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OCCUPATIONAL STRUCTURE, WAGES, AND AGE PATTERNS OF FEMALE LABOUR FORCE PARTICIPATION IN ENGLAND AND WALES IN THE NINETEENTH CENTURY*

OSAMU SAITO

1. INTRODUCTION

The working life of people has changed in the course of economic development. A higher age at leaving school for children and increased provisions for the elderly have shortened the working life span for both sexes. For women, moreover, economic development has brought about changes in the *age pattern* of labour force participation. Today the so-called M-shaped curve is becoming common among developed countries, indicating that women who once dropped out of the labour force when they married, return to work after their child caring is over. This 'return-to-work' phenomenon, as I noted in a study of two English rural parishes (Saito 1979), did not exist in the past.¹ Levels of local rates of labour force participation varied widely with the availability of employment, but even where ample employment opportunities were available to women, the age pattern was single-peaked with its peak in an age group in which most women were married and had young children; this holds true for factory towns in the mid-nineteenth century (Anderson 1971, 72; Litchfield 1978).

In the present essay we shall first see that based on the published Census Reports for England and Wales, nineteenth-century county-level data also do not yield M-shaped patterns. Then we shall examine the effects of occupational structure, wages and the proportion married upon patterns and levels of labour force participation (or 'activity rates') to see how the age patterns were determined. The analysis will show that it was young women with young children who were most responsive to the availability of non-agricultural employment, and that necessity played a major part in sending such young women to the labour market. It will also suggest that the nineteenth-century profile of women's labour force participation is consistent with the pattern of relationship between poverty and the family life cycle that Rowntree (1902) postulated for labouring people.

* I am grateful to Laurel Cornell for making stylistic revisions of the draft.

¹ In his work on the Leicestershire village of Shepshed, Levine showed that the proportion of framework knitters' wives who were employed increased again after their grown-up children had left home (1977, 29). However, since this is a result for a single occupational group and since it is not child care but the number of children in employment that was a likely cause of mothers having stopped working, one should not interpret his finding as evidence of the M-shaped pattern in the past. Similar caution is needed about Lees's findings for the London Irish (1976).

2. THE 1851 PATTERN FOR ENGLAND AND WALES

Figure 1 portrays the age pattern of female labour force participation in 1851 and compares it with the 1971 one.² The 1851 pattern is clearly not M-shaped, nor is it a central-plateau one which is regarded as typical for low-income countries where family farms and cottage industries are dominant forms of employment (see Durand 1975, ch. 6). Admittedly there is a possibility that as the size of female labour force, especially of married women, is likely to have been understated the shape might have been closer to a central-plateau pattern. Yet the conclusion holds even if wives of farmers, innkeepers, etc., who were, according to the Census Report, 'generally engaged in the same business as their husbands,' are counted as in the labour force (see the upper solid line in Figure 1).

However, the fact that the pattern was single-peaked and its peak was in the age group 15–19 does not necessarily mean that most women left work as soon as they got married or had a child. A closer look at Figure 1 reveals that the distance between the peak and the bottom is greater in 1851 than in 1971: in 1851 the lowest point is reached in the age group 35–39 whereas in 1971 it comes in the 25–29 group, the age group next to the one in which the peak is reached. This difference is partly due to a fall in family size, for it has shortened women's child rearing period. However, while this argument explains why the activity rate rises again after the age of 30 in the postwar period, it fails to accommodate the fact that the lowest activity rate in the 1851 curve was recorded when the responsibilities of motherhood were no longer heavy. The only thing that is clear at this stage is that in 1851 young mothers with young children were more likely to take employment than middle-aged women with grown-up children.

3. OCCUPATIONAL STRUCTURE AND AGE PATTERNS

The occupational structure of any county can be seen from two different angles: occupations of household heads and those of other household members. The former correspond roughly to occupations of males aged 20 and over and the latter to those of females. It is often assumed that the whole array of employment opportunities of an area can be summarized in terms of the proportion of adult males engaged in agriculture, but this assumption is not always justified. Therefore, the classification scheme presented in Table 1 is used in order to take into account employment opportunities for women. Group II-2 thus consists of counties where there were many non-agricultural jobs for men and few for women. Durham, for instance, is of this type. Similarly, Group III-1 comprises counties in which agriculture's share in male employment was large and there were ample non-agricultural employment opportunities for women. Bedfordshire is a typical example of this type.

² For definition of the labour force participation rate and problems arising from the use of early censuses, see Saito 1979.

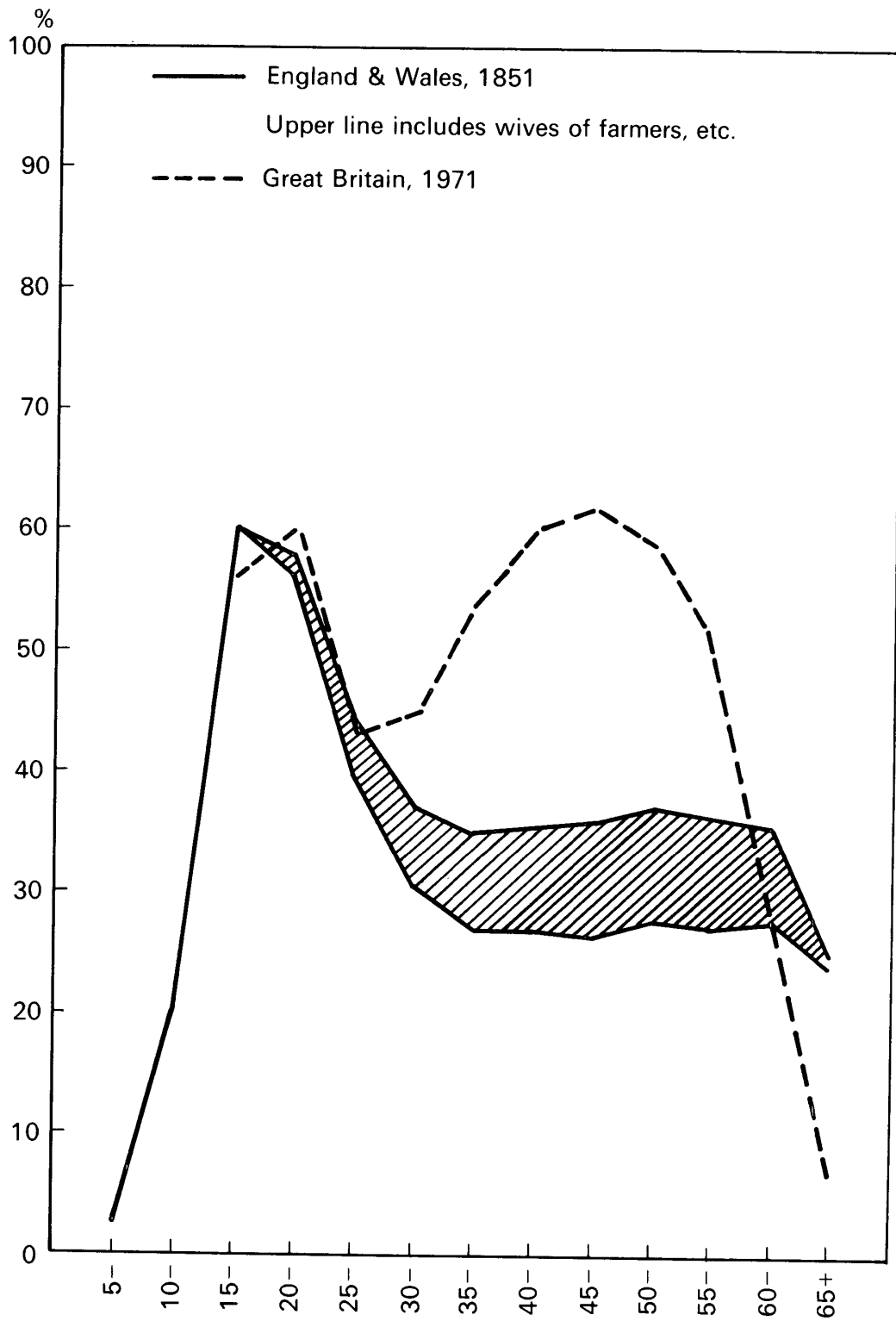


Fig. 1. Female activity rates for England & Wales, 1851, and Great Britain, 1971.

Sources: See Appendix Table and OPCS 1975, Pt. II.

TABLE 1. CLASSIFICATION OF COUNTIES BY OCCUPATIONAL STRUCTURE, 1851

Group	Occupational structure		Counties
	Male	Female	
I	Urban	Urban	London.
II-1	Non-agricultural	Non-agricultural	Hants, Glos, Staffs, Worcs, Warwick, Notts, Derby, Cheshire, Lancs, and West Riding.
II-2	Non-agricultural	Agricultural	Durham, Northum'd, and Monmouth.
III-1	Agricultural	Non-agricultural	Surrey, Kent, Sussex, Midd'x, Herts, Bucks, Northants, Beds, Essex, Leics, and East Riding.
III-2	Agricultural	Agricultural	Berks, Oxon, Hunts, Cambs, Suffolk, Norfolk, Wilts, Dorset, Devon, Cornwall, Somerset, Hereford, Salop, Rutland, Lincoln, North Riding, Cumb, Westm'd, South Wales, and North Wales.

Note: 44 counties other than London are classified as follows:

Male occupational structure — Non-agricultural if the proportion of males aged 20 and over engaged in agriculture is lower than 30 per cent; agricultural if higher;

Female occupational structure — Non-agricultural if the proportion of females engaged in agriculture is lower than 25 per cent; agricultural if higher.

Source: B.P.P. 1852-3, LXXXVIII.

It is clear from Figure 2 that the profiles for counties in all groups except London are basically identical with the overall one for England and Wales. Among these four groups, however, there are some less marked, but no less significant, differences. One such difference is between Groups II-1 and II-2. In the former group the activity rate reaches its lowest point in the age group 45–49, much later than in the case of the overall pattern, and then flattens out. In the latter, on the other hand, after reaching its lowest point in the late 30s the rate goes up again slightly. Both groups were non-agricultural with respect to male occupational structure, but in Group II-1 many more industrial and commercial jobs were available for women than in Group II-2. Some counties in Group III-1, where rural industries provided women with employment opportunities, exhibit a pattern similar to the one for Group II-1. Bedfordshire, Buckinghamshire and Leicestershire are noteworthy examples of this case. In other words, the availability of non-agricultural employment raised levels of labour force participation of younger married women rather than of older women. Even the 1782 pattern for the Bedfordshire parish of Cardington, where the highest activity rate was reached in the age group 25–29 (Saito 1979, Fig. 2), may be regarded as a product of this tendency.

Another point is that occupations of adult males exerted little influence upon levels of female activity rates. This can be shown by comparing Group II-1 with Group III-1 and Group II-2 with Group III-2. If counties in which agriculture's share in female employment was small are selected, then the female activity rate turns out to be higher in non-agricultural counties (II-1) than in agricultural ones (III-1) as far as females aged under 45 are concerned. Among counties in which agriculture's share in female employment was large, on the contrary, the rate is higher for every age group in agricultural counties (III-2) than in non-agricultural ones (II-2). In type III-1 counties such as Bedfordshire domestic industries were still dominant while type II-1 counties such as Lancashire were characterised by the factory system. Young married women were therefore ready to respond to non-agricultural employment, whether it was domestic employment or not.

Finally we have to touch on the effect of widowhood upon women's labour force participation, for in an age when welfare measures were insufficient, widowhood was the occasion for women to reenter the labour market. One may thus argue that the proportion married also helps to explain the pattern and levels of female labour force participation. Indeed, the effect of this factor is evident for the London profile, which is neither M-shaped nor single-peaked, but shows a monotonous rise in the activity rate after the age of 35. Correspondingly, from age 35 the proportion of married women, already low in the age group 25–34 compared to the other counties, becomes even lower and its deviation from the national average even wider with increasing age (Table 2).³ Although breakdown figures by marital

³ It does not follow, however, that industrialised counties, most of which were also being urbanised, showed similar patterns. In Table 2 no differences between agricultural and non-agricultural counties are significant at the 5 per cent level.

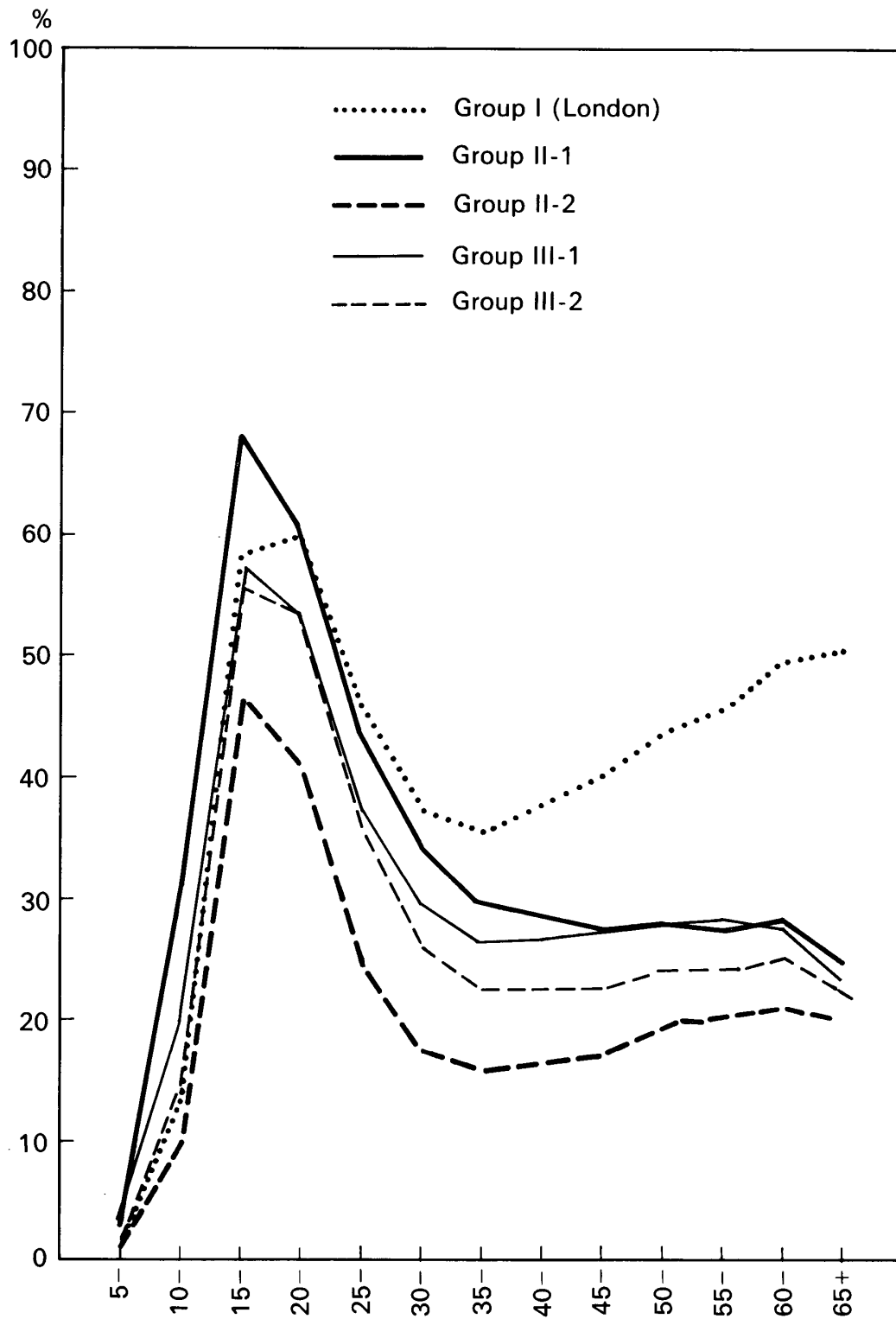


Fig. 2. Female activity rates by groups of counties: England & Wales, 1851.
Source: See Appendix Table.

TABLE 2. PROPORTIONS OF MARRIED WOMEN BY AGE GROUP:
ENGLAND AND WALES, 1851

	Age group					
	20—	25—	35—	45—	55—	65+
<i>England & Wales</i>						
Mean (%)	29.7	64.7	76.8	73.4	61.3	34.9
Stand. dev.	5.18	4.35	2.99	3.48	3.95	3.03
<i>London (%)</i>						
	17.3	60.2	69.9	61.9	45.2	21.7
<i>Non-agricultural counties^a</i>						
Mean (%)	32.1	65.4	76.7	73.3	61.6	34.8
Stand. dev.	3.53	3.87	2.87	2.89	2.44	2.14
<i>Agricultural counties^b</i>						
Mean (%)	28.1	64.3	77.2	73.9	62.1	35.5
Stand. dev.	5.24	4.77	2.82	3.21	3.45	2.44

^a Groups II-1 and III-1.

^b Groups II-2 and III-2.

Source: B.P.P. 1852-3, LXXXVIII.

status are not available from the published census, it is probably safe to attribute London's peculiar pattern to its exceptionally low proportions married.

4. EFFECTS OF WAGES AND OCCUPATIONAL STRUCTURE

It is not quite correct to conclude, based on the results in Section 3, that men's economic activity did not affect women's labour force participation. As labour economists point out, earning power of the head of household has a strong negative influence on his wife's decision to work. What matters is not what he is doing, but how much he takes home. Therefore, regional variations in the female activity rate are expected to be negatively related to male wages. This wage variable is also important in evaluating the effect of a second variable, agriculture's share in employment, on female activity rates. What should be estimated is the net effect that that variable, a proxy for occupational structure, exerts on the activity rate. This net effect can be obtained by controlling for the influence of wage levels. A third variable to consider is female wages. The inclusion of this variable will allow us to determine whether, given the occupational structure, women in the labour force were attracted to the labour market or were compelled by necessity. This is because the effect of female wages is expected to be positive. Weekly earnings in agriculture are the male and female wage variables used in this analysis.

County rates of female labour force participation are regressed by age group on these variables. The regressions are calculated for the two census years 1851 and

1871,⁴ since female wage data are not available for 1851. In both cases the calculations are made only for counties whose wage data are listed in the sources.⁵ For the age groups 25–34, 35–44, 45–54 and 55–64, in which more than sixty per cent of women were married, the equation with the proportion married variable included is also tried and compared with the one without it to see how *married* women behaved by looking at the ways in which the inclusion of this variable affects the performance of other variables.

Now let us examine the regression results presented in Tables 3 and 4. The coefficients of determination, adjusted to the degree of freedom, are generally low, suggesting that some unknown factors enter into the explanation. Yet, since the aim of this regression analysis is not to explain the whole variation of the female activity rate across counties, but to look at the effect of a specific variable on the activity rate, this will not be a serious drawback if R^2 is statistically significant at the 5 per cent level. Although the significance of some variables differs between the 1851 and 1871 results and also among age groups, there is an overall consistency to the results as far as sign conditions are concerned. Male wages are negatively (except for the age groups 10–14 and 15–19 in 1851) and female wages positively related to the activity rate. Both proportion engaged in agriculture and proportion married have a negative sign in all cases.

One of the most interesting results in Tables 3 and 4 is the way in which the magnitude of coefficient of the proportion engaged in agriculture varies with age. From the 10–14 age group to the 20–24 one there is no consistent tendency between the 1851 and 1871 results, but from the 25–34 age group upwards it declined with age in both cases. For 25-to-34-year-olds a fall in agriculture's share in female employment by 10 percentage points meant, given wage levels, an increase in the activity rate by 7 to 12 percentage points, as against 3 to 4 percentage points for 55-to-64-year-olds. Clearly this is consistent with the hypothesis that married women in their 20s and 30s were more willing to take industrial and commercial employment than women in their 40s and 50s.

Another point of interest is the significance and relative strength of the effects of the two wage variables.⁶ In 1871, the only year for which this comparison can be made, the coefficient of the female wage variable is significant only in three cases, i.e. for the age groups 20–24, 25–34 and 65 plus, while that of the male wage variable is significant in most cases. There are two equations for which both are

⁴ Agricultural wage data are for 1850 and 1870, the 1850 figures being those given by Caird and reprinted in Lord Ernle 1961, and the 1870 ones taken from the Returns of Wages collected in B.P.P. 1887, LXXXIX; the latter are averages of Michaelmas and Christmas wages.

⁵ Counties excluded in the 1851 and 1871 files are as follows:

1851: London, Kent, Midd'x, Cornwall, Somerset, Hereford, Salop, Worces, Rutland, Westm'd, and Welsh counties;

1871: London, Midd'x, Bucks, Oxon, Cambs, Rutland, Yorks. East Riding, and Welsh counties.

⁶ In the case of the wage variables, it is hazardous to discuss the variation of the coefficient size with age group, since the value to be put in the regression equation as an independent variable does not vary with age group; it represents only a regional standard of wages.

TABLE 3. CROSS-SECTION REGRESSIONS OF FEMALE ACTIVITY RATES:
32 ENGLISH COUNTIES, 1851

Age group	Weekly earnings of men	% engaged in agriculture	% married	Constant	\bar{R}^2
10-14	.11 (.11)	-.77* (3.65)	—	27.33* (2.70)	.310*
15-19	.34 (.43)	-.60* (3.04)	--	63.32* (7.31)	.243*
20-24	-.36 (.51)	-.59* (2.76)	—	63.07* (8.19)	.156**
25-34	-.55 (.74)	-.54** (2.13)	—	42.62* (5.43)	.077
	-.77 (1.15)	-.69* (2.97)	-.92* (2.88)	106.01* (4.58)	.262*
35-44	-.84 (1.30)	-.38** (1.92)	—	36.57* (5.40)	.072
	-1.19** (1.88)	-.45** (2.35)	-.85** (2.05)	106.19* (3.07)	.164**
45-54	-.93 (1.57)	-.26 (1.49)	—	37.56* (6.05)	.061
	-1.48** (2.31)	-.31** (1.85)	-.74** (1.87)	97.53* (2.99)	.135
55-64	-.69 (1.22)	-.27 (1.67)	—	36.54* (6.16)	.060
	-1.38** (2.23)	-.29** (1.90)	-.75** (2.18)	89.84* (3.58)	.168**
65+	-.03 (.05)	-.16 (1.25)	—	25.88* (4.67)	.000

Note: Figures in parentheses are the absolute values of *t*-ratios.

* Significant at the 1 per cent level.

** Significant at the 5 per cent level.

Sources: Lord Ernle 1961, App. IX, and B.P.P. 1852-3, LXXXVIII.

significant, but even in these two the effect of male wages is greater than that of female wages. In the age group 20-24, for instance, if we multiply each coefficient by the corresponding sample mean (12s 7d and 5s 1d respectively) then we will get the result that a 10 per cent fall in male wages led to an *increase* in the female activity rate by 2.2 percentage points whereas a fall of the same magnitude in female wages meant a *decrease* by only 1.4 percentage points.

Finally a few comments are necessary on the results for the age groups 25-34, 35-44, 45-54 and 55-64 in relation to the proportion married variable. Since a

TABLE 4. CROSS-SECTION REGRESSIONS OF FEMALE ACTIVITY RATES:
35 ENGLISH COUNTIES, 1871

Age group	Weekly earnings		% engaged in agriculture	% married	Constant	\bar{R}^2
	Men	Women				
10-14	-.32 (.32)	1.59 (.88)	-.80** (2.23)	—	17.64** (1.90)	.081
15-19	-1.26** (1.82)	2.01 (1.58)	-.94** (2.36)	—	80.63* (12.71)	.155**
20-24	-1.74** (2.04)	2.70** (1.72)	-1.08** (2.35)	—	66.23* (8.62)	.174**
25-34	-2.12** (2.32)	3.00** (1.79)	-1.20** (2.40)	—	47.90* (5.64)	.190**
	-.93 (.99)	1.35 (.83)	-1.33* (2.92)	-.81* (2.76)	96.12* (5.04)	.333*
35-44	-1.91** (2.28)	2.38 (1.55)	-.71** (2.22)	—	42.02* (5.35)	.159**
	-1.44** (1.73)	1.25 (.80)	-.73** (2.41)	-.74** (2.03)	99.04* (3.40)	.236**
45-54	-1.79** (2.45)	2.14 (1.60)	-.60** (2.33)	—	42.97* (6.21)	.189**
	-1.68** (2.31)	1.45 (1.02)	-.58** (2.28)	-.44 (1.34)	77.31* (2.90)	.209**
55-64	-1.19** (1.75)	1.84 (1.47)	-.39** (1.94)	—	37.55* (5.98)	.113
	-1.29** (1.86)	1.54 (1.18)	-.38** (1.87)	-.23 (.84)	54.78* (2.54)	.104
65+	-.21 (.35)	1.90** (1.72)	-.25 (1.66)	—	20.57* (3.75)	.104

Note: See Table 3.

Sources: B.P.P. 1873, LXXI Pt. I; 1887, LXXXIX.

majority of women in these age groups were married, the performance of the other variables in the equation will reflect the behaviour of married women more accurately if one controls for the proportion married. In this sense the way in which the performance of the male wage variable is affected is as one would expect, for the coefficient size and its significance are greatly improved. For 1871, on the other hand, the behaviour of the same variable is a little puzzling when the proportion married is added to the equation: in the age group 25-34 it becomes insignificant and in the 35-44 and 45-54 groups the magnitude of its effect is reduced slightly. In the case of 1871, however, the female wage variable is also

affected substantially. In all the four age groups the coefficient size and its *t*-ratio are reduced; in the 25–34 group in particular the female wage variable no longer retains its significance when one controls for the effect of the proportion married. On the basis of these results one may thus conclude that in the nineteenth century married women's decisions to work were hardly influenced at all by the wage rates offered to them.

5. CONCLUDING REMARKS

The regression results reported in Section 4 generally agree with the findings about the age pattern of female labour force participation.⁷ First, the positive effect of female wages has been identified for 20-to-24-year-olds, of whom more than one in two were working. For 15-to-19-year-olds whose activity rate was slightly higher than that for 20-to-24-year-olds, the *t*-ratio just failed to reach the 5 per cent significance level, but the effect is also unmistakable. In view of the fact that most of the women in these age groups were single, and the possibility that a substantial number of such single women were not living with their parents,⁸ the accord between high activity rates and the significance of a 'pull' factor might be taken to mean a positive relationship between migration and high wages. However, it should be emphasised that the finding that the negative effect of male wages outweighed the positive one of female wages suggests that the income effect, a 'push' factor, was more important in explaining migration.

Second, the regression analysis suggests that the propensity of married women to work was hardly influenced by high wages, but was rather determined solely by the earnings of their husbands. *If* we can assume that the need to supplement household income did not increase with age, it is not surprising that the M-shaped pattern was not by any means typical in the past. Indeed, the risk of poverty, according to Rowntree (1902, 136–7), seems to have been greatest for families at an early stage of the life cycle, i.e. those with children who were too young to work; families with working children, whose fathers were likely to be in their 40s, 50s or even early 60s, could, on the contrary, enjoy a period of comparative prosperity. Recent work confirms this relationship between poverty and life cycle stages for mid-nineteenth century households (Foster 1974, 98; Anderson 1971, 31, 72). And, considering the Victorian view that wives of respectable men should remain economically inactive, introduced first by aristocratic and middle-class families and then accepted by the labour aristocracy (Hobsbaum 1964, 306), it may well be that the overall pattern of married women's labour force participation reflected

⁷ The regression analysis produces poor results for children under 15 and the elderly. This may be because of flaws in data sources; in fact it is likely that census occupation tables are much less reliable for these two groups, particularly for young children, than for other age groups. For the elderly, moreover, factors affecting labour force participation decisions may also have been different.

⁸ For age of children at leaving home and co-residence patterns, see Wall 1978.

alternating stages of poverty and relative prosperity in the life cycle among poorer classes.

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REFERENCES

- Anderson, M. (1971). *Family Structure in Nineteenth-Century Lancashire*, Cambridge: Cambridge University Press.
- B.P.P. (British Parliamentary Papers) (1852–3 LXXXVIII). *Census of Great Britain, 1851. Population Tables II*.
- (1873 LXXI, Pt. I). *Census of England and Wales, 1971. Population Abstracts*.
- (1887 LXXXIX). *Returns of Wages Published Between 1830 and 1886*.
- Durand, J. D. (1975). *The Labor Force in Economic Development: A comparison of international census data, 1946–1966*, Princeton: Princeton University Press.
- Lord Ernle (1961). *English Farming, Past and Present*, 6th edn, London: Heinemann.
- Foster, J. (1974). *Class Struggle and the Industrial Revolution: Early industrial capitalism in three English towns*, London: Weidenfeld and Nicolson.
- Hobsbaum, E. J. (1964). *Labouring Men: Studies in the history of labour*, London: Weidenfeld and Nicolson.
- Lees, L. (1976). 'Mid-Victorian migration and the Irish family economy', *Victorian Studies*, **20**, 25–43.
- Levine, D. (1977). *Family Formation in an Age of Nascent Capitalism*, New York: Academic Press.
- Litchfield, R. B. (1978). 'The family and the mill: cotton mill work, family work patterns and fertility', in A. S. Wohl, ed., *The Victorian Family: Structures and stresses*, London: Croom Helm.
- OPCS (Office of Population Censuses and Surveys) (1975). *Census 1971, Great Britain. Economic Activity*.
- Rowntree, B. S. (1902). *Poverty. A study of town life*, 3rd edn, London: Macmillan.
- Saito, O. (1979). 'Who worked when: life-time profiles of labour force participation in Cardington and Corfe Castle in the late eighteenth and mid-nineteenth centuries', *Local Population Studies*, **22**, 14–29.
- Wall, R. (1978). 'The age at leaving home', *Journal of Family History*, **3**, 181–202.

APPENDIX. AGE-SPECIFIC FEMALE ACTIVITY RATES FOR ENGLAND AND WALES AND FOR VARIOUS GROUPS OF COUNTIES, 1851 (%)

	Age group												
	5—	10—	15—	20—	25—	30—	35—	40—	45—	50—	55—	60—	65+
<i>England & Wales</i>	1.9	20.9	60.4 (60.5)	56.0 (57.8)	39.6 (43.9)	30.6 (37.0)	27.0 (34.9)	26.9 (35.6)	26.7 (36.0)	27.8 (37.2)	27.4 (36.6)	27.9 (35.7)	23.9 (24.7) ^a
<i>Group of counties^b</i>													
I	0.6	13.0	58.5	59.6	45.7	37.2	35.6	37.8	40.0	43.5	45.6	49.4	50.4
II-1	2.4	30.1	68.0	60.1	43.2	33.9	29.4	28.4	27.3	27.9	27.5	28.2	24.6
II-2	0.4	9.3	46.8	41.4	24.9	17.4	15.7	16.3	17.2	19.5	20.0	21.1	20.0
III-1	3.8	19.4	57.5	53.2	37.5	29.5	26.3	26.3	27.0	27.9	28.2	27.4	23.2
III-2	1.1	15.2	55.4	53.4	35.5	26.0	22.4	22.5	22.7	24.1	24.2	25.2	22.2

^a Figures in parentheses are activity rates for which wives of farmers, innkeepers, etc. are counted as in the labour force.

^b See Table 1 above.

Source: B.P.P. 1852-3, LXXXVIII.