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Women's Continuous Careers in Italy: The Education and Public Sector Divide

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Abstract

Cross-sectional data on the role of education show that low-educated Italian women have one of the lowest rates of participation in Europe, and that their gap vis à vis the highly educated is very wide. Also wide is the gap in the shares, between high and low educated working women, of those employed in the public sector. By adopting a life-course perspective and using retrospective longitudinal data from the last wave of ILFI (2005), this study analyses how in Italy education and public employment differentiate women's entries into and exits from paid work, observing three cohorts of women born between 1945 and 1974 from the time they leave fulltime education to their forties. The findings confirm for Italy what has been shown for many other countries, namely that highly educated women have more continuous careers around motherhood than do low educated women, regardless of their occupational position, their contract, and their employment position in family-friendly sectors such as the public sector. However, we also find that in Italy highly educated women tend to be over-concentrated in the public sector and that, when they work in that sector, they tend to have more children and to bear them earlier compared with equally highly educated women in the private sector. In the Italian context where protection in the public sector has also been used as a surrogate measure for universal work-family reconciliation policies, and where traditional gender norms still persist, these results are consistent with the possibility that education is so important for women's labour market continuity because it represents an investment in 'reconciliation' and 'work legitimacy' over and above investment in human capital.

Keywords

Women's labour market participation, work-family reconciliation, non monetary returns to education, public sector employment

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1. Introduction

Two facts about female employment in Europe are fairly well known. Where female employment is overall high, public sector employment is likely to be an important contributor. In particular, the correlation between the female employment rate and the share of public sector employment over the total was positive and statistically significant for EU15 countries in the early 2000s, with Italy recording below average values for both the female rate and the share of public employment.¹ Moreover, where overall female employment is low, the reasons are, often, low participation by poorly educated women and a wide gap in employment between highly and poorly educated women.

In all these respects Italy is close to its usual “sisters”, the other Mediterranean countries, but the differentiating role of education is more pronounced. In particular, if the values for the gap in the employment rates of highly versus low educated women are averaged out over the last fifteen years (1995-2010), Italy has registered the highest gap in the EU15 after Ireland and Belgium, corresponding to 48.5%. Spain is partly off-line in this respect with a significantly lower gap (35.8%). Moreover, Italy has registered one of the highest gap in the shares, between high and low educated working women, of those employed in the public sector: 58% of highly educated women in employment worked in the public sector in Italy at the turn of the century against 14% for the poorly educated. Again, this divide was less pronounced in Spain: 37% versus 9%.

The positive association among education, the public sector and female employment is well known, but here we revisit it from a somewhat different perspective. We argue that Italian women have invested in education with a view to reaping ‘reconciliation returns’ over and above monetary returns. In a context where publicly subsidized care is rationed, gender role norms are still strong, and employment opportunities for graduates are comparatively poor, while returns in reconciliation are particularly “attractive”. When public sector jobs offer (cheaper) reconciliation options such as leaves, career interruptions or short/flexible working hours that reduce the organizational cost of combining work and career, education yields reconciliation returns by increasing the chances of entering public employment. Moreover, in “unfriendly” normative settings, education may give women less tangible returns as it affords them the kind of ‘legitimacy to work’ that they need in order to overcome traditional gender norms and practices.

The argument we put forward may be seen to qualify the contention in much of the economic literature that education is essentially an investment in human capital leading to higher (lifetime) future earnings (monetary returns). As we shall show, the evidence on the role of purely monetary returns in the choice of education is not so clear cut. Moreover, many comparative cross-countries studies have shown that the employment impact of education is institutionally and culturally embedded and may therefore vary considerably across countries (Solera 2009; Chamliou et al. 2011).

The link among education, the public sector and female employment within Italy is explored by using a longitudinal life-course approach. Drawing on all the waves of the Longitudinal Survey on Italian

¹ Data refer to 2002. The share of public sector employment over total employment is taken from OECD (2003), "Economic Outlook", No. 73, June. The employment rate for women aged 15-64 is from Eurostat Statistics. The value of the Pearson correlation is 0.62.

Households (ILFI), the last one dated 2005, we observe women born between 1945 and 1974 from completion of full-time education until their forties, and around family formation. By controlling for many individual, family and job characteristics, we analyse the extent to which education and private/public employment matter in differentiating women's first entry into paid work and exit from it, once entered.

The paper is organised as follows. Section 2 discusses economic and sociological theories of monetary and non-monetary returns to education, bringing evidence on these returns in Italy to bear in the discussion. Section 3 presents descriptive evidence on employment continuity and the fertility behaviour of Italian women. It focuses on the public/private sector divide and on education. Section 4 performs multivariate and event-history analysis of first entry into paid work and first exit to housework, showing whether and to what extent being well educated and working in the public sector play an independent role in these transitions. Section 5 summarises and indicates some policy implications.

2. Returns to education and public sector employment: Theoretical issues

2.1 Returns to education: competing hypotheses

Few issues have attracted as much research interest within sociology or economics as the role that education plays in fostering women's participation in the labour market. This topic has been approached from several perspectives. According to standard economic theory, people's choices concerning their working lives primarily respond to non-own income and own wages. The latter, in turn, depend on the decision on how much and where to invest in one's human capital. In the theory of wage compensating differentials, education can also represent a non-monetary investment which, on a lifetime basis, is however reframed in terms of human capital. According to this theory, on an hourly basis, more stable jobs can offer wages lower than the investment in education yields elsewhere, because part of the remuneration takes the form of stability, which is desired by most people and which is costly for the firm (e.g. Rosen 1986). On a lifetime basis, stability protects human capital against depreciation; hence lower period returns are still compatible with maximum lifetime earnings.

Education is seen as a strategy to maximize lifetime returns also in the literature on the sectoral segregation of female employment and on the cost of career interruptions. Here too, however, the emphasis is placed on wages and income. Indeed, a large part of this literature tends to read overrepresentation of educated women in public sector jobs (or any other type of job that facilitates reconciliation and career continuity) as a lifetime income maximization strategy pivoting on the guarantee of stability (e.g. Blau et al. 2006).

However, many studies suggest that the lifetime maximization of income is only part of the story. Indeed, there is evidence that unemployment or precarious labour market positions have a negative impact on fertility (Adsera 2011; Blossfeld et al. 2005) while employment in the public sector has a positive one (Conti and Sette 2007; Martín-García and Castro-Martín 2013). This indicates that what matters about precariousness is not only low income but also the overall uncertainty that surrounds future work (location, duration, working schedule, as well as earnings). This uncertainty hinders advance planning and may therefore restrain or postpone fertility.

The enhancing effect of the public sector on fertility is not only linked to the guarantee of stability. The public sector has also traditionally offered employment opportunities in "typically female" fields and with

'women friendly' working conditions. These include shorter hours or less pressure to work long hours, more flexible schedules and, depending on the country, greater tolerance of absenteeism or better opportunities to take unpaid or paid leave without penalties on re-entry. All these conditions have been shown to reduce the wage cost of motherhood (Gornick and Jacobs 1998; Mandel and Semyonov 2006). Studies on the work-family conflict show that they also contribute to reducing the organizational effort and the psychological stress required to reconcile domestic and care activities with paid work (McGinnity and Whelan 2009; Gregory and Milner 2009).

Nonetheless, there is no firm recognition in the literature that this reduction in psychological and organizational costs is an independent reason for investing in education, beyond current or future wages. These reduced costs can be labelled 'reconciliation returns', and, in line with some cross-country studies showing that polarization by education is lower where social policies are more universal and generous (Stier and Lewin-Epstein 2001; Geist 2005), they can be expected to play a significant role in Italy, where work-family reconciliation provisions other than in-job provisions are scarce.

Other lines of research suggest that education may exert an independent effect on women's labour market careers, beyond earnings, not only via the reconciliation motive but also via what can be called the "legitimacy motive". This has to do with own and social approval for women's involvement in paid work. As maintained by several authors contrary to Hakim's Preference Theory (Hakim 2000), preferences are not stable and context-less but are constrained by welfare and labour market institutions (Crompton and Harris 1998; McRae 2003). These institutions not only shape the set of concrete opportunities and constraints within which women and couples make their choices, but they also assume and define what is "normal" and "appropriate", thereby also shaping preferences and normative beliefs (Sjöberg 2004; Treas and Widmer 2000). Preferences may also change over the life course in response to new experiences and new opportunities and constraints. Education is shown to be often the driver of this change. Specifically, not only are preferences prior to choices of education, as assumed by standard approaches, but they are transformed by the process of acquiring and acting education in itself, as the literature on women's empowerment in developing countries has recently reiterated (e.g. Kabeer 1999). Investment in education may indeed reflect, *à la* Boudon, both instrumental and cognitive rationality: it may be a means to acquire income for "consumption" or it may stem from and reinforce a cultural model where work is central to a woman's identity and own conception of welfare (Solera and Negri 2008).

The macro cultural context also plays a role in structuring the impact of education at the micro-level. In particular, there is evidence that education polarises behaviours to a greater extent where a general cultural shift in favour of non-traditional gender roles has not (fully) occurred (Lück 2006). In such relatively traditional gender contexts, education not only allows entry into primary segments of labour markets and access to good earnings to buy care (which is particularly important if reconciliation policies are poor, as said), but it also strongly differentiates attitudes. That is, education may exert a countervailing influence and may increase the perceived economic advantages of a higher commitment to paid work by acting as a *passpartout* to own and others' approval of "modern roles", or simply by affording greater bargaining power within couples and kinship networks to a woman with a greater taste for work. Evidence from the International Social Survey Programme indicates that Italy (Künzler 2002; Lück 2006), and especially the South (Brown and Scott 1998), is one such traditional gender context. The following sections offer empirical evidence on how and to what extent education polarises Italian women's labour market participation over the life course.

2.2 Monetary versus non monetary returns to education in Italy

With specific reference to Italy, how strong is the case for monetary returns to education versus non monetary ones? While the country is an ideal case for investigating this question, the data available do not allow direct testing of the relative strength of competing hypotheses. The main reason is that the only (entirely) longitudinal data set for the country - the ILFI source that we use in this paper - does not collect information on wages. However, a review of evidence on monetary returns from other sources yields indications on the actual support that this hypothesis commands in the Italian context and whether there is room for alternative explanations.

Basic calculations that we carried out on the Bank of Italy Household Survey showed that, on an annual basis and for four different years between 1987 and 2000, Italian women of 'prime age', full-timers with at least college educations, earned less in the public than in the private sector, while the opposite held for women with low or intermediate educations. We also found that on an hourly basis, earnings for top educated women in the public sector were higher than, or roughly equivalent to, those in the private sector, with results varying from one year to the next.² Given that the reporting of hours of work is fraught with measurement errors, the latter finding should be treated with caution.³

The trend changed in the new century. In 2004, the latest year that we investigated, both annual and yearly female earnings in the public sector overtook those in the private sector as part of a more general trend of private sector wages to lag behind. However, the change concerns a small minority of the women whose work history we shall observe in this paper, the few that entered the labour market between 2000 and 2005.

Econometric studies do not resolve the uncertainty surrounding the monetary returns differential between the private and the private sector, as the results depend markedly on the methodology, the data source, and the reference time period. Brunello et al. (2000), for example, found that, overall, the public sector yielded lower returns to age and education for both men and women at around the turn of the century. More recently, Lucifora and Meurs (2004) have found that, although the pay advantage from working in the public sector diminishes considerably for highly educated women, it remains positive (while turning negative for highly educated/skilled men). Other studies show that public sector jobs seem to have prevented downward mobility and employment interruptions rather than having favoured upward mobility (Gonzalez 2006). In Italy, in particular, the age-earnings profile in the public sector has traditionally been flatter, or at least it was so until the late 1990s (Bardasi 1998).

Overall, and for all the Italian female cohorts entering the labour market before the new century, descriptive and econometric evidence indicates that period earnings were lower in the public sector,

² If the annual earnings of female full-timers aged 36 to 55 years (36-51 in 2004) with at least college education are set to 100, the corresponding figures in the public sector are 73.7 in 1987, 95.8 in 1989, 79.6 in 1995, 71.3 in 2000 and 107 in 2004. When private sector hourly earnings are set to 100, hourly earnings for public sector women amount to 102 in 1987, 96.1 in 1989, 125.8 in 1995, 99.6 in 2000 and 138.8 in 2004. Given that earnings strongly depend on age, the age breakdown has been selected so as to minimize differences in the average age between women in the private and in the public sector. The data source is the Bank of Italy Household Survey. While the survey dates from the seventies, data earlier than 1987 are not fully comparable and have been ignored.

³ Hourly wages are generally calculated by dividing period earnings by the corresponding hours and are thus sensitive to errors or difficulties in reporting hours of work. The latter are rather frequent. An especially problematic case is that of teachers, but there are many others, especially in service employment.

whereas there are no robust results for hourly earnings. In addition, cross-country comparisons show that higher shares of women in the public sector are not necessarily associated with higher public sector-private sector wage gaps. In Spain, for example, where the share of educated women in public sector jobs is lower than in Italy, the wage gap, controlling for human capital, family characteristics and job characteristics, is about 50% for women, similar to Greece and Portugal, and higher than in Italy, which amounts to 30% (Anghel et al. 2011: table 7). This means, in turn, that while the monetary returns motive for entering the public sector (and staying there) cannot be ruled out on the basis of this evidence, nor can alternative hypotheses.

We therefore hypothesize that non monetary returns may be important in the welfare and labour market setting that characterizes Italy. Employment in this sector is in fact the main public ‘resource’ that the Italian variety of welfare regime offers women so that they can reconcile work and family. Although the package of working conditions that the public sector offers is common knowledge within Italy, it may nevertheless be useful to briefly recall its main features: maternity and parental leave provisions are more generous for public sector employees in terms of both coverage rate and length of absence; with the major exception of the health sector, the scheduling of working hours leaves sufficient room for individual choice - where this is combined with a 36-hour weekly schedule, the advantages for reconciling work and family are akin to those of a ‘long part-time’; access to jobs is through educational credentials, which may reduce discrimination but also the role of actual experience, past achievement etc; because seniority is the main factor determining wage progression, periods of leave or other forms of weak work attachment are not penalized; in the past the public sector has been especially generous in granting early retirement.

This stands in contrast with poor care supports in the country. As well documented in the literature (Bettio and Plantenga 2004; Naldini and Saraceno 2011), public childcare services for children under three years of age are limited, financial transfers targeted on families with children remain modest and selective, part-time jobs are scarce, and re-entry after family-care interruptions is made difficult by labour market stickiness. Employment and career protection policies have been used as surrogates for a wider and a more universal package of reconciliation provisions offering very attractive conditions in some sectors while further segmenting the labour force. The family, with its gender structure and its intergenerational and kinship solidarity, is still “the” crucial welfare provider. This “familistic” profile is found in other Mediterranean countries. In Spain, in particular, care and reconciliation policies are equally poor (Naldini and Saraceno 2011) and a cohesive family economy has hindered the outsourcing of services such as child and elderly care, but also house mortgages, small loans, and financial assistance (Bettio and Villa 1998). As noted, however, education draws stronger divides among Italian women with respect to employment. This may be partly accounted for by comparatively lower “interesting” job opportunities outside the public sector, given that small firms and ‘grey’ labour segments are more widespread in Italy than in Spain. Both these features tend to depress the supply of structured career jobs for graduates.

3. Education, motherhood and employment in the public sector: descriptive evidence on types of work history

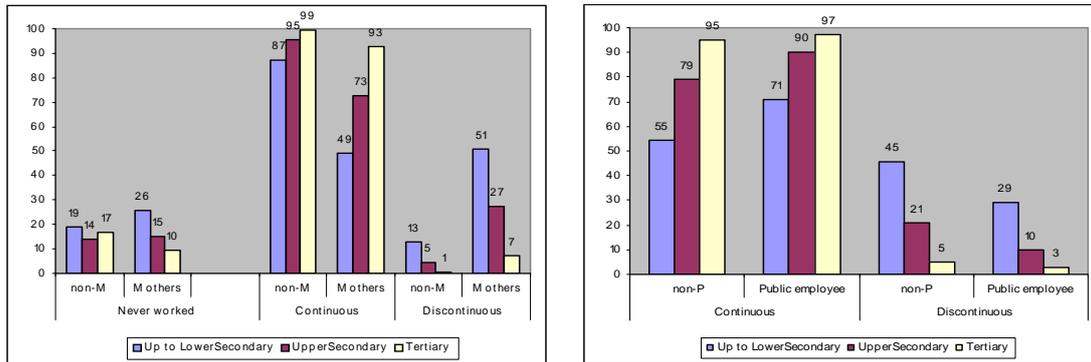
To what extent do education and public sector employment actually matter for female employment continuity in Italy, as well as for fertility? By drawing on Longitudinal Survey on Italian Households (ILFI), in this section we explore the descriptive evidence on Italian female work histories. The ILFI is a five-wave longitudinal survey first carried out in 1997 on a national representative sample of 9770

individuals belonging to 4714 households throughout Italy. Four other waves have been conducted since then – in 1999, 2001, 2003 and 2005. The survey combines a retrospective with a prospective design and thus allows reconstruction of the entire life history of an individual up to the time of interview in a number of different areas (such as education, family, work). Here we use the last wave, dated 2005, with full updated histories. As stated earlier, we focus on women born between 1945 and 1974 and observe them from the end of full-time education up to the age of 40. The largest sample we consider comprises 2980 women, or 2380 when only women who have started a labour market career are included (see table 2). Since women born after 1964 cannot be followed until they are 40, all descriptive figures refer to women ‘observed’ until age 35. The lower age limit traditionally used by demographers to estimate completed fertility is 35, but the latest reproductive technology may have moved it forward. This may represent a limitation of our analysis, but perhaps not a major one because such technology is still costly and may not have been easily available to the older cohorts in our sample.

Figure 1 shows the distribution of women’s work histories into the tripartite classification of ‘never worked’, ‘continuous’, and ‘discontinuous’, distinguishing by education, motherhood and sector of first job. This tripartite classification of types of work history is based on a specific notion of continuity that fits our interest, with interruptions connected to the gender allocation of family responsibilities. Specifically, we look at the frequency of family/care related breaks experienced by a woman over the observed adult life course. We do not include in these breaks episodes of maternity leave (or other leaves) because they are counted as employment or episodes of unemployment because they are not necessarily related to motherhood. Thus, in figure 1, “never worked” refers to a woman who has never recorded a job episode up to age 35; “continuous” to a woman who never experienced a housework episode by age 35, although she may have stopped working for various reasons (unemployment, education); “discontinuous” denotes a woman who has withdrawn from the labour market to become a fulltime housewife at least once over the observed life course. Differences among episodes of employment, unemployment, housework and other types of inactivity are based on self-declarations.

Three levels of education are considered: they correspond to ISCED level 0-2 (up to lower secondary education, that is, “licenza elementare o “media inferiore”), ISCED 3-4 (upper secondary education, that is, “diploma scuola secondaria superiore”) and ISCED 5-7 (tertiary education, “laurea”). The first panel in figure 1 reiterates the expected positive relationship between education and work continuity. It also confirms that motherhood has a strong influence on work history continuity at low levels of education, while such influence wanes at intermediate levels and disappears at high levels. Childless women tend to be considerably more continuous than mothers among the less educated (38 absolute percentage points difference) whereas the impact of motherhood halves among women with intermediate levels of education (22 percentage points difference) and practically disappears among the highest educated. Similarly, the number of children is an important discriminatory factor for work continuity, but it matters primarily among low educated women (own calculations, not shown here).

Figure 1. Types of work history up to age 35 in Italy, by education, motherhood and public sector first job



Note: Women born between 1970 and 1975 are excluded because they are not observable up to age 35
Source: ILFI, 2005.

The second panel in figure 1 compares the history of women who have started their labour market career in the public sector to those who first entered the private sector or self-employment. The panel suggests that the gap in continuity between women working as public employee and the rest is largest for the least educated, and smallest among the top educated.

If, then, for low educated women the public sector appears to have made a difference primarily in terms of employment continuity, for women with high or average levels of education the primary difference concerns fertility. Table 1 shows that female employees with tertiary education whose first job was in the public sector do not only bear their first child earlier but are also more likely to have two or more children by the age of 35 compared with equally educated women in the private sector. Even women with upper secondary educations and first jobs in the public sector display higher fertility, although no difference emerges in the age of first birth. In contrast, fertility is comparable or even higher among low educated female employees with first jobs in the private sector. Low educated women form the numerically largest (as well as the oldest) of the three groups of women, thus driving the overall result of no difference in number of children for all women (regardless of level of education) working or otherwise in the public sector (last column of Table 1).

We sum up these descriptive findings on the role of the public sector in the suggestion that the kind of employment continuity that the sector affords is not sufficient, per se, to enhance fertility; rather, it works to this effect in combination with a higher level of education. In other words, it is primarily for the highly educated, who do not want to give up on their investments, that the possibility to combine employment with motherhood, with fewer careers penalties and with less stress and fatigue, is crucial in the decision whether to have more children.

Table 1. Women in the public sector in Italy: Employment and fertility figures, by education

	Up to Lower Secondary	Upper Secondary	Tertiary	Overall
<i>Share of ever-working women with first job in public sector (by cohort, both full- and part-timers)</i>				
1 st Cohort 1945-54	14.7	35.5	78.5	28.8
2 nd Cohort 1955-64	12.7	29.6	50.1	25.3
3 rd Cohort 1965-74	14.4	21.9	26.3	20.1
All cohorts	13.9	27.7	47.7	24.6
<i>Timing of first job and first child by public sector first job and education</i>				
Public employee				
Age 1 st job	19.1	22.3	25.5	22.5
Age 1 st child	24.8	27.1	28.6	26.9
Other (private employee or self-employed)				
Age 1 st job	17.0	21.1	25.9	19.2
Age 1 st child	24.6	27.1	30.6	25.9
<i>Share of women with different numbers of children by age 35^a, by public sector first job and education</i>				
Public employee				
0 children	20.7	30.0	33.7	28.1
1 child	31.4	27.2	25.1	27.4
2+ children	46.8	43.7	40.1	43.2
Other (private employee or self-employed)				
0 children	15.8	30.5	50.7	24.3
1 child	27.2	30.7	24.6	28.3
2+ children	55.9	36.8	25.6	45.4

Note: ^a Women born between 1970 and 1975 are excluded because they are not observable up to age 35

Source: ILFI, 2005.

4. The effect of education and public employment on women's labour-market transitions

In order to add cogency to the above findings and to extend the investigation further, we resort to event history analysis in this section and trace the role of education and the employment sector on women's work histories in a life-course perspective. We start by looking at a woman's entry into paid work. We specifically investigate what affects the probability of starting to work, and, for those who do start, of starting as a public employee. Because we are interested in participation decisions, rather than in the duration of the job search, here the analysis is cross-sectional. The crucial regressor is level of education, whose effect is controlled for with relevant individual and contextual variables. These are either time-constant (like cohort and characteristics of the father or the partner⁴) or they vary with time, in which case

⁴ This variable is intended to control for family income effects. Thus, it refers to a woman's father when she started a labour market career before marriage, to her partner if she started after marriage. For women who have never entered paid work and have also never married by age 40, the reference is to the father's occupational score (when the

they are measured on completion of full-time education (level of education and region of residence). When looking at the sectoral allocation of the first job, we rely on the same set of regressors, with the addition of duration of first job search.

Table 2. Sample size and descriptive statistics

	% or median	N		% or median	N
<i>ALL WOMEN</i>			<i>ONLY EVER WORKING AND EVER MARRIED WOMEN: VALUES AT AGE 35</i>		
<i>Work experience</i>			<i>Baseline age children:</i>		
Never worked	20.1	600	- no children	9.3	138
At least one job episode	79.9	2380	- pregnant	3.7	55
			- youngest child aged 0-3	21.2	314
			- youngest child aged 4+	65.7	970
<i>Marriage-cohabiting experience by age 35^a</i>			<i>Number of children</i>		
Never married-cohabiting	17.9	476	- 0	10.7	158
Ever married-cohabiting	82.1	2178	- 1	30.8	455
			- 2+	58.5	864
			<i>ONLY EVER WORKING AND EVER MARRIED WOMEN: VALUES AT ONE YEAR BEFORE MARRIAGE</i>		
<i>Birth cohort:</i>			<i>Employee status:</i>		
1 st Cohort 1945-54	35.9	695	- Private employee	59.5	1032
2 nd Cohort 1955-64	36.7	707	- Public employee	26.5	459
3 rd Cohort 1965-74	27.4	529	- Self employed	13.9	241
<i>Level of Education:</i>			<i>Agricultural sector:</i>		
- up to Lower Secondary	49.3	952	- no	95.6	1650
- Upper Secondary	36.9	714	- yes	4.4	76
- Tertiary	13.7	265	<i>Working time:</i>		
			- full-time	89.6	1573
<i>Her mother's work experience:</i>			- part-time	10.3	182
- Mother has never worked	51.3	962	<i>Type of contract:</i>		
- Mother has worked	48.6	913	- employee with permanent	69.4	983
<i>Region:</i>			- employee with fixed-term	18.2	257
- North-West	30.4	588	- employee without contract	12.4	177
- North-East	20.0	387	<i>Previous time in employment</i>	44 months	
- Centre	20.6	396	<i>Occupational score</i>	36.1	
- South-Islands	29.0	560	<i>Partner's occupational score</i>	34.8	

Source: ILFI, 2005.

The second step in the analysis concerns women's exit from paid work to full-time housework. Here the analysis is longitudinal and we use discrete-time hazard rate models by fitting simple logit regressions to the data. Thus, the dependent variable is *the log-odds of the monthly conditional probability of leaving employment* within a particular month, given that the person has never left the labour market until that

daughter was 14 years old, as asked in the ILFI questionnaire); for those who have never worked but got married, to the partner's occupational score (at first job).

time. The crucial regressors here are *level of education and employment in the public sector*. We also include: *labour market experience*, i.e. duration in employment as an additional component of own human capital; *full-time or part-time type of job*; the *occupational prestige* of the job held; *type of contract*; and a dummy to distinguish *agricultural work* from work in other sectors. By controlling for a host of labour market variables which are in turn influenced by education we intend to isolate the non-labour-market effect or “residual” effect of the latter, which may be explained with reference to other dimensions (cultural or institutional).

As well known, changes in marital status, in the number and age of children, and in the situation of the partner impinge on one’s financial resources and use of time. In order to control for these factors, we use a set of time-varying dummy variables, specifically the *age of the youngest child* to account for different care time; and, in a continuous form, *number of children*, which should also account for differential financial needs. Furthermore, we include the *partner’s occupational score* among our covariates in order to capture the partner’s income effect, and restrict our event-history analysis to married/cohabiting observed from one year before marriage until age 40 (30-35 for the youngest cohort). In order to account for variations in the demand for labour over time and across regions, we also include the *regional yearly unemployment rate*. Given that in Italy regional variations are marked not only with regard to (un)employment but also with respect to other dimensions, from cultural attitudes to availability of services we encompass a four-category *region variable* distinguishing between North-West, North-East, Centre and South-Islands. Finally, in our models we also use the variable on the *work experience of a woman’s mother* to proxy gender role identities or work attitudes. Because most of these factors change over a person’s life course, they are introduced as time-varying covariates. Table 2 gives an overview of the variables used.

Two methodological issues in our discrete-time hazard rates models concern sample selection and the proxy for income. As regards sample selection bias, we checked for the latter (where relevant and feasible) using Heckman’s procedure and found that it was not statistically significant. As regards information about income, ILFI data offer a very rich set of relevant covariates but they do not comprise retrospective data on earnings or other sources of income. Thus, we resorted to proxies. With ILFI data, the choice is between occupational class and prestige score. We chose the latter because occupational score is a metric variable and affords greater variance and because authoritative contributions argue in favour of using occupational status to proxy earnings (Schooler and Schoenbach 1994; Goldthorpe and McKnight 2005). The ILFI occupational score ranks occupations according to their ‘desirability’ expressed by a representative sample of (Italian) individuals: desirability concerns monetary, in kind, and immaterial rewards, and it is measured along the 93 grades scale of de Lillo and Schizzerotto (1985). This scale is primarily influenced by job rewards and job requirements, that is, by earnings and necessary skills/qualifications.

4.1 First entry into paid work

Table 3 looks at the effects on women’s probability to start working, and, for those who do start, to start as a public employee. In agreement with findings from previous research, education proves to be one the most important factors affecting the participation of Italian women, the odds of having ever worked being twice as high for female graduates than for poorly educated females. Education has an even greater role in influencing the sectoral allocation of participating women: for highly educated women the odds of having

the first job in the public sector are seven times higher than those for low-educated women. Overall, these results confirm that, controlling for family background, cohort and region, highly educated Italian women were and remain over-represented not only in the labour force but also in public employment.⁵

Table 3. Women's first entry into paid work in Italy: effects on the probability of having ever worked and of starting as a public employee (logistic regression: estimated log-odds)

	EVER WORKED?	1 ST JOB AS PUBLIC EMPLOYEE?
<i>Baseline birth cohort: 1945-1954</i>		
- 1955-1964	0.19*	-0.34***
- 1965-1974	-0.03	-0.77***
<i>Baseline: Mother has never worked</i>		
-Mother has worked	0.30***	-0.12
<i>Father's or partner's occupational score</i>		
	-0.01*	-0.001
<i>Baseline Region: North-West</i>		
- North-East	0.18	-0.05
- Centre	-0.70***	0.24
- South-Islands	-1.75***	0.07
<i>Baseline education: up to Lower Secondary</i>		
- Upper Secondary	0.49***	0.95***
- Tertiary	0.75***	1.95***
<i>Duration 1st job search</i>		
		0.007***
<i>Constant</i>		
	2.06***	-1.51***
Log-likelihood	-1235.7	-1119.8
Number of women	2831	2192

Note: Robust Standard Errors ; * p< .10; ** p< .05 ***p< .01
Source: ILFI, 2005

An additional result worth noting is that our three cohorts differ in terms of the propensity to enter public employment. This propensity displays a significant decline in the 1980s and 1990s which especially affects the last cohort and reflects progressively shrinking opportunities in this sector.

4.2 First transition out of paid work

Our evidence on transitions out of paid work is summarized in table 4, where five discrete event-history models are reported. Investigation is restricted here to married women who experienced only one marriage or cohabitation over the observed life course (from first job to age 40); in this way we are able to use the partner's occupational score to proxy family income (in addition to her own earnings). Since divorce was

⁵ When modelling the sectoral allocation of first jobs, we checked for the presence of sample selection by running a Heckman's bivariate probit model and by using mother's work experience as selection variable. The estimates

still relatively infrequent in the period of interest, and since employment interruptions overwhelmingly concerned married women, this ought to represent a not too serious restriction.

The purpose of using four nested models was to test whether and to what extent being well educated and working in the public sector retain a significant impact when the labour market position is controlled for with progressive degrees of accuracy. Two findings are notable in this respect. First, working in the public sector continues significantly to reduce the risk of interruptions after controlling for wage (here, as said, proxied by women’s own occupational score and employment experience⁶) and all other employment conditions (Models 3 and 4), indicating that public employment may offer more than monetary returns. Second, the coefficient for education diminishes progressively from Model 1 to 4, but a statistically significant and negative effect on married women’s risk of exiting paid work remains after controlling for own wage (Model 2), for wage and employment conditions in the public sector (Model 3), for industrial branch (working in agriculture versus elsewhere), for type of contract, and for part-time vs. full-time status (Model 4).

The fact that education loses influence from Model 2 to Model 3 indicates that part of the reason why educated women are more likely to have continuous careers is that they work in the public sector. As model 5 indicates, and in line with the descriptive evidence in figure 1, the public sector seems to foster continuity at the low end of the educational spectrum more than it does at the high end, with tertiary educated women displaying labour market attachment irrespective of where they work. At the same time, the fact that education retains significance when extra-labour market variables are introduced (model 4) suggests that something more than wage and employment conditions may be needed to account for this ‘residual’ effect and something that is specific to the Italian context, since this residual effect is not observable everywhere. For example, estimation of models similar to those in table 4 on British data shows that, unlike in Italy, in Britain education loses statistical significance if the occupational class variable is introduced (Solera 2009).

In principle, various factors can account for this residual effect. One possibility is that it captures differences in employment opportunities or in formal childcare provisions. The availability of public childcare support in Italy is not only scarce, as noted, but also unevenly distributed among regions, such as labour market opportunities. However, we partly controlled for these differences through the variables “regional unemployment rates”, and “region”. Moreover, in Italy the weak institutional support to childcare is largely compensated by kinship and intergenerational solidarity, and by own resources to buy care. Own resources are normally higher for highly educated women and couples, but, in the models, they are captured by proxies for wages and income.

Table 4. Married/cohabiting women’s first transition from paid work to housework in Italy (Discrete time hazard rate models: estimated log-odds)

MODEL 1 MODEL 2 MODEL 3 MODEL 4 MODEL 5

remained nearly invariate.

⁶ We also ran models with a 11, 7 or 5 class-related-group variable instead of the occupational score and we obtained nearly the same results for all our important covariates.

<i>Baseline birth cohort: 1945-1954</i>					
- 1955-1964	0.03	-0.03	-0.03	-0.03	-0.03
- 1965-1974	0.32**	0.22*	0.14	0.06	0.06
<i>Previous time spent in employment</i>	-0.04**	-0.01**	-0.001**	-0.006**	-0.006**
<i>Duration in current status</i>	0.001	0.001	0.001	0.001	0.002
<i>Partner's occupational score</i>	-0.001	0.001	0.001	0.001	0.003
<i>Baseline age children: no children</i>					
- pregnant	0.76***	0.76***	0.76***	0.79***	0.79***
- youngest child aged 0-3	-0.20	-0.20	-0.20	-0.20	-0.19
- youngest child aged 4+	-0.74***	-0.74***	-0.63***	-0.70***	-0.64***
<i>Number of children</i>	-0.09	-0.12*	-0.15*	-0.07	-0.11
<i>Baseline: Mother has never worked</i>					
-Mother has worked	-0.05	-0.05	-0.07	-0.06	-0.12
<i>Yearly regional unemployment rate</i>	-0.004	0.006	0.005	0.01	0.007
<i>Baseline Region: North-West</i>					
- North-East	0.24*	0.27*	0.26**	0.30**	0.30**
- Centre	0.21	0.20	0.15	0.09	0.10
- South-Islands	0.49**	0.39*	0.31*	0.36*	0.21
<i>Baseline education: up to Lower Secondary</i>					
- Upper Secondary	-0.97***	-0.60***	-0.35**	-0.31**	-0.73**
- Tertiary	-2.66***	-1.98***	-1.60***	-1.48***	-1.92***
<i>Occupational score</i>		-0.02***	-0.02***	-0.03***	-0.03***
<i>Baseline employee status : public employee</i>					
- private employee			0.70***	0.79***	0.55***
- self-employed			1.09***	1.40***	1.24***
<i>Baseline agricultural sector: no</i>					
- yes				-1.09***	-1.09***
<i>Baseline time: full-time</i>					
- part-time				0.09	0.09
<i>Baseline type of contract: permanent contract</i>					
- employee with fixed-term contract				0.27*	0.27*
- employee without contract				0.82***	0.81***
<i>Interaction education*public</i>					
- upper secondary*private employee					0.54**
- upper secondary*self-employed					0.32
- tertiary*private employee					0.93
- tertiary*self-employed					0.20
<i>Constant</i>	-4.68***	-4.24***	-4.67***	-4.92***	-4.72***
Log-Likelihood	-2827.4	-2808.6	-2880.9	-2736.2	-2734.3
Number of woman-months	147719	147719	147719	147719	147719
Number of women	1366	1366	1366	1366	1366
Number of transitions	594	594	594	594	594

Note: estimates using option « cluster »; * p< .10; ** p< .05 ***p< .01
Source: ILFI, 2005

Given that highly educated women may interrupt less because they work in better protected or more

“family-friendly” jobs, we partly controlled for different forms of protection in the event of maternity through sector and type of contract. What we instead cannot measure or adequately proxy with our data are norms or preferences (a part the proxy of work attitudes we use through mother’s work experience). It is thus likely that the residual effect that education captures mainly reflects differences in preferences and in the ability to act upon preferences and to overcome constraints. Our suggestion is to view this residual as a legitimacy effect. In Italian-like labour market settings where re-entry is difficult, well educated women may be more adverse to exit. Arguably, not only do these women earn more and like working more but they also perceive themselves and are perceived as ‘entitled to work’, so that for them the cost of interrupting and not being able to re-enter properly is higher. As mentioned earlier, this “legitimacy” effect of education is likely to play a greater role where a marked overall cultural shift has not occurred and education ‘buys’ acceptance of a “modern role” for women. Künzler shows that Italy is one of these contexts: it has one of the narrowest gaps between young and old cohorts in gender role orientations, whereas Spain one of the widest (Künzler 2002). And as Scott shows (1999), young Italian cohorts did not display a significantly higher propensity to endorse mothers working once education and women’s labor force involvement were controlled for. In Italy, not only attitudes but also behaviors seem quite constant across cohorts once education has been controlled for, as evident in tables 3 and 4 as well as in other studies (Schizzerotto et al. 1995). As shown by Naldini and Jurado (2013), this relative stability over time of Italy diverges from what is observable in Spain: between 1999 and 2008 women’s labour market participation has increased in both countries but more in Spain than in Italy. The higher participation of the younger female cohorts in Spain is matched by a (comparatively) more gender balanced distribution of unpaid work and a more entrenched culture of emancipation. For example, disagreement about the beliefs that a pre-school child is likely to suffer if the mother works and that a father is not suited to look after children is more widespread among Spanish respondents.

5. Conclusions

Cross-sectional data on the role of education show that low-educated Italian women have one of the lowest rates of participation in Europe, and that their gap vis à vis the highly educated is very wide. Educated Italian women are also noticeably over-represented in the public sector. By adopting a life-course perspective and using retrospective longitudinal data from the last wave of ILFI, in this study we have analysed how education and public employment differentiate women’s entry into and exits from paid work, observing three cohorts of women born between 1945 and 1974 from the time they leave fulltime education to their 40s.

We find that in Italy, education has exerted a strong influence on the probability of entering a labour market career, has increased the chances of pursuing this career within the public sector and has reduced women’s risks of exiting paid work after controlling for wages, employment in the public sector and other job characteristics. We also find that working in the public sector significantly lowers the risk of labour market interruptions for less educated women in partial independence from wage and all other employment conditions. In other words education and public sector employment enhance work history continuity in partial independence from one another and from other labour market conditions. This is consistent with the possibility that education affords non monetary returns by both giving access to the reconciliation benefits attached to public sector jobs and by affording legitimacy to the choice of work continuity. One of the differential benefits accruing to well educated women who work in the public sector would then be not so much earnings and employment continuity – highly educated women have

continuous careers also in the private sector – as lower fertility costs, including own stress and fatigue. Fertility is, in fact, higher among medium or well educated women employed in the public sector.

Due to lack of suitable life-course datasets these results cannot be directly compared to those of other countries, Mediterranean countries in particular. However, the evidence we reviewed from comparable cross-sectional data or prospective panel data suggests that the reason why in Italy education has a stronger influence is that education polarise female behaviour more where social policies are less developed – which is true for all Mediterranean countries - but also where change in traditional norms has been slower, which is especially true for Italy.

Although the present work has been analysis-oriented rather than policy-oriented, an overall policy consideration is in order. As well known, Italy, as well as Spain, are still countries with a low-participation/low-fertility equilibrium⁷. Public sector employment has served as a surrogate for a wider and a more universal package of reconciliation provisions that has benefited only one group of women – however large and highly qualified it may be. *De facto*, universal rights have been traded for privileges. This segmentation between ‘protected’ and ‘unprotected’ women is becoming even less acceptable now that the public sector is shrinking and young cohorts disproportionately bear the burden of a “partial and selective” deregulation (Barbieri 2009). The findings in this paper endorse the view that, if the aim is to ensure across-the-board increases in fertility and participation and reduction of education-based inequalities, public employment can no longer be used as a surrogate for proper universal reconciliation policies. They also suggest that polarisation in protections may go hand in hand with polarisation in own and others’ approval for mothers’ involvement in paid work. Therefore, policy action should more explicitly address gender cultures and practices within families, within organizations as well as within society at large.

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⁷ Recent values for the fertility and the employment rate (15-64) in Italy are 1.41 in 2009 and 46.1% in 2010, respectively); the corresponding figures for Spain in 2010 are 1.39 and 52.8% in Spain. For comparison, the EU27 average values are 1.59 and 58.2% (2009 and 2010, respectively). Both sets of rates declined since the onset of the financial crisis across countries with significant contractions in employment.

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