The Jewish Anticipation of Fertility Control in Nineteenth-Century Europe: A Reassessment.

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Abstract. A long-standing tradition has contrasted the fertility of Western- and Central-European Jews with that of the majority populations among whom they lived, showing that the Jews practiced fertility control significantly earlier than the members of other social groupings or religious affiliations. Although a few recent studies have shown that this is not always the case (Derosas 2003; Schellekens and van Poppel 2006), there is still a widespread agreement that the Jews practiced fertility control before the rest of the European population. The reasons why they did so however are not as unanimous. The most popular explanations refer to the socioeconomic and demographic conditions which characterized the Jewish communities: indeed, European Jews retained overall better socioeconomic status, higher education, and larger income than their Gentile neighbors. They were also more urbanized, and had notably lower infant mortality rates (Livi-Bacci 1986; Ritterband 1981). Such an approach appears unsatisfactory under several respects: it does not explain why Jewish fertility tended to be lower than that of other groups with similar socioeconomic conditions, nor the differences in the timing of fertility decline among Jewish communities throughout Europe. It also understates the existence of large intra-Jewish fertility differentials.

In this paper I argue that the minority-group status hypothesis provides a much better explanation of the Jewish exceptionality. According to Goldscheider's classical analysis (1971), the members of minority groups who are desirous to integrate into the dominant society tend to depress their fertility as a reaction to the feelings of relative marginality, competition, and social insecurity they experience during the acculturation process. On the contrary, those who prefer to maintain their cultural identity and remain segregated from the majority usually display higher fertility rates. In order to test this hypothesis, I contrast the reproductive behavior of the Venetian Jews and Catholics in mid-nineteenth century. This is a particularly interesting period to study. The demographic transition was at its beginning. The integration of the Venetian Jews into the Gentile society was underway. Most limitations to civil rights had been abolished since 1797, and many families had moved to the city center abandoning the Ghetto, which only the poorest Jews still clung to, and which appeared an exotic and strange place to foreign visitors. Cases of intermarriage were virtually absent. However, the demography of Jews and Catholics was rather similar, with the relevant exception of infant mortality (Derosas 2003).

The paper relies on longitudinal information at the individual, family, and household levels, drawn from the city population register, supported and integrated by further pieces of information provided by an array of other sources. The study concerns some 31,000 persons, roughly one quarter of the total population, whose biography is reconstructed along two decades, from 1850 to 1869. The sample includes virtually all Venetian Jews (about 2,400 persons in 1869) and the inhabitants of four parishes, two of which were very poor, one was in slightly better social conditions, neighboring the Jewish Ghetto itself, and one was quite rich. In the last two parishes also several Jewish families dwelled. I use both descriptive analyses and hazards models. The main questions I consider include the following: Are there differences between Jewish and Catholic fertility? And between the fertility of rich, integrated Jews and that of their poor, non integrated counterparts? Do such differences concern starting, spacing, or stopping? The results show that the "characteristics" approach provides a poor explanation of fertility differentials between Catholics and Jews. On the contrary they fit nicely with the "minority-group status" hypothesis: using residence as a proxy for integration versus segregation, I show that the fertility of the assimilated Jews was much lower than that of their Catholic counterpart. On the contrary the segregated Jews who still inhabited in the Ghetto displayed much higher fertility than the Catholics. I also show that the reproductive behavior of the assimilated Jews was characterized by longer spacing, whereas the higher fertility of the Ghetto Jews was largely due to later stopping. Finally, I suggest that the minority-group status framework is coherent with the different timing of the fertility decline among Jewish communities throughout Europe, showing that it followed closely the specific pace of the Jewish emancipation in different countries.

1. *Introduction*. A long-standing tradition has contrasted the fertility of Western- and Central-European Jews with that of the majority populations among whom they lived, showing that the Jews practiced fertility control significantly earlier than the members of other social groupings or religious affiliations. Although some recent studies have revealed that this is not always the case (Derosas 2003, 2006; Schellekens and van Poppel 2006; Benz 2006; Vobecká 2006), such a peculiarity of the Jewish demography is still substantially unquestioned. The opinions on its reasons, however, are not as unanimous. The most popular explanation refers to the socioeconomic and demographic conditions which characterized the Jewish communities: overall, the European Jews retained better socioeconomic status, higher education, and larger income than their Gentile neighbors. They were also more urbanized, and had notably lower infant mortality rates (Livi Bacci 1986; Ritterband 1981), features which are all related to low fertility. However, such an approach appears unsatisfactory under several respects: it does not explain why Jewish fertility tended to be lower than that of other groups with similar socioeconomic conditions, nor the differences in the timing of fertility decline among Jewish communities throughout Europe. It also underrates the existence of relevant intra-Jewish fertility differentials.

In this paper I argue that the minority-group status hypothesis provides a better explanation of the Jewish exceptionality. In his pioneering analysis, Goldscheider (1971) argued that the members of minority groups who are desirous to integrate into the dominant society tend to depress their fertility as a reaction to the feelings of relative marginality, competition, and social insecurity they experience during the acculturation process. On the contrary, those who prefer to maintain their cultural identity and remain segregated from the majority usually display higher fertility rates. According to such an hypothesis, the preference of Jews for smaller families was a consequence of their process of integration into larger society rather than of their socioeconomic peculiarity, and it is in the timing and specific features of such a process that Jewish fertility should be framed. I followed such an approach in a recently published research on the Venetian Jewry around mid-nineteenth century, a period when its integration into the Gentile society was still under way (Derosas 2006). Contrasting the acculturated Jews with the more traditionalist and segregated ones, I showed that indeed the fertility of "traditionalists" was much higher than that of the "integrated" Jews, the Catholic majority locating in the middle between these two extremes. Similar studies of intra-Jewish differential fertility in twentieth-century US have been carried out by Goldscheider himself (1971; Goldscheider and Uhlenberg 1969), but unfortunately this kind of analysis is much more difficult to accomplish with reference to earlier times, when information on different degrees of acculturation is seldom available, and much more so at the individual level. Indeed, most if not all studies of Jewish demography in the past tend to consider the Jews as a homogeneous group

under the cultural/religious respect. Nevertheless, I will argue that taking into consideration the specific timing and features of Jewish integration into local societies equally confirms, albeit indirectly, the minority-group status hypothesis, disentangling the peculiarity of the Jewish position in the process of fertility decline, and explaining the apparent anomalies mentioned above.

This paper is organized as follows. First I outline the prevailing hypotheses about the Jewish anticipation of fertility control. Then I present the main outcomes of my study on Venetian Jews. Finally I discuss some recent analyses concerning a few other Jewish communities, suggesting the existence of a strict relationship between fertility decline and the process of Jewish acculturation.

2. *Literature review*. Since late-nineteenth century, scholars have noticed that the Jews of Europe and the US had lower birth rates and smaller families than the non-Jewish neighbor populations (Billings 1889; Livi 1920; Bachi 1931). Later analyses confirmed such a feature of the Jewish demography and extended it to the pre-modern period (Goldscheider 1967; Knodel 1974; Ritterband 1981a; Livi Bacci 1986), with the sole possible exception of nineteenth-century France (Hyman 1981). Presently the early adoption of forms of fertility control by the European Jews is widely accepted as common knowledge among scholars.

Why they did so, however, is not equally clear. Actually, Judaism appears as favorable to high fertility as most religious ideologies. The family has a basic role in all aspects of Jewish life, and children are regarded as a divine trust. Fecundity is considered the greatest of blessings, and childlessness a reason for deep grief. Furthermore, besides reproduction, there is no moral stigma on sexuality and a proper frequency of sexual intercourse is recommended as marital duty (Feldman 1968; Kaufman 1992; Bok 1981). As for the rules of family purity, their effect is controversial, the waste of irregular cycles being probably compensated by the concentration of sexual intercourse in fecund days by women with regular cycles (Bachi 1976: 31; Della Pergola 1983: 208-214). Prolonged breastfeeding was probably more effective, contributing to reduce infant mortality and make birth intervals longer. Breastfeeding was recommended to Jewish mothers until the second year of life (Bok 1981: 109), and seems to have been widely practiced in the past (Woodbury 1926: 75-120; Marks 1994: 67-70; Schellekens and van Poppel 2006). On the whole, Bok tends to exclude that religious norms had any significant impact on Jewish fertility (1981: 77). The scant empirical evidence available suggests that in the past religiousness among Jews was associated to larger families than the average (Hyman 1981: 88).

As mentioned above, most scholars relate the low fertility of European Jews to their peculiar socioeconomic features. After controlling for socioeconomic differences, religious differentials

should consequently disappear (Anderson 1986). Ritterband (1981a: 8-12) included occupation, education, income, urban dwelling, residential mobility, and lower infant mortality among the determinants of lower Jewish fertility. Livi Bacci (1986) followed a similar line, associating the Jews with the aristocratic elites and urban populations in general. For all of these groups he suggested that lower mortality, better social conditions, and urban dwelling accounted for lower fertility. With reference to the position of German Jews, Knodel (1974: 140) used a variant of this line of reasoning, arguing that it was the structural isolation of the Jews and the density of relational networks which made the diffusion of new ideas about family size and family limitations spread faster and independently from the rest of German society. A similar approach was followed by Watkins and Danzi (1995) to explain the adoption of birth control among Jewish women in early-twentieth-century New York and Philadelphia.

Recent studies suggested more refined approaches to the relationship between religious affiliation and demographic behavior. Building on Goldscheider's pioneering work (1971), several scholars stressed the need to take into account the wider social-political context in which religious groups acted. From religious rules and socioeconomic conditions, the focus was moved to disentangling the interplay between cultural values, social relations and political institutions (McQuillan 2004; Lynch 2006; Kertzer 2006). In particular, as far as minorities are concerned, Goldscheider himself (1971: 270-298) first argued that the minority status plays a relevant role in shaping the fertility of religious groups: since high fertility represents an obstacle to full integration into the majority, a tendency to assimilation should be associated with lower fertility, while persistent separation from the majority should result in higher fertility to ensure group preservation. Group identification and segregation also imply a greater commitment to religious ideology and a stronger social control on the respect of religious norms.

It should also be noticed that both the "religious" and the "socioeconomic" explanations basically outline the conditions for new ideas and behaviors to spread in specific subgroups rather than concern the mechanisms actually triggering the process of change. On the contrary, the minority-group status hypothesis is more prescriptive not only about the determinants but also about the timing of the fertility decline. Unfortunately, the data available do not allow us to clarify the timing of Jewish fertility decline as precisely as we would desire. Certainly it did not start and develop simultaneously throughout Europe and the rest of the world. Della Pergola (1983: 231) noticed that it took at least two centuries for the fertility transition to involve all Jewish communities. The Italian Jews seem to have been the first to reduce their birth rates significantly, starting as early as the end of the seventeenth century. It is not clear, however, whether this depended on nuptiality restrictions, or on some form of fertility control, or on both. Some authors

(Toaff 1990: 288-289; Della Pergola 1997: 919; Favero and Trivellato 2004: 38) argued that the Italian Jews effectively practiced marital fertility control from the beginning of the eighteenth century if not earlier. Other scholars stressed the constraints imposed on marriage by the ecological restrictions of ghettos, and located the start of generalized fertility control around the end of the eighteenth and the beginning of the nineteenth century (Livi 1920: 76; Bachi and Della Pergola 1984: 178-179; Livi Bacci 1986: 190-192). However, in the communities of Rome, the largest and the poorest of Italian Jewry (Bachi and Della Pergola 1984), and Pitigliano, a small town in the Tuscan countryside (Livi Bacci 1978), fertility rates remained remarkably high until 1870 at least. Elsewhere in Europe the process of fertility reduction took place even later. Goldstein (1981) showed that the Jews of the German village of Nonnenweier maintained higher levels of fertility than non-Jews until 1880. Schellekens and Van Poppel (2006) showed that in the Hague Jewish marital fertility was above the average until 1880, and only slightly below, though still higher than that of the Protestants, afterwards. As for the American Jews, those who immigrated in the late-eighteenth and early-nineteenth centuries had larger families and higher marital fertility than the non-Jewish population (Cohen 1981).

3. *Jewish fertility in nineteenth-century Venice*. I will now present a summary of my research on Venetian Jews. The Venetian case provides a unique opportunity to test the minority-status group hypothesis with reference to the Jewish fertility transition. Venice hosted one of the most ancient and relatively prosperous communities of the Italian Jewish Diaspora. The community reached a peak of about 2,500 members around 1630, and progressively declined in the eighteenth century, shrinking to 1,500 in 1790 (Favero and Trivellato 2004). After the end of the aristocratic regime in 1797 and the consequent Jewish emancipation, the community experienced a sustained growth, which contrasted remarkably with the dramatic fall of the Venetian population. According to the city census, 2,415 Jews lived in Venice in 1869. The overall city population was under 126,000 inhabitants; before 1797 there had been around 140,000 inhabitants and this number collapsed precipitously after the end of the aristocratic regime and the loss of independence, reaching a low of 93,000 in 1838. The population trend mirrored the general conditions of the Venetian economy and society: indeed, the first half of the nineteenth century was the direst period of the city's history (Derosas 2002). In 1865 Venice appeared as "a gloomy and dejected city" to the eyes of the American writer William D. Howells ([1866] 2001), who spent four years there as US consul.

Shortly after the end of the segregation, many Jews abandoned the Ghetto moving to more comfortable areas of the city. Map 1 displays the distribution of Jewish dwellings in 1869, according to the address reported in the census records.

Map 1. Distribution of Jewish dwellings in Venice, 1869.

Source: 1869 census (my elaboration).

Clearly, the Ghetto area had still the highest concentration of Jews, with about one third of the community dwelling there. Some other families had left the Ghetto, but only to move to its immediate outskirts, no more than a few blocks away. Roughly another third lived in the parishes of the city center, in the St. Mark and Rialto areas. The others scattered around the main streets heading from the Ghetto to the center. In the rest of the city the Jews were completely absent. Indeed their residential choices were quite selective; however there does not seem to be any tendency to concentrate in "Jewish" blocks of neighboring dwellings, as was suggested by previous studies on this issue (Calabi 2001; Levis Sullam 2001). It is also interesting to notice that most of these choices were of a definitive nature. The population register reports some 1400 changes of address of Jewish families from 1850 to 1869, only 7 per cent of which implied a return to the Ghetto, while 9 per cent went in the opposite direction; 58 per cent concerned moves outside the Ghetto and the remaining 26 per cent moves inside the Ghetto.

To a large extent, the distribution of Jewish dwellings followed a social gradient. The richest families were the first to abandon the Ghetto, moving to palaces located in the central parishes or along the Grand Canal, which they bought from the impoverished Venetian aristocracy as soon as they were allowed to have real estates of their own (Derosas 1987). On the other hand, with only a few exceptions, "in the high dirty houses and low dirty lanes" of the Ghetto, to use Howells' ([1866] 2001) words, remained only the poorest members of the community. Elsewhere the social composition was rather mixed, with a prevalence of members of the petty bourgeoisie and the middle class. The Venetian Jews used to distinguish themselves between "upper Jews" (*ebrei de su*), i.e. the very rich, and "lower Jews" (*ebrei de zo*), the poor. Such a sharp distinction was deeply rooted in the collective conscience and is still well alive nowadays, although it does not really make much sense any more. Even at mid-nineteenth century, however, such a picture of the community's social structure was quite inaccurate. Between the two extremes of the bankers and great landowners on the one hand, and the day-laborers and poor supported by the community's welfare institutions on the other hand, the whole range of the social scale was represented, including factory workers, artisans, shopkeepers, employees, and professionals. Indeed, the largest occupational groups listed in the 1869 census were tradesmen and retailers, brokers, peddlers, and workers of some glass factories located nearby the Ghetto. Most Jewish women were housewives or had no occupation. Literacy was exceptionally high: 82 percent of the males and 77 percent of the females could read or write. The percentages for the whole city were 58 and 44 respectively.

In Venice the process of Jewish emancipation started abruptly in 1797, when the arrival of the French troops put an end to the aristocratic regime. The heavy gates giving access to the Ghetto were knocked down and burnt by a jubilant mob led by two Jewish members of the provisional government. The latter lasted only a few months, but compulsory segregation was never to be restored by the different regimes which succeeded in the city government. The Austrians, who – apart from the Napoleonic parenthesis (1806-1814) – governed Venice till 1866, maintained the policy of substantial equality and in favor of Jewish integration introduced by the Tolerance Edict of Joseph II in 1781. All distinctive signs were abolished; the use of Hebrew was allowed only in religious ceremonies; the Jews were encouraged to attend public schools and Universities and were subject to military conscription; most importantly, they could exercise all kinds of economic activities and professions. The exceptions were all public offices, notary offices, and pharmacies: interdictions that the Jews hardly endured and unsuccessfully tried to cancel, fuelling their deep hostility towards the Austrian regime (Berengo 1987). Full emancipation came only in 1866 when Venice joined the Kingdom of Italy.

Indeed, the Jews were among the most enthusiast supporters and leaders of the struggle against the Austrian dominion and in support of the national *Risorgimento*. The role played by Venetian Jews on economic and social life was even greater than the political one. Their rise into the city elite was astonishing for speed and dimension: in a few years they became the greatest landowners of the region, using part of the wealth accumulated with banking, insurances and international trade to buy the church properties alienated by the Napoleonic regime as well as the assets of the indebted aristocracy, while keeping their primacy in financial and commercial activities (Derosas 1987). If these representatives of the Jewish elite were the most apparent examples of the new position of Jews in Venetian society, however, one should not disregard the contribution of many members of the middle class, particularly professionals like physicians and lawyers as well as scientists and intellectuals, who actively participated in the most important institutions of the city and in social and public life in general (Luzzatto Voghera 2002). Nor, at a lower social level, should be understated the role of the hundreds who had abandoned their traditional jobs of peddlers, especially rag-and-bone-men – the most frequent occupation in eighteenth-century Ghetto (Luzzatto 1956; Berengo 1989) – to undertake more "modern" or common jobs such as factory worker or shopkeeper. In all cases, they made a resolute choice towards integration into, or at least intense interaction with, Gentile society.

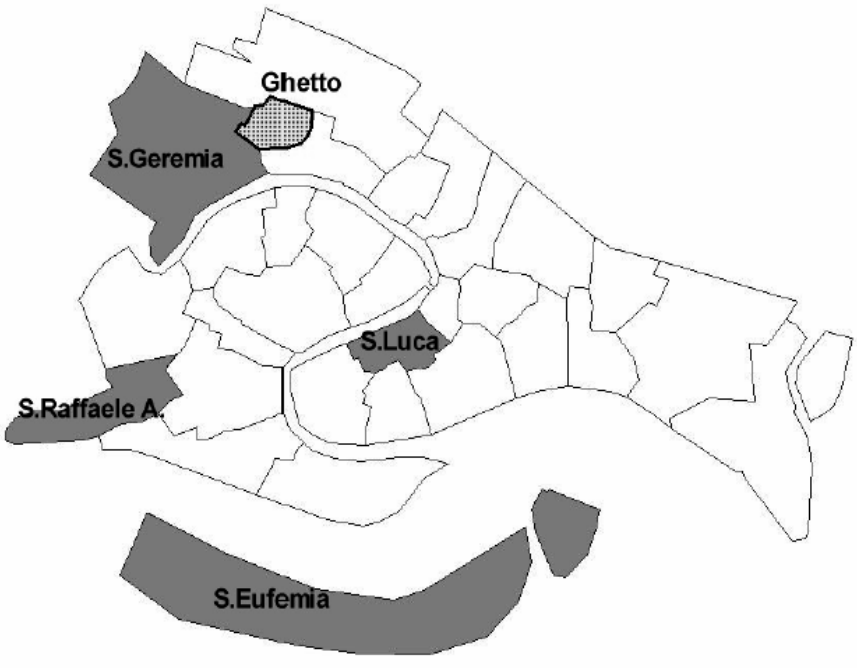
On the other hand, the Ghetto society maintained its persistent separateness. All visitors were stricken by the peculiarity of the place and of the people who inhabited it. Everything looked different: clothing, language, attitudes, buildings. In literary and tourist imagery, the Ghetto represented an exotic surplus, a Jewish Orient in an oriental Venice. Wondering why many Jews still remained in such a filthy and noisome place, Howells suggested ironically that "it may be that the impurity of the place and the atmosphere is conducive to purity of race." Actually, the purity of race, to put it in Howells' terms, was out of question, since mixed marriages were practically non extant and conversions relatively rare. But there was no doubt that the preservation of cultural identity could be better safeguarded by residence in the Ghetto: daily life, kids games, school attendance, a shared idiom (Fortis and Zolli 1979), religious ceremonies, traditional festivities, welfare organization, communal institutions, were all organized in a perspective of self-containment and persistent seclusion. They were the peculiar components of the life of the *hasèr*, from the Hebrew *hatzer*, as the Venetian Jews prefer to call the Ghetto, that is the *courtyard* where Jewish life peacefully unrolled, as in the unperturbed interior of a house (Levis Sullam 2001: 239).

Of course, dwelling outside the Ghetto did not mean necessarily to severe all relationships and involvement to communal life. On the contrary, the government of community institutions and the financial support of its welfare organizations were entirely committed to the members of the

Jewish elite, who had little to share with Ghetto's life but were extremely interested into its survival as a basic condition for the preservation of their own identity as secularized Jews. Each side was necessary to the survival of the other. Thanks to the persistent vitality of Ghetto life, the "other" Jews could safely undertake the way of an increasing integration and acculturation, which in some cases ultimately led to full assimilation and even conversion. Religiosity turned into a private family matter, mostly entrusted to female care, which acculturated Jews did not like to display in their social life. As one would expect, in the daily clash with the needs of a society patterned according to different rules, the observance of religious norms were destined to be increasingly overcome: one could not avoid a dinner of the Chamber of Commerce because *kosherut* was not observed, or desert a meeting of the bank board because it was held on Saturday. To such accommodations probably contributed the peculiar attitude towards the reforms carried out by German Judaism. The Venetian Jews, as well as the Italian Jews in general, preferred to remain faithful to tradition, but – similar under this respect to Catholics – underneath their formal respect laid a substantial neglect of religion (Luzzatto Voghera 1998). Interestingly enough, the clergy who denounced the presence of the first Jews among their parishioners, did not complain about their peculiar religiosity, but rather about the open agnosticism and scandalous atheism, and warned about the "corrupting influence" and the "unavoidable infection" brought by these "contagious hosts" (Bertoli and Tramontin 1971).

In this paper I use residence as a proxy for Jewish integration. I assume that the Jews who had left the Ghetto were eager to integrate into the majority, whereas those who remained in the Ghetto were more traditionalist and maintained a strong cultural identity and social separation from the surrounding society. My analysis concerns the period 1850 to 1869, and includes the whole Jewish community as well as four other Venetian parishes, whose location is displayed in map 2.

Map 2. The study areas: Parish and Ghetto boundaries.



In 1869 the four parishes had 15,825 inhabitants (Jews excluded). With the 2,415 Jews, the population under study covers about 15 percent of the total population, and includes all social ladders. San Luca was one of the richest parishes of the city, inhabited by members of the elites, civil servants, employees, artists, artisans, and servants, especially female. San Geremia included a part of the Ghetto in its territory and was rather a working-class parish. Men were mostly employed in glass factories, at the railway station, or as butchers in the communal slaughterhouse; women worked in glass factories, as milliners or servants. Sant'Angelo Raffaele was the poorest parish of the city, inhabited by fishermen, boatmen, porters, day laborers. Women worked as bead-stringers, seamstresses, hat-makers, or in a large tobacco-factory located nearby. Only 21 percent of the males and 17 percent of the females could read or write, the lowest percentages in the city. Finally, Santa Eufemia, in the island of Giudecca, was a very poor parish either, though slightly better off than Sant'Angelo Raffaele; its inhabitants were porters, hemp and leather workers, boatmen. 40 percent of the female population was employed, mostly as hemp hacklers, bead-stringers, hat- and glove-makers, servants.

Table 1 displays the socioeconomic status of the four parishes under study and the Jewish community, as it results from the individual records of the 1869 census.

Table 1. The Study Areas in 1869: SES and Literacy by Religion, Parish and Sex.

	S.Ang. Raff.	S.Eufemia	S.Geremia	S.Luca	Ghetto Jews	other Jews	*Cath.*	*Jews*
Males								
Day Laborers	33.9	27.9	18.9	6.9	5.2	0.9	*20.4*	*2.5*
Factory Workers	23.9	31.4	33.9	21.8	21.3	3.5	*28.1*	*10.0*
Artisans, Shopkeepers	9.2	5.4	15.1	36.4	31.8	34.8	*18.1*	*33.7*
Middle class, Elite	1.2	0.7	1.9	11.0	2.9	24.1	*3.9*	*16.4*
Unknown	31.8	34.6	30.3	23.9	38.8	36.7	*29.4*	*37.5*
N	1715	535	2801	1683	446	771	*6734*	*1217*
Females								
Factory Workers	22.2	17.9	5.6	0.9	3.8	0.1	*9.4*	*1.5*
Piecemeal Workers	13.0	14.1	9.7	12.6	9.5	5.2	*11.7*	*6.8*
Servants	3.9	5.9	6.5	17.4	2.0	1.1	*8.8*	*1.4*
Retailers	1.9	2.8	2.2	3.9	2.7	2.7	*2.7*	*2.7*
Middle class, Elite	1.7	0.3	2.1	9.4	2.9	16.2	*3.9*	*11.1*
Housewives, Unknown	57.2	58.9	73.9	55.8	79.2	74.7	*63.5*	*76.4*
N	1812	574	2857	2014	451	736	*7257*	*1187*
% Literate								
Males	21.7	37.2	47.6	77.5	68.6	88.6	*47.7*	*81.3*
Females	14.6	22.6	25.1	61.5	63.0	83.4	*32.4*	*75.7*

Source: my elaboration from the 1869 city census. * Part of the census records regarding Santa Eufemia are missing.

Occupations have been grouped following different criteria. As far as males are concerned, the grouping reflects both the average income and its regularity. The lowest level includes unskilled workers apparently without fixed employment, such as day laborers, fishermen, boatmen, porters. Factory workers are supposed to be semi-skilled and to enjoy their salary on a more regular basis: they include workers in the tobacco factory, in glass factories, in hemp and leather factories, in the railway or in the communal slaughterhouse. The third group includes artisans, retailers, peddlers of different kinds, low-rank employees. The "middle class" group ranges from the members of the lower bourgeoisie, clerks, teachers, to officers, civil servants, landowners, bankers, nobles.

As for female occupations, a slightly different criterion has been followed, associating probable income levels with working conditions, in order to distinguish whether work was carried out at home or outside. The rationale for such a subdivision is that home activities were probably less conflicting with childbearing, and should have therefore a different impact on fertility. Unfortunately, we know very little about the economic organization of the time, so that it is usually hard to distinguish between independent craftsmanship, piece work at home, or factory work. Anyway, factory workers include mostly women employed in the tobacco factory, in glass factories, or in hemp factories. Piecemeal work concerns mostly bead-stringing, which was at the time the first female occupation. I include in this group also jobs like sewing, embroidering, hat- and glove-making. Service is a self-standing group, and includes also washing, cooking, ironing, and so on. Retailers include a wide variety of street sellers, who delivered all kind of goods, from fresh water to bread, milk, meat, vegetables, as well as artisans. In the same way as for males, the "middle class" group is a rather heterogeneous mix of professions, like teacher, artist, shop director, and social-status denominations, as well-to-do, noble, landowner. Finally, the group of housewives also includes the large number of cases where no occupation is reported. These criteria are maintained throughout the paper.

As is evident from table 1, there were rather strong socioeconomic differences between Catholics and Jews. Among the latter the members of the petty bourgeoisie and especially of the middle class and the elite were much more numerous, whereas day laborers and factory workers were the majority among the Catholics. Furthermore, female occupation was more widespread among the Catholics than among the Jews. Very few Jewish women worked in factories, and even less as servants. Differences in literacy were also impressive, the percentage of Jews able to write being twice that of their Catholic counterparts. However, there were even more dramatic differences inside each religious subgroup, the socioeconomic gap separating the rich parish of San Luca from the wretched areas of Sant'Angelo Raffaele or Santa Eufemia being as large as that

dividing the Jews of the city center from their coreligionists still dwelling in the Ghetto. At the end, this makes up a rather balanced composition of both the Catholic and the Jewish samples. San Luca and San Geremia were inhabited by Catholics and Jews, sharing roughly the same socioeconomic features. In Sant'Angelo Raffaele and Santa Eufemia there were no Jews, as well as there were no Catholics in the Ghetto. Their inhabitants were all very poor. The rest of the Jews living outside the Ghetto were mostly members of the petty bourgeoisie and the lower middle class. Event though there is no perfect a balance between Jews and Catholics, it will be possible to carry out a comparison including all social levels for both the religious groups.

The data used for this analysis are mostly drawn from the local population register, established in 1850 and kept updated until 1869. Overall, the dataset includes about 31,200 individuals, whose life course has been observed for spells of different length from 1850 to 1869. The total person-years are about 316,000, with 10,160 births and 7,850 deaths observed. The population register is based upon unbounded household forms, reporting the address and the composition of each household as well as their variations along time. For each member of the household the following details are reported: name and surname of the individual and of his or her parents; sex; marital status; religion; place and date of birth (or age at registration); date of immigration; profession; date of entry; date, cause of exit, new address, and name of the spouse in case of exit for marriage. Any change was to be reported within three days from its occurrence, and defaults were heavily fined. Nevertheless, some pieces of information can be lacking or incorrect. Whenever possible, the population register data have been integrated and corrected using information provided by other source materials, namely the parish registers of baptisms, burials, and marriages; the similar registers kept by the Jewish community; the city census of 1869. A careful cross-check carried out between these different source materials through systematic nominal record linkage warrants about the accuracy and the reliability of the data used.

In particular, marriage and birth registers have been used to find the date of marriage of couples who married before they were recorded in the population register. Catholic marriage registers – unfortunately not the Jewish ones – also report the signature of the spouses, when they can make it, or alternatively a cross when they cannot. The 1869-census records include a piece of information about the capacity to read and write of each individual listed. Though a signature is not necessarily an evidence of literacy, I considered it as such, provided the census did not state the contrary. Sometimes the population register omitted the registration of children who died shortly after birth. Birth registers allow to deal satisfactorily with this problem. They also report cases of stillbirths and miscarriages, though it is not clear how systematically they do it. Although this is quite unusual in fertility studies, I decided to include them in my analysis for two reasons: because

this makes the analysis of inter-birth spacing more precise, and because otherwise their omission might have biased the comparison between Jews and Catholics: indeed, there are reasons to believe that while in Jewish registers stillbirths were recorded more completely, the Catholic ones sometimes disguised stillbirths as neonatal deaths (Derosas 2003, 2004; Snel and van Straten 2004).

The main questions I address are:

- Are there differences between Jewish and Catholic marital fertility?
- Are such differences related to socioeconomic conditions?
- Are there differences between the fertility of the Jews who dwelt in the Ghetto and that of their coreligionists who had abandoned it?
- Do such differences concern starting, spacing, or stopping?

Table 2 displays the age-specific marital fertility rates (ASMFR), total marital fertility rates (TMFR), and Coale and Trussell's *M* and *m*, broken down by religion, husbands' SES, and wives' SES. The TMFR is the hypothetical number of children which a woman married at the index age (here 20 and 25) can expect to have with a given pattern of ASMFR. *M* and *m* are two parameters developed by Coale and Trussell to measure the degree to which a population follows the "natural" (i.e. parity-independent) fertility pattern, empirically identified by the Hutterite fertility: *M* is a scale factor while *m* measures the degree to which parity-dependent fertility control is practiced. The first concerns the level of the curve of ASMFR, the second the shape of the curve itself. TMFR, *M* and *m* are computed both considering only live births and including also stillbirths and miscarriages.

The main results can be summarized in a few remarks. All subgroups fall short of the natural fertility patterns, showing that some kind of fertility control was carried out. It is only at the age-group 20-24 that some groups display higher rates than the natural fertility pattern, due to the frequency of premarital conceptions mentioned above. The degree of fertility control varies however in a wide range. Interestingly enough, religion is only a minor factor of variation. Indeed, Jewish fertility is only slightly lower than that of Catholics. However such a comparison is clearly misleading, averaging two opposite extremes in the Jewish group: on the one hand, the fertility of the Ghetto Jews is higher than that of the Catholics ($TMFR_{25} = 6.29$); on the other hand, the rates of the Jews dwelling outside the Ghetto are much lower ($TMFR_{25} = 3.88$). The parameter *m* is lowest among the Jews of the Ghetto (0.134), whose ASFRs closely follow the natural fertility pattern, but much higher among the other Jews (0.581) than among the Catholics (0.347). If stillbirths are included, for the Ghetto Jews *m* falls just below 0, indicating that marital fertility is higher than natural fertility as age advances.

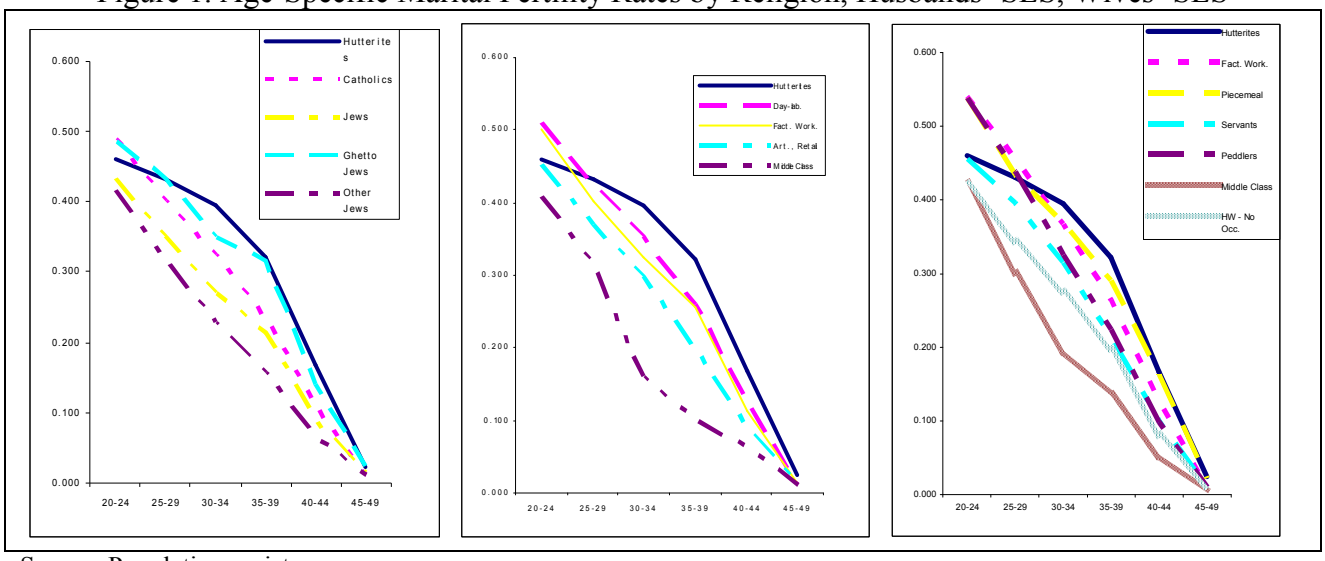
Table 2. Age-Specific and Total Marital Fertility Rates by Religion and SES

	20-24	25-29	30-34	35-39	40-44	45-49	$TMFR_{20}$	$TMFR_{25}$	*M*	*m*	Person -years
Religion											
Catholics	0.490	0.400	0.324	0.234	0.108	0.013	7.84 (8.18)	5.39 (5.57)	0.881 (0.771)	0.347 (0.367)	34071
Jews	0.433	0.351	0.271	0.212	0.089	0.015	6.85 (7.53)	4.69 (5.21)	1.209 (1.066)	0.377 (0.282)	5204
Jews											
Ghetto Jews	0.486	0.432	0.348	0.316	0.140	0.023	8.72 (9.49)	6.29 (6.90)	0.652 (0.575)	0.134 (-0.049)	1651
Other Jews	0.414	0.316	0.228	0.157	0.065	0.011	5.96 (6.38)	3.88 (4.22)	1.247 (1.138)	0.581 (0.556)	3552
Husbands' SES											
Day Laborers	0.510	0.424	0.351	0.260	0.123	0.012	8.40 (8.57)	5.85 (5.97)	0.747 (0.697)	0.281 (0.267)	12276
Factory Workers	0.501	0.401	0.326	0.255	0.113	0.015	8.06 (8.24)	5.55 (5.70)	0.834 (0.787)	0.307 (0.294)	13528
Artisans, Shopkeepers	0.451	0.370	0.297	0.199	0.088	0.012	7.08 (7.31)	4.83 (4.99)	1.038 (0.987)	0.440 (0.419)	10892
Middle Class, Elite	0.408	0.313	0.161	0.099	0.063	0.012	5.27 (5.40)	3.24 (3.31)	1.101 (1.058)	0.708 (0.684)	2220
Wives' SES											
Factory Workers	0.540	0.455	0.367	0.264	0.127	0.009	8.81 (9.25)	6.11 (6.36)	0.625 (0.541)	0.313 (0.330)	5389
Piecemeal Workers	0.539	0.434	0.369	0.291	0.163	0.022	9.08 (9.49)	6.39 (6.65)	0.520 (0.443)	0.128 (0.143)	10193
Servants	0.456	0.396	0.316	0.213	0.100	0.009	7.45 (7.96)	5.17 (5.48)	0.980 (0.814)	0.373 (0.389)	2292
Retailers	0.538	0.439	0.326	0.224	0.098	0.010	8.17 (9.07)	5.48 (5.90)	0.735 (0.598)	0.489 (0.540)	1242
Middle Class, Elite	0.424	0.302	0.194	0.136	0.052	0.005	5.56 (5.87)	3.44 (3.67)	1.176 (1.085)	0.744 (0.760)	1601
Housew., Unknown	0.422	0.344	0.275	0.198	0.080	0.011	6.65 (6.97)	4.54 (4.72)	1.199 (1.083)	0.432 (0.431)	18556

Source: Population register. Values in brackets are computed including stillbirths and miscarriages. M and m are computed with the method proposed by Coale and Trussell (1978) for the age-groups 20-24 to 40-44.

To some extent however these religious differences could simply reflect a social gradient in reproductive behavior. Indeed, there were also remarkable differences in fertility according to SES. As far as the husbands' condition is concerned, all measures and parameters – ASMFR, TMFR, *M*, *m* – closely follow the social scale, ranging from the highest levels of the day laborers ($TMFR_{20}$ = 8.40) to the lowest of the middle class ($TMFR_{20}$ = 5.27). In the case of wives, the correspondence is less straightforward but are coherent with what one would expect: those women whose occupations were probably less disturbed by a childbirth, such as the sewers or the bead stringers, had the highest birth rates, while those who might lose their job as a consequence of a pregnancy, like the servants, had much lower rates. However the minimum was again attained by the members of the middle class.

Figure 1. Age-Specific Marital Fertility Rates by Religion, Husbands' SES, Wives' SES



Source: Population register.

Useful as it is, the two descriptive analysis do not provide conclusive answers to the four questions proposed above. The age-specific and total marital fertility rates are slightly lower for the Jews than for the Catholics. However the Jewish rates are quite misleading, averaging two opposite extremes, one much higher and the other much lower than the overall Catholic levels. This leaves open the question whether the intra-Jewish differences were mostly due to the underlying socioeconomic differences or rather reflected a diverging process of acculturation involving the two Jewish subgroups.

In order to disentangle the competing or concurring effects of socioeconomic status and cultural integration, I turn to a multivariate approach, namely a Cox proportional hazards model. The Cox regression is used to model the hazard rate of a conception. A conception is assumed to take place 9 months before childbirth or before the date of registration of a stillbirth or a miscarriage, though in this case the interval was probably shorter. The population at risk is restricted to married women or unmarried women who are supposed to be cohabiting with the men they later married, provided that they had at least one childbirth was observed. The intervals considered are those following the first birth observed; they start 3 months after each childbirth, to allow for the restart of ovulation, and have a maximum length of 5 years, after which they are censored.

The following variables are included in the analysis: mother's age; marriage duration; composition of surviving children; survival status of the latest child; socioeconomic condition and literacy of both parents; religious affiliation.

- Woman's age influences fertility in two main ways: it affects some proximate determinants of natural fertility, such as fecundity and sterility (Trussell and Wilson 1985), but can also be related to deliberate fertility control. Age is included in the model as five-year age groups.
- Marriage duration, or age at marriage, has been shown to influence fertility of pre-transitional populations, through a variety of mechanisms which include secondary sterility associated with parity, declining coital frequency, age difference among the spouses, and even parity-dependent fertility control (Page 1977; for a discussion see Van Bavel 2003). Marriage duration is represented in the model as ten-year duration groups.
- The previous reproductive history of a couple is likely to influence its further choices and decisions. Crude parity, that is the number of children ever born, mostly influences secondary sterility. Unfortunately such a piece of information is unknown for a large number of the women included in the analysis, whose marital life started before 1850. I decided therefore to drop crude parity from the models. On the other hand, the attitudes of a couple towards a prospective new child were more influenced by their surviving children than by their children ever born. Such an attitude was probably related not only to the number of surviving children but also to their sex composition. In the model net parity is summarized by four categories: no surviving children; one or more sons and no daughters; one or more daughters and no sons; both son(s) and daughter(s).
- The survival of the latest child can also have an impact on a further conception. Breastfeeding tends to delay the return of ovulation, while its premature interruption shortens post-partum amenorrhea, exposing the mother to the risk of a new pregnancy (Preston 1978; Santow 1987). On the other hand, the death of a child can also trigger a replacement effect, pushing the parents to substitute the deceased child with a new born (Taylor, Newman, and Kelly 1976; Knodel 1982). In order to distinguish between these different effects of infant mortality, the covariate regarding the survival status of the latest born is expressed by three categories: the child died during lactation, assumed here to last 8 months; the child died after lactation, at the age of 8 months or more; the child is alive.

To this set of demographic variables, a second set of socioeconomic and cultural variables is added. They concern socioeconomic condition, literacy, and religious affiliation of the spouses, defined according to the criteria mentioned above. It should be noted that information about literacy is probably biased by the fact that Jewish marriage registers do not include the signature of the spouses. As a consequence, the Jews are over-represented in the "unknown" category. Religion is represented alternatively considering all Jews together or distinguishing between the Jews of the Ghetto and the others.

I estimated five different models. The first is the basic model, including all covariates but religion. Its purpose is to test whether there were socioeconomic and cultural differences in fertility, or more precisely in the hazard rates of a conception, after controlling for the demographic covariates included in the model. It is also useful for a comparison with the other models, allowing to test whether adding a new covariate improves significantly the overall fit and whether there are changes in the previous estimates which could be due to the presence of interaction effects. The second model adds religion simply distinguishing between Catholics and Jews. The third model drops such a dichotomy to introduce intra-Jewish differences, distinguishing between Ghetto Jews and the rest of the Jewish community dwelling outside the Ghetto. Its aim is to test the "minority group status hypothesis." There are finally two further models, one concerning fertility until the age of 35, the other restricted to the later age brackets.

To simplify, I call "early fertility" that concerning the first segment of the reproductive course, and "late fertility" the other. The underlying hypothesis is that early fertility is more revealing of possible deliberate birth spacing, whereas late fertility should be affected by stopping choices, or at least by a mix of stopping and spacing behaviors. Indeed, modeling stopping behavior is a complex issue from a theoretical and technical point of view (Kok and Van Bavel 2006). My assumption is that in most cases stopping is more an *ex-post* acknowledgement than the result of an *ex-ante* decision, and that therefore any sharp distinction between stopping and late-fertility spacing can hardly be established. Focusing on late fertility, however, can be a useful way to highlight different attitudes towards stopping itself.

Table 3 displays the results of the regressions for the five models. The first column shows the proportional distribution of all covariates. This is the same in models 1 to 3 and changes slightly in models 4 and 5: the latter distributions however are omitted. The other columns concern the exponentiated coefficients and the related p-values. For each model also some overall statistics are reported, such as the number of events (births) and the woman-years observed, the overall χ^2 test of the model, the degrees of freedom, the maximum log likelihood statistics. Models 2 and 3 also report the difference with the maximum log likelihood of model 1. The increase in the maximum log likelihood is used to test the statistical significance of the covariate: the value is multiplied by two and chi-square distributed under the zero hypothesis that the first model is the correct one.

Table 3. Cox Regression Analysis of Inter-Birth Intervals, Venice 1850-1869.

Covariates	Prop.	Model 1 EXP (Coeff)	Model 1 p-value	Model 2 EXP (Coeff)	Model 2 p-value	Model 3 EXP (Coeff)	Model 3 p-value	Model 4 EXP (Coeff)	Model 4 p-value	Model 5 EXP (Coeff)	Model 5 p-value
Wife's Age											
< 25	0.14	1		1		1		1		n.i.	
25 - 30	0.25	0.85	0.000	0.85	0.000	0.84	0.000	0.85	0.000	n.i.	
30 - 35	0.27	0.69	0.000	0.69	0.000	0.68	0.000	0.68	0.000	n.i.	
35 - 40	0.21	0.58	0.000	0.58	0.000	0.58	0.000	n.i.		1	
40 - 45	0.11	0.31	0.000	0.31	0.000	0.30	0.000	n.i.		0.51	0.000
45 +	0.03	0.08	0.000	0.08	0.000	0.08	0.000	n.i.		0.13	0.000
Marriage Duration											
< 10 years	0.57	1	ref.	1	ref.	1	ref.	n.i.		1	ref.
10 to 20 years	0.30	0.91	0.007	0.91	0.007	0.91	0.009	n.i.		0.90	0.075
20 + years	0.06	0.66	0.000	0.66	0.000	0.66	0.000	n.i.		0.64	0.000
Unknown	0.07	0.80	0.000	0.80	0.000	0.81	0.000	n.i.		0.83	0.045
Surviving Children											
None	0.05	1	ref.	1	ref.	1	ref.	1	1	1.00	ref.
Only Son(s)	0.20	1.07	0.251	1.07	0.250	1.07	0.242	1.06	1.20	1.20	0.181
Only Daughter(s)	0.21	1.06	0.327	1.06	0.326	1.06	0.308	1.05	1.19	1.19	0.213
Both	0.54	0.98	0.669	0.98	0.672	0.98	0.728	0.92	1.24	1.24	0.105
Surv. Stat. Prev. Child											
Alive	0.79	1	ref.	1	ref.	1	ref.	1	1	1.00	ref.
Dead < 8 months	0.16	1.65	0.000	1.65	0.000	1.65	0.000	1.66	1.64	1.64	0.000
Dead > 8 months	0.05	1.42	0.000	1.42	0.000	1.42	0.000	1.51	1.25	1.25	0.005
Husband's SES											
Day laborer	0.33	1	ref.	1	ref.	1	ref.	1	1	1.00	ref.
Factory Worker	0.38	0.98	0.418	0.98	0.417	0.98	0.387	0.96	1.02	1.02	0.704
Shopkeeper, Artisan	0.25	0.95	0.183	0.95	0.197	0.97	0.436	0.97	0.98	0.98	0.803
Middle Class	0.03	0.96	0.607	0.96	0.623	1.03	0.715	0.98	1.12	1.12	0.463
Unknown	0.01	1.02	0.889	1.02	0.883	1.09	0.581	1.11	0.89	0.89	0.699
Wife's SES											
Factory Worker	0.19	1	ref.	1	ref.	1	ref.	1	1	1.00	ref.
Piecemeal Worker	0.34	1.06	0.103	1.06	0.104	1.06	0.111	1.04	1.11	1.11	0.150
Servant	0.05	1.11	0.095	1.11	0.095	1.10	0.111	1.15	0.99	0.99	0.955
Peddler, Artisan	0.03	1.12	0.125	1.13	0.124	1.12	0.153	1.12	1.07	1.07	0.641
Middle Class	0.03	0.84	0.046	0.84	0.048	0.87	0.094	0.89	0.80	0.80	0.227
Housew., Unknown	0.36	1.07	0.094	1.07	0.097	1.07	0.105	1.02	1.13	1.13	0.106
Husband's Literacy											
Illiterate	0.36	1	ref.	1	ref.	1	ref.	1	1	1.00	ref.
Literate	0.41	1.07	0.054	1.07	0.054	1.07	0.048	1.07	1.05	1.05	0.471
Unknown	0.23	0.86	0.000	0.86	0.000	0.86	0.000	0.84	0.89	0.89	0.097
Wife's Literacy											
Illiterate	0.43	1	ref.	1	ref.	1	ref.	1	1	1.00	ref.
Literate	0.23	1.01	0.698	1.02	0.689	1.01	0.747	1.02	1.01	1.01	0.848
Unknown	0.34	1.06	0.124	1.06	0.127	1.06	0.098	1.07	1.02	1.02	0.789
Religion (a)											
Catholic	0.88	n.i.		10	1	n.i.		n.i.		n.i.	
Jew	0.12	n.i.		0.996	1	n.i.		n.i.		n.i.	
Religion (b)											
Catholic	0.88	n.i.		n.i.		1	ref.	1	ref.	1	ref.
Ghetto Jew	0.05	n.i.		n.i.		1.20	0.002	1.16	0.035	1.32	0.008
Other Jew	0.07	n.i.		n.i.		0.87	0.008	0.86	0.016	0.86	0.208
Events		7067		7067		7067		5099		1968	
Woman-Years		14820		14820		14820		8564		6256	
Overall χ^2 Test of Model		1566.22	0.000	1566.23	0.000	1586.73	0.000	437.39	0.000	521.63	0.000
Degrees of Freedom		26		27		28		22		25	
Max Log Likelihood		-58253.38		-58253.37		-58243.12		-40063.21		-14168.5	
-2* diff(M.L.L.)				0.02	0.888	20.56	0.000				

I will restrict my comments to the aspects which are directly related to the main interests of this analysis. The first concerns socioeconomic conditions, which do not seem to play any significant role in shaping hazard rates. This is rather unexpected, since it contrasts with the previous analysis of marital fertility rates. The only partial exception concerns the case of middle-class and elite women, whose coefficients are significantly lower by 16 per cent than the reference category of factory workers. However also this coefficient loses statistical significance once the distinction between Jewish subgroups is introduced in the model.

Model 2 compares the hazard rates of Catholics and Jews. There is no difference between the two groups. Adding this covariate does not improve significantly the model, nor the coefficients estimated in model 1 are modified in model 2, suggesting that there is no interaction between socioeconomic conditions and religion. Actually this is confirmed by a model including interaction terms, which is not displayed here. In conclusion, neither religious affiliation in itself, nor socioeconomic conditions, nor any interaction between the two, have a significant effect on fertility, as it is expressed by the hazard rates of a conception.

The situation changes dramatically once we distinguish between the Jews of the Ghetto and the Jews dwelling outside. As the maximum log likelihood shows, the covariate is statistically significant. The coefficients for the two Jewish groups are both significant (p-value < 0.01). The relative risk of a new conception for the Jews of the Ghetto is 19.5 percent higher than that of the Catholics. On the other hand, the other members of the Jewish community have a lower risk than the Catholics by 13.2 percent. The relative difference between the two Jewish subgroups is therefore about 38 percent. It should also be noticed again that there is no significant evidence of any interaction between religion and socioeconomic conditions.

Models 4 and 5 highlight a further interesting aspect, showing that intra-Jewish differences vary with regard of the two phases in the reproductive course labeled here as “early” and “late” fertility. In fact, in the “early fertility” phase the gap separating the two Jewish groups are slightly smaller than the overall estimates of model 3. On the contrary, at older ages the difference widens dramatically, due to the raise of the Ghetto Jews, whose relative risk scores a 31.6 percent above the reference category. On the other hand, the Jews outside the Ghetto maintain unchanged their relative position, but the p-value is no longer significant. This suggests that the lower fertility of the Jews who had abandoned the Ghetto depended mostly on deliberate spacing in the first phase of their marital course; on the other hand, the higher fertility of their coreligionists in the Ghetto depended primarily on higher reproductive intensity at older ages which probably led also to later

stopping, although also fertility in the first phase of the life course was significantly higher than the rest of the population. Either way, these results validate the "minority-group status" hypothesis.

4. *Framing the fertility decline in the process of Jewish emancipation*. Goldscheider (1971: 295) argued that "minority group status and fertility must be considered within a dynamic framework of sociocultural change", stressing that "the relationship of minority group status and fertility operates within the particularized, but changing, social situation of minority groups." Unfortunately, most studies of Jewish fertility in the past lack in depth of historical analysis, and fail to take into account the changing social situation of Jewish minorities . They tend to understate the sociocultural differentiations inside local Jewries, and to ignore the specific, locally determined historical processes which originated such differentiations. However, some studies provide references to the process of Jewish emancipation which confirm, albeit indirectly, the relationship between the latter and fertility decline.

In her study on Bohemia between 1850 and 1930, Jana Vobecká (2006) argued that in the first half of the nineteenth-century the fertility of the Jews was quite higher than that of the majority population. This explains the rapid growth of the Jewish minority, notwithstanding the legal restrictions which tried to keep their number under public control, strictly regulating marriages and natality (*numerus clausus*). But in the second half of the nineteenth century a dramatic change in the reproductive behavior took place: "a conscious limitation placed on fertility in marriage" became evident, together with restrictions in nuptiality and later age at marriage. The author argued that such changes "do no reflect only the general tendency to demographic revolution related to industrialization and globalization", and suggests that "a progressing emancipation … also played a role." Indeed many Jews achieved "a rapid social ascent… In Bohemia, no social or other group experienced so fundamental transformation of objective conditions and demographic behavior in so short interval as the Jewish population did."

Goldstein (1981) showed that the Jews of the German village of Nonnenweier maintained higher levels of fertility than non-Jews until 1880. Incidentally, she noticed that the subsequent drastic drop coincided with the overall process of emancipation of German Jews. More recently, Ernest Benz (2006) found exactly the same situation in Baden. His analysis was mostly focused on Catholics involved in the political struggle in Baden around 1869, but the population under study included also a certain number of Jewish families, who turned out to have the highest levels of fertility, higher even than Catholics. Anticipating the results of an ongoing research, Benz claimed that such a situation would be soon dramatically reversed: after emancipation in 1862, "Jews would

have enjoyed a massive lead in family limitation over Christians as a whole and over virtually all other subpopulations." Therefore, also in Baden "Jews were distinguished not by an early start on the fertility transition, but by the rapid pace at which it proceeded among them." Although he related explicitly the onset of fertility decline to Jewish emancipation, the author did not suggest that it was the new sociocultural conditions attained in 1862 which pushed the Jews to prefer smaller families. Following Knodel's argumentation, Benz argued that before 1862 "Judaism walled its adherents out socially from exposure to the contraceptive practices" which were apparently dawning in the rest of the population, at least among Lutherans. After emancipation, the thick networks which characterized Jewish communities made the existing ideas about birth control spread much faster than in the rest of Baden society. Such an argument, however, is not fully convincing. One should not take for granted that Jewish networks were significantly thicker than those of other religious denominations. In particular, it seems rather odd that such a feature of the Jewish society came into play when emancipation was powerfully pushing towards communal disintegration. Also, whereas networks can be relevant in the diffusion of innovations of a technical kind, they are probably less effective as far as the values system, as those involved in fertility reduction, is concerned.

Another interesting case is that concerning the Dutch Jews. As mentioned above, in the Hague Jewish marital fertility was above the average until 1880, and only slightly below, though still higher than that of Protestants, afterwards. Schellekens and Van Poppel (2006) are certainly right stressing that this represents an exception to the rule of the Jewish anticipation of fertility decline. However this is not necessarily an argument against the minority-group status hypothesis. Such an hypothesis holds that during the process of acculturation the members of a minority have to cope with feelings of relative marginality, competition, and social insecurity, and tend to counteract some of their disadvantages limiting fertility. In Goldscheider's words (1971: 296), they translate "the 'goals' of social mobility for themselves and their children into 'means' that include family size limitation." Was this the case with the Dutch Jews? Probably not. The Netherlands were traditionally a highly pluralist society, with a strong regional and religious diversity, characterized by an increasing degree of practical tolerance, which guaranteed substantial freedoms for a variety of minorities. Indeed, this was by far the European country where the Jews fared best, which explains the massive migration of increasing numbers of both Sephardi and Ashkenazi Jews. Indeed, in a people which, during the struggle against Spain, had considered themselves the reincarnation of the biblical Jewish heroes (Schama 1987), feelings and expressions of utter anti-Semitism were virtually absent. In the Dutch Republic there was no *numerus clausus* nor stigmatizing Jewish insignia were imposed. The main interdiction concerned the access to the

guilds, which barred the access of Jews to a large number of occupations. Full legal emancipation came with the French troops in 1795, and with emancipation the hold of religious communities quickly declined. "I am a Dutchman of the Jewish faith, who does not care about the Jewish faith": such was the attitude widespread among Dutch Jews, especially in Amsterdam. Most Jews abandoned the Jewish quarters, and mixed marriages increased significantly (Daalder 1995). The favorable conditions which characterized the position of Jews in the Dutch society could have made their integration less problematic then in other countries, and softened the hardships of marginality and social insecurity. As a consequence, resorting to lower fertility than the Christian majority could have resulted less compelling than elsewhere.

5. *Conclusions*. In this paper I proposed a reassessment of one of the most established convictions about the European demographic history: the Jewish anticipation in the process of fertility decline. The most popular explanation for this peculiarity of the Jewish people is that their socioeconomic features led them to forerun an attitude which would eventually permeate the whole European society. A different version argues that the relative isolation of the Jews and the thick social networks which characterized their communities made new ideas and values about reproduction spread easier and faster than in the Gentile society. I argued that neither of these explanations are fully convincing. As an alternative, I suggested that the minority-group status hypothesis, as was proposed by Goldscheider in his pioneering work (1971), provides a much better theoretical framework to this purpose. My own analysis on nineteenth-century Venice corroborates the validity of such an approach. Unfortunately, I am not aware of similar studies for historical populations. Actually, relating fertility levels to different degrees on integration or acculturation of minorities is not an easy task to carry out. Ideally, one should be able to distinguish between the fertility of the acculturated part of a minority with that of the segregated one, which is quite demanding in terms of the information required. However, a careful consideration of the historical conditions which characterized the demographic behavior of the various Jewish communities can provide an indirect support to the minority-group status hypothesis. In particular, the conditions of the Jewish minority before and after emancipation, the interactions with the host population, and the timing and rapidity of the acculturation process, should be taken into account. Indeed, one of the major worth of the minority-group status hypothesis is that it restitutes the study of Jewish fertility to the specificity of historical analysis.

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