

OCCUPATIONS, MIGRATION, SEX RATIOS, AND NUPTIALITY IN NINETEENTH CENTURY ENGLISH COMMUNITIES: A MODEL OF RELATIONSHIPS

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Variations in nuptiality among different kinds of societies or communities have been studied for a long period. Most notably, the distinction between west and north European nuptiality patterns and those of other societies was a major contribution to the understanding of historical nuptiality patterns (Hajnal 1965). A framework for the analysis of such variations in relation to the "availability" of mates and the "feasibility" and "desirability" of marriage has been suggested by Dixon (1971). In that framework, the availability of suitable mates (i.e., the marriage market) in a community depends primarily on the sex ratio of the population in the marriageable ages; the feasibility of marriage is primarily determined by expectations regarding the financial and residential independence prospects in the community; and the desirability of marriage—the strength of motivation to marry—depends on appropriate substitutes to the marriage institution within a given socioeconomic context.

The present study applies this framework to nineteenth century English communities, focusing on interrelationships among occupational and labor characteristics which are hypothesized to affect nuptiality levels in two ways. The first is structural, in which occupational and labor characteristics (referred to as occupational structure) affect nuptiality levels *indirectly*. Hence the occupational structure of communities may affect the sex selectivity of net migrations, which in turn affect sex ratios (availability), and thereby nuptiality levels. The second relationship is functional, in which the occupational structure of communities affects nuptiality levels *directly* through the feasibility and the desirability of marriage. To clarify the structural and functional relationships of the model, the main features are described in more specific terms. Intercommunity differences in population sex ratios (which affect nuptiality levels) may result from the following three factors: (1) variations in the proportions of males and females at birth; (2) variations in sex differential patterns of mortality; and (3) variations in the sex selectivity of intercommunity migration. There are no known variations in the proportions of the two sexes at birth in general (except for sampling variations). Also, no major district variations in mortality sex differentials are known for the nineteenth century period, and where sex selective mortality may have been present it was likely to have had a very small influence on sex ratios as compared to the substantial migration effects. Therefore, it is hypothesized that sex selectivity in migration is a major variable explaining intercommunity variations in the population sex ratio among nineteenth century English communities. But, why should communities differ in the sex composition of their migrations? It is hypothesized that occupational structure is a major factor determining differential rates of male and female migration, although others also might be of importance. Nevertheless, occupational structure (used in this study) is the only relevant information available, and it is probably highly correlated with

other economic factors. The hypothesized relationships outlined so far represent the indirect effect of occupational structure on nuptiality and may be summarized: occupational structure of communities affects the sex selectivity of migrations which produce intercommunity differentials in population sex ratios, and these in turn account for a substantial proportion of the variation in nuptiality levels (see arrows (2), (3), and (4) in figure 1). In this model the sex selectivity patterns of migration—surplus female migration ratios (SFMR)—are measured on the basis of one decade, 1871–1881. Therefore, their measured effects on the population sex ratio do not include the occupational structural effects of sex selectivity of the migration that occurred prior to 1871. Hence, in the proposed model the effects of these past migrations on the sex ratio (SXR) are represented in figure 1; see arrows (5). Although a direct effect of SFMR on I_m is not plausible, we have included such a relationship in the model for completeness of presentation. Hence, with the relationships represented by arrows (2), (3), (4), and (5), the presentation of the indirect effect of socioeconomic structure on nuptiality is complete.

Occupational characteristics of communities may also affect their nuptiality levels directly through the feasibility and/or the desirability of marriage. (See arrows (1) in figure 1.) For example, in an agricultural setting, particularly if land is scarce, the need to accumulate sufficient resources for the formation of a new household may lead to marriage postponement. Such marriage postponement occurred in many west and north European agricultural communities, where low nuptiality was connected with household structure and with the time required to accumulate resources (e.g., Davis 1963). One consequence of the shift from the family to the market economy, however, was that increasing proportions of men and women became hired laborers, thereby reducing the amount of investments needed. This implied that, for a large

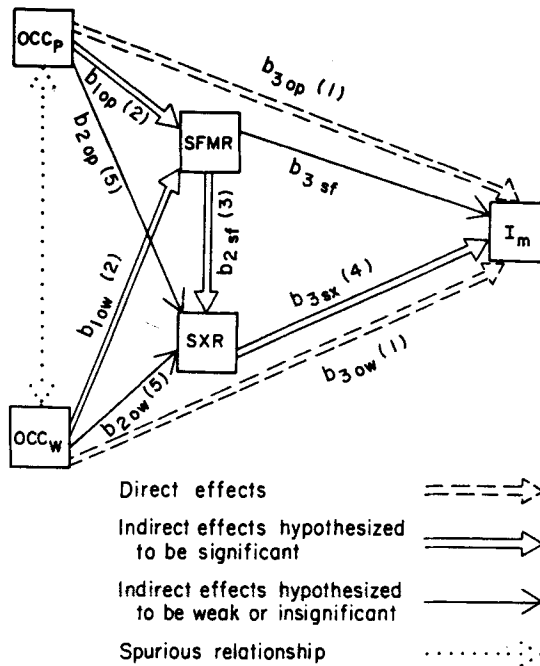


Figure 1.—An illustration of the effects of the explanatory variables in the model on nuptiality levels.

part of the nonagricultural population, the relationship between resources and marriage became more flexible. Similar analyses to that presented in this paper (equations (1)–(3) and table 2) illustrate this distinction in nuptiality between agricultural and other types of communities. Indeed, such analyses suggest that when nuptiality is standardized for the *indirect* structural effects, nuptiality in agriculture is lower relative to communities of other types.

The major aim of this paper is to analyze the direct and indirect relationships between occupational structure and nuptiality levels. A recent study of regional patterns of nuptiality in Europe from 1870 to 1960 (Watkins 1981) considered the possible effects of occupational structure and of marriage market characteristics on nuptiality levels. However, it did not attempt to reach conclusions as to the relative importance and strength of these two effects, or their relationship to migration or to socioeconomic structure.

These direct and indirect interrelationships may be expressed by a causal recursive model. It will be demonstrated that this model fits well the district data for nineteenth century England. In particular, the indirect relationship between occupational structure (OCC_j) and nuptiality levels (I_m), via migration selectivity (SFMR) and population sex ratios (SXR) illustrated in figure 1 (arrows (2), (3) and (4)), is nearly as important as the direct functional relationship represented by arrows (1). These overall direct and indirect effects on nuptiality, as well as the more detailed effects are presented.

The distinction between these direct and indirect effects is of conceptual importance. A major component of socioeconomic modernization is occupational diversification, which is likely to affect nuptiality in complex ways and perhaps affect the whole demographic system involving nuptiality, migration, and fertility. For example, migration resulting from occupational change may raise individual welfare, and as a result increase the feasibility of marriage. On the other hand, migration may be selective by sex and affect the relative availability of potential spouses in the community. It follows that nuptiality levels may be altered by the balance of effects operating in different directions. In turn, changed nuptiality patterns are likely to modify fertility levels. However, fertility may be affected directly by changes in the occupational structure. The complex relationship between social structure and one aspect of the demographic system, nuptiality, is analyzed in this paper.

Population structures and processes in the districts of England and Wales during the 1870s are used as a case study of the model. The use of English data and the focus on the specific period are appropriate on several grounds beyond the availability of detailed data. While the important elements in the model are all related to the broader processes of socioeconomic modernization which had begun much earlier in England, the period chosen is nevertheless most appropriate. Indeed, during or around 1871–1881, the period covered in this study, several socioeconomic processes reached unprecedented levels. Among these were the shift away from agriculture, the rate of internal migration in general and of rural to urban migration in particular (Friedlander 1970, 1974). Moreover, it can be implied from other studies that sex selective migration patterns in English communities depended largely on the relative employment opportunities for males and females, and these were strongly associated with their occupational characteristics (e.g., Redford 1968). For example, English nineteenth century urban communities in which a large proportion of the people were engaged in higher status occupations, attracted substantial female immigration because in such communities there was a high demand for female labor in domestic service occupations. If, in addition, such communities had little industrial activity, there would not be extensive employment opportunities for men. Consequently, a

surplus of female migration into these communities could be expected. It follows that the proportions of women in the population of such communities would rise, implying an increase in the availability of potential brides. Similarly, communities may have attracted a surplus male immigration if the occupational structure provided employment opportunities for males. The proportions of males would rise, implying an increase in the availability of potential grooms. Such was the case in nineteenth century English coal mining communities, and in those with extensive heavy industries, which contributed to their exceptionally high nuptiality (e.g., Friedlander 1973; Haines 1977; Mosk 1981). Communities specializing in textile industries are of interest because they had provided employment for women (the correlation coefficient of the percentage of women employed in textile and of women participating in the labor force in 1871 was .75). However, these districts may be divided into two distinct groups. The first consists of agricultural districts in which textile manufacturing had developed mainly as a cottage industry along with farming. These districts, which had a relatively small population size, were spread geographically all over England, and were characterized in that period by economic stagnation. Hence, massive outmigration with a small excess of females was taking place. The second group consisted of districts specializing in textile industries which developed along with other industries. These districts were located particularly in the industrial north. They attracted high numbers of both male and female immigrants, with a small female surplus forming a slightly higher sex ratio compared with the national average. Hence, unlike coal mining and urban commercial districts, there was only a minor structural *indirect* effect of occupational structure on nuptiality in textile districts.

English nineteenth century nuptiality data have been analyzed before, but in rather different ways. One study (Anderson 1976) utilized district level census data, considering nuptiality as the dependent variable. Occupational distributions and population sex ratios were considered a single set of explanatory variables and the analysis was purely empirical (i.e., no model was employed). Moreover, migration which is considered a most important link in the present study was entirely absent in that research. A most interesting study of nuptiality in Victorian England by Ogle (1890) was a pioneer work in demography relating occupational structure and employment levels to nuptiality. However, although Ogle's study demonstrates exceptional insight for a nineteenth century social scientist, his analysis was limited by the resources available at that time.

DATA

The analysis in this study is based on two major sources of official data which were published regularly for each of over 600 registration districts. One source consists of the published volumes of the 1871 and 1881 censuses providing age, sex, and marital status distributions. The 1871 census provides, among other data, the occupational/industrial distributions of the adult population by sex for each district. The aggregated occupational categories of these distributions used in this study are: professional, commercial, industrial, textile, mining, domestic, agricultural, and the proportion out of the labor force. The published vital registration data provide the intercensal number of births and deaths for each district. English official data may in general be considered of high quality with only minor problems of underenumeration or under-registration (Glass 1951; Teitelbaum 1974). From these data it is possible to construct the following indices used in the analysis (see also Friedlander 1983):

OCC_j denotes the proportions of males (or females) in the j -th occupation as listed above. These proportions are, of course, highly intercorrelated. To fit the model it was necessary to eliminate most of them so that the remaining variables would have

Table 1.—Means and standard deviations^a for the variables included in the model

Variable	Districts with:	
	Positive migration	Negative migration
Surplus female migration ratio, 1871-1881 (SFMR)	.0016 (.0590)	.0253 (.0660)
Coale nuptiality index, 1881 (I_m)	.5222 (.0735)	.4975 (.0544)
Sex ratio, 15-44 age group, 1881 (SXR)	1.0568 (.1698)	1.0355 (.1208)
Percent of males in professional occupations (OCC _p)	4.55 (2.37)	4.19 (1.54)
Percent of women occupied out of their households (OCC _w)	36.69 (11.41)	35.42 (9.79)
Number of cases	106	430

^a Standard deviations in parentheses.

low intercorrelations. Among combinations of such variables, OCC_p and OCC_w, the proportion of men in professional occupations and the proportion of women in *all* occupations (i.e., their “participation” in the labor force) provided the “best” explanation, in a statistical sense, of employment opportunities and hence, to sex selective migration patterns. The use of these two occupational proportions is justified not only on statistical grounds as noted. Indeed, high levels of female participation in the labor force may be explained by good employment opportunities for women. The proportions of men in professional occupations, although relatively small in their general level, are very significant in their meaning. Indeed, it was likely to be associated with high demand for female labor, particularly in domestic service occupations, leading to female immigration (sometimes referred to as “white apron” migration).

SFMR (surplus female migration ratio), expressing sex selective migration patterns, is the difference between female and male net migration for the 15-44 age group expressed as a ratio of the average number of women in that age group during 1871-1880. Positive values of SFMR imply female surplus in the net migration of the district, and vice versa if the index is negative. It should be added that the migration values used here are implied net migration estimates. These have been derived from the difference between the ten-year projections of the populations aged 10-40 in 1871 and the enumerated populations in 1881 of that age cohort. For each district a Coale-Demeny Life Table survivorship function has been applied in these projections according to its estimated general mortality level (Friedlander 1983). As a result, implied net migration estimates for the age group 15-44 (approximately) have been obtained. Although these migration values are indirect estimates, they are consistent with another set of independently estimated *county* migrations, which have been described elsewhere (Friedlander and Roshier 1966). A comparison of the estimate of district migration used in this study (after aggregation to the county level) to these earlier independent estimates shows a very good correspondence, with a correlation coefficient of .91. Hence, this supports the reliability of migration estimates used here.

SXR is the sex ratio of females to males in the population aged 15-44.

I_m is the Coale standardized nuptiality index (Coale 1966).

THE MODEL AND ITS APPLICATION TO
NINETEENTH CENTURY ENGLISH DISTRICT DATA

The hypothesized interrelationships are analysed using a recursive regression model which assumes that the variables in the system can be hierarchically arranged in terms of their causal priorities, thereby allowing the estimation of the coefficients through ordinary least square methods (e.g., Blalock 1971; Wonnacott and Wonnacott 1970). Hence, the assumption implies that occupational structure may affect the remaining three variables in the system. Sex selectivity in migration may affect population sex ratio and/or nuptiality levels, but does not affect the occupational structure. Population sex ratios may affect nuptiality levels but do not affect the sex selectivity of migration or the occupational structure. Finally, nuptiality levels may be affected by the three other variables in the system but do not affect any of these three variables (see figure 1). Such a model can be at best a rough approximation of the complex processes described. For example, measurements used are those which could be calculated from the data and these are subject to various limitations. Also, while the temporal treatment of SXR in relation to I_m may be justified, this is much more difficult with respect to SFMR and SXR. Another limitation of the model concerns its recursive specifications. For example, the assumption that SXR cannot affect SFMR may only be justified on the grounds that among these two effects, that of SFMR on SXR may be assumed to be much stronger. Despite these shortcomings, the application of the model will be shown to yield reasonably good results.

Returning to the proposed model, the following three equations express the causal relationships which have been hypothesized:

$$\text{SFMR} = a_1 + b_{1op} \text{OCC}_p + b_{1ow} \text{OCC}_w \quad (1)$$

$$\text{SXR} = a_2 + b_{2op} \text{OCC}_p + b_{2ow} \text{OCC}_w + b_{2sf} \text{SFMR} \quad (2)$$

$$I_m = a_3 + b_{3op} \text{OCC}_p + b_{3ow} \text{OCC}_w + b_{3sf} \text{SFMR} + b_{3sx} \text{SXR} \quad (3)$$

The a 's and b 's are the coefficients of the model equations. The hypotheses that were outlined and summarized in Figure 1 imply that b_{3sf} should be zero, or small, relative to b_{3sx} . This is because SFMR is presumed to affect I_m only through SXR. For similar reasons b_{2op} and b_{2ow} may be expected to be small relative to b_{2sf} . The model is applied separately for the 106 districts with positive net migration during 1871–1880, and for the 430 districts with negative net migrations during that period. The distinction between these two groups of districts is essential because migration into districts might well have a different pattern of association with the explanatory variables in the model than migration from districts. The process of development was often associated with particular industries, which accounted for variations in sex selectivity of migration. In districts of positive net migration, therefore, a large proportion of variations in sex selectivity is more likely to be accounted for by the explanatory variables than in districts of negative net migration.

Tables 1 and 2 show the means, standard deviations and simple correlation coefficients for the variables in the model. These confirm that the two groups of districts are sufficiently differentiated for some variables to justify empirically the separation of the analyses between districts of positive and negative net migration. Moreover, the simple correlations are high, particularly for districts with positive migration.

Table 3 shows the results of the regression analysis which describes the hypothesized interrelationships (compare also with figure 1). The standardized regression coefficients and multiple correlations for these two analyses are of particular interest. It is evident from the data that the independent variables provide good

Table 2.—Intercorrelations between the variables included in the model^a

Variable	OCC _w	SFMR (1871-81)	SXR (1881)	I _m (1881)
Districts with positive migration				
OCC _p	.248	.466	.666	-.722
OCC _w	--	.412	.582	-.605
SFMR (1871-81)	--	--	.829	-.599
SXR (1881)	--	--	--	-.841
Districts with negative migration				
OCC _p	.189	.132	.242	-.364
OCC _w	--	.291	.495	-.457
SFMR (1871-81)	--	--	.738	-.465
SXR (1881)	--	--	--	-.627

^a The meaning of notations and definitions are given in the text and in Table 1.

overall explanations to variations in the dependent variables. This is particularly so for districts with positive migration for which the multiple correlation values are exceptionally high. Moreover, the regression coefficients show reasonable consistency with the hypotheses outlined above. For example, the occupational structure variables should affect the population sex ratio mainly through the sex migration selectivity index (SFMR). Direct effects of OCC_j on SXR may be due only to past migrations (because SFMR relates only to the 1871-1881 decade) and therefore should be weak, relative to the effect of SFMR on SXR. The evidence from regression equation 2 in both sections on table 3 supports this conclusion. Also, according to the model, the effect of SXR on I_m should be relatively strong, while in contrast, the direct effect of SFMR on I_m should be relatively weak or nonexistent. This is confirmed for both groups of districts by equation 3 in table 3. Moreover, according to our hypothesis, both the indirect effect of occupational structure on nuptiality (via SFMR and SXR) and the direct effect should be strong. This, again, is supported by the results shown in table 3. Hence, the hypothesis that the occupational structure of communities affected nuptiality levels in these two different ways is substantiated.

Table 4 illustrates the interrelationships among the variables included in the model for selected districts. The effects of occupational structure on migration patterns and population sex ratios, and in turn on the nuptiality levels of districts are clearly observed. The data suggest that the range of variation in nuptiality which might emerge among communities is enormous.

Among the demographic processes in English communities in the second half of the nineteenth century, there were two important underlying interrelationships between socioeconomic structure (occupational structure) and nuptiality levels. First, a direct effect wherein societal characteristics affected nuptiality levels through the economic feasibility and/or the cultural desirability of marriage. Second, an indirect structural effect, where the socioeconomic structure of communities affected sex selective migration, thereby affecting nuptiality through changes in population sex ratios. Together, these direct and indirect effects account for much of the observed variation in nuptiality patterns.

Table 3.—Standard regression coefficients^a and multiple correlations for districts by positive or negative net migration,^b 1871–1881

Explanatory variable	Dependent variables					
	Districts with positive net migration			Districts with negative net migration		
	SFMR (1)	SXR (2)	I _m (3)	SFMR (1)	SXR (2)	I _m (3)
OCC _p	.388	.338	-.353	c	.103	-.213
OCC _w	.316	.267	-.249	.291	.289	-.175
SFMR	--	.561	c	--	.640	c
SXR	--	--	-.462	--	--	-.489
R	.56	.92	.89	.29	.80	.68
N	106	106	106	430	430	430

^a The direct and indirect effects of occupational structure on nuptiality level are:

	Districts with positive net migration	Districts with negative net migration
Direct effect	-.602	-.388
Indirect effect	-.462	-.283

^b The meanings of notations and definitions are given in text and in Table 1. All coefficients included in the table are significant at a one percent level.

^c Variable excluded from model because its coefficient was insignificant at a one percent level.

DISCUSSION

In her analysis of nuptiality level variations among countries around 1960, Dixon (1971) concluded that the feasibility and the desirability of marriage accounted for much of the variation in marriage patterns, while the availability of mates was not a significant factor. However, in order to test more fully the relative importance of the effects of these sets of factors on nuptiality, smaller, more homogeneous units need to be the basis of analysis.

The present study shows that the availability of mates accounts for a large proportion of the variations in nuptiality levels among the districts of England and Wales during the 1870s. Moreover, its effect on nuptiality was nearly as strong as socioeconomic functional factors. A major source of variation in the availability of mates was the very high rates of internal migration during that period. This affected not only the geographic redistribution of the population but contributed to inter-district variation in population sex ratios. The data shown in table 4 provide a striking example of differentials in population sex ratios that may be found among different types of districts as a result of sex selectivity in migration.

The analysis of nuptiality should be viewed within the more general context of the

Table 4.—Occupational structure, migration selectivity, population sex ratios and nuptiality levels for selected districts by positive or negative net migration^a

District and county by type of net migration	Net migration rates at ages 15-44, 1871-80 ^b			Variables in the model				
	Both sexes	Males	Females	OCC _P (1)	OCC _w (2)	SFMR (3)	SXR (4)	I _m (5)
Positive net migration								
Excess of males								
Burtonup (Staffordshire)	20.1	24.2	15.3	3.2	27.2	-13.5	.840	.604
Prescot (Lancashire)	9.6	14.1	4.5	2.6	28.4	-11.7	.870	.586
Barnsley (Yorkshire)	16.6	20.9	11.5	2.4	22.5	-14.0	.820	.668
Excess of females								
Richmond (Surrey)	18.9	12.9	22.9	14.0	48.2	14.3	1.493	.371
Hastings (Sussex)	25.9	17.4	31.2	10.9	49.7	20.4	1.613	.336
Barnet (Middlesex)	24.6	16.7	31.1	9.0	41.7	17.9	1.266	.419
Negative net migration								
Excess of males								
Hoo (Kent)	-13.1	-1.1	-29.0	2.7	17.1	-27.5	.709	.681
Alverstoke (Hampshire)	-14.7	-9.5	-21.9	5.8	31.6	-8.6	.714	.601
Tendring (Essex)	-7.2	-3.0	-11.8	3.6	24.9	-8.4	.893	.583
Excess of females								
Reigate (Surrey)	-8.6	-14.8	-3.0	5.2	35.3	10.1	1.136	.448
Bedford (Bedfordshire)	-19.3	-28.0	-12.0	5.6	59.4	11.6	1.190	.468
Dursley (Gloucestershire)	-28.5	-37.7	-20.6	5.4	40.6	11.1	1.190	.461
Positive net migration								
No excess								
Guildford (Surrey)	7.2	7.3	7.2	6.7	38.8	0.1	1.031	.467
Negative net migration								
No excess								
Thingoe (Suffolk)	-39.0	-38.5	-39.4	3.1	27.0	-0.1	.980	.541

^a The meanings of notations and definitions are given in text and in Table 1.

^b Net migration rates were calculated from the implied net migration values and the mean population in 1871-80.

extensive socioeconomic and demographic changes that occurred in nineteenth century England. One very significant transformation was the shift away from agriculture to industrial, mining, construction, and service occupations which contributed to the high rates of internal migration. This occupational redistribution varied among districts, contributing to socioeconomic differentiation among districts. In turn, these socioeconomic characteristics were related to nuptiality patterns, both directly (through functional relationships) and indirectly (through internal migration and population sex ratios). A few specific population subgroups

mentioned earlier provide examples of such processes that took place in nineteenth century England.

It is well known that age at marriage was lower and the extent of marriage higher in English coal mining communities compared to other socioeconomic communities (e.g., Friedlander 1973; Haines 1977; Mosk 1981). It has been shown that high nuptiality levels were functionally related to the special employment conditions in mining communities. More specifically, the health risks involved shortened a man's working life and led to a reduction of family earnings at a relatively early age. In addition, female employment opportunities were very limited in these areas, so that participation of wives in the labor force was low. As a response to these conditions couples contracted marriages at particularly young ages. Early marriages increased the likelihood that a family could have a son earner to supplement their income at the stage when father's income could be expected to shrink. This is one interpretation (according to the direct routes, see figure 1) of high nuptiality levels, in coal mining areas. However, because there was such high demand for male labor and such low demand for female labor in mining areas, these communities experienced extremely high rates of male immigration and low rates of female immigration. Consequently, the sex ratios declined which in turn led to increased female nuptiality (the indirect relationship). Hence, both the functional direct relationship and the structural indirect relationship affected nuptiality strongly in the same direction pushing it to very high levels.

The second example deals with agricultural communities in England during that period. The need to possess certain financial means prior to the establishment of a new household produced a direct effect of marriage postponement, that is, reduced nuptiality. The stagnating economic conditions in agriculture were associated with high rates of outmigration particularly at the younger ages with a slight female surplus, contributing towards higher female nuptiality. Two recent studies (Smith 1981; Hajnal 1982) have explored and confirmed such relationships between labor migration (or "servant circulation" as this migration is referred to) and nuptiality levels in European countries in general, and in England in particular. For this example, therefore, the effects were in different directions: the indirect effects contributed to increased female nuptiality while the direct effects pushed toward reduced nuptiality. In balance, the results for agricultural districts were about the average level of nuptiality. A third group of districts are non-industrial urban areas which attracted massive migration during the second half of the nineteenth century. These migrations were characterized by a female surplus, leading to lower nuptiality levels. In addition, the feasibility factor in these urban areas was contributing to lower nuptiality because the material requisites of marriage in such urban districts were probably higher than in industrial urban districts. Hence, both these relationships contributed toward relatively lower female nuptiality.

Finally, a large group of industrial districts were mixed, specializing in textile manufacturing and other kinds of industries. These districts attracted a significant net migration. While the textile industry provided employment opportunities for both men and women, it contributed towards a small overall surplus of female migration. Hence, levels of nuptiality slightly decreased. On the other hand, direct factors in these districts slightly increased levels of nuptiality and the overall effects on nuptiality remained around average.

Our analysis has shown that nuptiality levels among districts in nineteenth century England were responsive to socioeconomic variation. These were evident in both the direct effects of socioeconomic variation on nuptiality as well as the indirect effects of socioeconomic factors on migration, sex ratios, and thereby nuptiality. These

effects emerge at the district level, where relative homogeneity can be achieved in the analysis. Studies focusing on larger units, for example, regions, may obscure these factors (Watkins, 1981). Moreover, recent attempts to account for regional variation in nuptiality within Europe have not paid sufficient attention to the indirect effects of socioeconomic structural variation. Before concluding that cultural factors are important in explaining variation in nuptiality, the effects of migration and imbalances in the sex ratio, stemming largely from differential socioeconomic opportunities, need to be considered. At least for England, in a critical period of its demographic transition, socioeconomic factors—directly and indirectly—were of critical importance in explaining nuptiality.

ACKNOWLEDGEMENTS

We are indebted to Shlomo Yitzhaki of the Department of Agricultural Economics, the Hebrew University, Jerusalem, for his advice on the application and the solutions of equation systems in causal models. We are also indebted to Calvin Goldscheider, who read an earlier version of this paper and made important suggestions. Three anonymous referees made invaluable suggestions which assisted us in clarifying several problematic issues. Part of the work on this paper was done while the senior author was Andrew Mellon Visting Scholar at the Population Reference Bureau, Inc., Washington, D.C. Earlier stages of this research were supported through grants D71.070 and D73.08C made available by the Population Council, New York.

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