italy, France, and the UK. *Labour*. 19, 51–77 (2005).
8. Eurostat (2009) [electronic resource] <http://epp.eurostat.ec.europa.eu>.
9. Giraldo, A., Mazzucco, S., Michielin, F.: Il ruolo del reddito nelle decisioni di fecondità. In: *Proceedings of the conference “La bassa fecondità tra costrizioni economiche e cambio dei valori”*, 223–241. Accademia nazionale dei Lincei, Rome, (2004).
10. Istat (2009) [electronic resource] www.istat.it.
11. Neyer, G.: Family policies and fertility in Europe. Fertility policies at the intersection of gender policies, employment policies and care policies. Max Planck Institute for Demographic Research Working Paper 10 (2006).
12. Rondinelli, C., Aassve, A., Billari, F.: Women’s wages and childbearing decisions: Evidence from Italy. *Demogr. Res.* 22, 19, 549-578 (2010).