The extent of women’s involvement in British industrialisation, and the rationale and timing of the rise of the male breadwinner family, have been the subject of much recent debate. Here Dr Humphries looks at the contribution that a major new source of evidence, derived from household budgets, brings to the discussion. She argues that variations across occupations and fluctuations over time characterised a long-term downward trend in women’s participation in paid employment, and speculates whether an overskewed labour market explains this.

**The debate**

The effects of the industrial revolution on women’s work and family lives continue to be debated. [1] The authors of classic texts tended simply to assume that industrialisation increased employment opportunities for women and children. Historians’ attention was captured by the newly established and rapidly growing factory sector and, within this, by textile production with its largely young and female labour force. More recently, the protoindustrial school’s rescue of domestic industry from the neglect afforded the familiar has underlined the importance of women’s work in domestic manufacturing and suggested that their economic prospects were tied to its fortunes, waxing and waning as the different trades expanded and contracted in their specific locations.

Ivy Pinchbeck’s seminal monograph describing women’s work during industrialisation presented a carefully shaded picture. [2] It acknowledged the importance of women workers in the early factories, but offset the related employment gains with reference to the emerging competition between factory production and domestic industry and the eventual elimination of widespread access to income earning opportunities with the decline of the major outwork industries. Pinchbeck anticipated the recent contributions of agricultural historians by drawing a mixed, but ultimately pessimistic, portrait of the opportunities for women in what remained the most important single sector in the economy.

Renewed interest in working people’s access to non-wage sources of income in the countryside, associated with the retention of common rights to agricultural resources, has demonstrated the importance of women in the exploitation of these and other customary rights such as gleaning. [3] When these opportunities disappeared with the privatisation of rural resources and enclosure in the late eighteenth and early nineteenth centuries, the costs fell mainly on women. [4] How changes in employment in the service sector of the economy fit into these trends has received even less attention, though more than one author has seen the enormous increase in female domestic servants as, in part at least, a response to underemployment of women. [5]

At perhaps a more theoretical level of analysis, modem feminist historians have debated whether or not industrialisation did impact so deeply on women’s economic experience. Some authors have argued that patriarchy, male domination of women, which extended to the organisation and control of their labour, provides a fundamental continuity to women’s experience and spanned the pre-industrial and industrial periods. [6]

These different perceptions of the impact of industrialisation on women’s work carry different implications for their family lives, although these are rarely spelled out in the relevant texts. Again the themes are varied and sometimes hard to see as consistent. The classic texts, with their emphasis on modern forms of industrial organisation, link industrialisation to the separation of home and work. This, in turn, has been seen by many historians as an important contributing factor in the emergence of a family form which comprised a male breadwinner with a dependent wife and children. Certainly such a family form became part of the late Victorian stereotype of respectable family life and a family wage a key component of the ‘quest for respectability’. The extent to which such families actually existed is less settled, and even if their weight was increasing, such a trend can be interpreted in two different ways.

The first interpretation is the conventional and beneficent one implicit in the quest for respectability. Husbands and fathers, as their incomes and perhaps education improved, sought to purchase leisure for their wives and children, or at least to spare them the pain of early industrial employment. Wives and mothers were then able to specialise in homemaking. Here the male-breadwinner family structure emerges as the result of husbands and wives together exercising free choice in the allocation of their labour time so as to maximise family well-being given market wages, productivity in domestic work, and increasing returns to specialisation. The gendered form of the division of labour which results from such optimisation by husbands and wives depends on complementarity between childbearing and childrearing. But this need only be weak complementarity, which makes some sense as a historical proposition.

Feminist historians take a much less rosy view of the purported emergent male breadwinner family. They see it not as the result of free choice in the context of rising male earnings and returns to specialisation, but as the product of institutional constraints on women’s access to paid employment. Protective labour legislation, chauvinist trade unions and social norms constructed to benefit dominant men acted to exclude women from the better paid jobs which might have afforded independence for themselves and their children, herded them into overcrowded and low paid activities, and rendered them dependent on husbands and fathers. Their darker view about the origins of the male breadwinner family is the corollary of their pessimistic understanding and interpretation of trends in women’s work. Is it possible to amalgamate these different stories and sort out what seem inconsistent hypotheses?

**The evidence and its deficiencies**

For the classic period of industrialisation, (c.1780-1850), while there is piecemeal and qualitative evidence of the kind so brilliantly mobilised by Pinchbeck, there are no economy-wide or universal indicators. As a result some authors have despaired of defensible generalisations: ‘Histories of women on the grand scale, whether optimistic or pessimistic, are amazingly premature when the available documentation is so sketchy’. [7] Concentrating on constructing a picture of women’s experience from piecemeal evidence from particular times and places has the advantage of building into the analysis an acknowledgement of the heterogeneity of women’s experience, and if outcomes for women are seen as occupationally or perhaps regionally specific, it might help to explain how some authors see opportunities waxing while other authors see them waning. Differentiating women’s experiences in this way reaches out to those interpretations of industrialisation which have sought to break away from the focus of economists on national aggregates to emphasise the variety of regional, industrial, technological and organisational developments. [8]

But without something which indicates women’s involvement in the main sectors and the aggregate economy, it remains unclear how the reconstruction of specific women’s experience in particular industries and at particular times and places fit together. Census documentation of women’s work while formally available from 1841 is well-known to underestimate female participation rates and distort the occupational distribution.

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of women workers, with the earliest census held to be particularly unreliable. [91 Indeed, it is precisely this dependence on fragmentary evidence that has allowed uncoordinated, if not inconsistent, interpretations to coexist. Thus the most useful strategy is to recognise the variety in women's experience while still trying to situate that variety within a general narrative. This approach is facilitated by the exploitation of a new source of evidence.

**New evidence from family budgets**

The new-source of evidence consists of an innovative data set of some 1781 household budgets which has been constructed by Sara Horrell and Jane Humphries. [10] These budgets provide estimates of family incomes and their composition for the period of the industrial revolution. The household accounts were originally collected for a variety of purposes and were found in a number of sources, including contemporary social commentaries, Parliamentary Papers, local archives, provincial record offices and working-class autobiographies. A typical example of the kind of family budget used in this analysis is shown in Figure 1.

The sample is quite small, and made smaller by the focus here on families which had both a husband and a wife present, and where the husband's earnings were non-zero and separately identifiable (1161 cases). Information for some occupations in some years is very limited. Also the quality of the data provided is uncertain. Nonetheless, these accounts are valuable in that they contain a great deal of information about the occupational status, earnings, and contributions to family incomes of married women and their children during industrialisation.

The family budgets document the proportion of married women who contributed to their families’ incomes (one definition of economic participation), as well as the relative importance of those contributions for households of different types. The proportion of married women who were described as having an occupation provides an alternative definition of economic participation. Alternatively a third inclusive definition could be used which counts a woman as participating if she had either an occupational designation or non-zero earnings.

Obviously, the data that has been found by Horrell and Humphries and included in their sample is not representative of the population of families which lived through industrialisation. But all of the broad occupational groups are represented in the occupations of the male heads of these households and the evidence is reasonably spread over time and across space. Subsamples of families defined with reference to the occupation of the husband/father, taken here as a proxy for local economic conditions, the sub-period and the geographical location, can be analysed to establish the experiences of married women in different circumstances and at different times. In turn, the participation rates and relative contributions to family incomes of women married to men with particular occupations can be aggregated using weights which represent the importance of the husbands’ occupational group in the total population. This procedure establishes benchmark estimates of the participation and contributions of all married women for particular sub-periods. [11] What do these imply? Table 1 provides estimates of married women’s participation rates using the inclusive (third) definition of participation. There is considerable variety of experience across the occupational groups.

At the beginning of industrialisation for example (1787-1815), 54.8 per cent of women married to agricultural labourers in northern and midland counties either enjoyed some earnings or had an occupational title recorded. Their southern sisters appear to have experienced even higher participation rates estimated at over 84 per cent.

Nor were the levels of economic involvement recorded for the wives of agricultural labourers out of line with the experiences of women married to industrial workers or artisans. On the eve of industrialisation (1787-1815) 40 per cent of miners’ wives earned or were described as having an occupation, and the activity rates for factory workers and outworkers’ wives were slightly below this and above it respectively, while almost two thirds of the wives of tradesmen and all the wives of casual workers participated as defined.

Weighting these estimates, as described above, by the importance of the husbands’ occupation within the aggregate employment structure, provides an approximate estimate for the overall experience of married working wives. On the eve of industrialisation, their participation rates were around 65 per cent.

What about trends over the course of industrialisation? Again the story is fragmented. The participation rates for women married to miners, tradesmen, or casual labourers seem to decline. But for agricultural labourers’ wives the story is more ambiguous. In high wage agriculture in the north and Midlands, women’s participation remained high but showed signs of failing after 1840. In contrast the participation rates of domestic industrial workers’ wives increased after the dislocation which followed the Napoleonic wars, perhaps because their earnings were necessary for family survival as falling piece rates squeezed mate earnings. Women married to men with factory employment, and so presumably located in a factory district, exhibited steadily increasing participation after the post war slump. Industrialisation appears to have been associated with more employment for some women, less employment for others, while yet a third group experienced some increase in work followed by a decrease. Any overall picture depends on the weights attached to these diverse interpretations.

The weighted average participation rates show a sharp decline in the post war slump, an increase in the 1830s and a second decline in the hungry forties, the latter trend continuing after mid century. Overall then participation appears to have declined though not in any smooth fashion.

To put these figures into a longer-run perspective and facilitate comparison with census estimates involves adjusting for the fact that married working-class women did not make up the total female population. Estimates of participation rates for all women are shown alongside raw and adjusted census estimates in Table 2. These estimates are based on...
the assumptions that one-third of the female population was middle and upper-class, and never worked for pay, and that of the remaining two-thirds, 10 per cent were single or widowed and had 100 per cent participation rates, while 90 per cent had the participation rates obtained by reweighting the Horrell-Humphries occupational participation rates described above.

Columns 1 and 2 in Table 2 provide raw census estimates, and estimates adjusted for documented under-recording of women's employment, respectively. Column 3 provides estimates based on the broader definition of participation (either a recorded occupation or non-zero earnings), and column 4 estimates based on the narrower definition (a recorded occupation).

Estimates based on the narrower definition are included in Table 2 because the instructions about recording women's work given to the early census takers, particularly in 1851, cited the possession of an occupation rather than the mere earning of income. These estimates (column 4) fit surprisingly well with the early census totals, especially if the latter are adjusted as in column 2 and the census figures for 1841 understood as a gross underestimate. [9] Participation rates for the period of industrialisation appear similar to those recorded in the 1851-71 censuses. However the more inclusive definition of participation preferred by Horrell and Humphries (column 3) suggest even higher activity rates of over 40 per cent for some stretches of the industrial revolution.

Clearly earnings definitions of activity produce higher measured participation rates than do occupational definitions. So long as women's participation was couched in the economy of makeshift, and concerned more with adding something to the family pot than with practising an occupation, it was destined to be underestimated by the mid nineteenth century censuses. But it is unlikely that under-enumeration in the censuses would be sufficient to eliminate the secular decline in participation suggested by the comparisons implicit in Table 2, particularly as the later nineteenth century censuses were probably more accurate. Thus although participation appears to have declined during the industrial revolution, it did so over a range that was at the peak of historical experience. Women's economic involvement in the early industrial economy thus appears to have been considerably higher than anything seen since, until the dramatic rise in women's participation in the 1960s.

The contributions of women and children

Evidence on participation alone is rather unsatisfactory. It does not convey the depth and extent of women's work. Were they working full-time and year-round or was their involvement, as much of the qualitative evidence attests, seasonal and part-time, essentially opportunistic and fragmentary? Horrell and Humphries offer evidence from their data set on the relative contributions of women and children to family incomes in an attempt to gauge the continuity of their activity. [11] Again the accounts are operationally specific; women's and children's relative contributions varied according to the occupations of husbands and fathers. But except in the case of factory and outworker families, women's and children's contributions were relatively small at the end of the eighteenth century and remained so throughout industrialisation. Few families were entirely dependent on the earnings of husbands and fathers; but for many families they were the mainstay. This reliance preceded industrialisation, with husbands' fathers' earnings contributing more than three-quarters of family income to all groups other than factory workers and outworkers between 1787 and 1815.

Trends in contributions also varied by male occupation, but with the exception of factory families, women and children do not appear to have substantially increased their relative contributions. If anything there was a slight increase in women and children's contributions over time and across occupations were not consistently related to family income levels. Low-wage agricultural families, at both the beginning and the end of the period, were among the poorest, yet the percentage contributions of wives and children were small relative to much higher quality children (not to mention the altruism of husbands and fathers!).

But these data themselves do not indicate the causes of variation in women's involvement; they cannot discriminate among the hypotheses about changes in women's lives outlined above. Were women voluntarily retiring from the labour market as the increasing wages of husbands and fathers were able to purchase leisure for wives and daughters? Or were womenrationally opting to work in the home because their productivity in housework and childcare had begun to exceed their productivity in paid work as reflected in their wages? Alternatively were women being squeezed out of paid work by institutions such as chauvinist trade unions, and sex-specific protective labour legislation? Or perhaps employers were becoming more prejudiced or afforded more financial leeway to indulge their taste for discrimination?

Much rides on interpretation here. Orthodox economic historians emphasise voluntary shifts in women's supply of their labour and read these secular trends as the result of optimisation by families facing with shifting relative prices and budget constraints. As such they were welfare-enhancing. The male-breadwinner family was produced by beneficent historic forces: improving living standards, better domestic conditions and a demand within families for higher quality children (not to mention the altruism of husbands and fathers!).

Feminist historians suggest that darker forces constrained women's labour supply and limited employers' demand. Dominance and subordination characterised relationships in the family putting paid to women's exercise of free choice in the allocation of their labour time. Selfishness and fear dictated the behaviour of unions while 'own-sex altruism' bound together male employers and employees limiting and constraining the demand for women's work. In either case, a family structure which involved a dependent wife and mother, and its mirror image, a breadwinning husband and father, became increasingly the hallmark of working-class respectability. Can the existing evidence discriminate between these two hypotheses?

Authors who see the emergence of the male-breadwinner family as a positive development, as optimisation on an institutional level, appear to have more faith in the efficiency of market processes and the rational responsiveness of family specialisation than they have empirical evidence. Even if husbands and fathers who earned more were inclined to devote some of their higher incomes to the purchase of leisure time for wives and daughters, it is still not clear that men's earnings increased sufficiently to explain the decline in female participation. Most authors now agree about trends in men's nominal earnings. Deflating these with the best available cost of living index suggests that the average worker was not significantly better-off in real terms until after 1840, and even then 1851 was a particularly good year when prices were at a cyclical low; with the subsequent rise in prices it was not until 1863 that the real wage level of 1851 was regained.

Significantly, Horrell and Humphries found that variations in women's and children's contributions over time and across occupations were not consistently related to family income levels. Low-wage agricultural families, at both the beginning and the end of the period, were among the poorest, yet the percentage contributions of wives and children were small relative to much better-off families whose fathers were employed in factories, for example. This suggests demand-side constraints at least in the low-wage agricultural counties: an interpretation reinforced by the evidence that as the real incomes of families in this

### Table 2: Trends in women's participation rates (per cent)

<table>
<thead>
<tr>
<th>Year</th>
<th>Horrell Estimates</th>
<th>Humphries Estimates</th>
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<tbody>
<tr>
<td>1815</td>
<td>18.4</td>
<td>20.7</td>
</tr>
<tr>
<td>1851</td>
<td>24.1</td>
<td>26.5</td>
</tr>
<tr>
<td>1881</td>
<td>27.2</td>
<td>29.3</td>
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<tr>
<td>1891</td>
<td>27.2</td>
<td>29.3</td>
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<tr>
<td>1901</td>
<td>27.2</td>
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<th>Notes</th>
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<tr>
<td>(1) Raw Census figures, see (9).</td>
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<tr>
<td>(2) Adjusted Census figures, see (9).</td>
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<tr>
<td>(3) Extended definition of participation used; earnings data adjusted for documented under-recording of women's employment.</td>
</tr>
<tr>
<td>(4) Reduced definition of participation used; participation defined by having a recorded occupation.</td>
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</tbody>
</table>
Humphries, Refresh 21 (Autumn 1995)


sector struggled upwards after 1835, wives and children contributed proportionally more not less. This interpretation was confirmed by independent evidence linking poverty in these counties with lack of employment for women and children. On the other hand, for miners' families the evidence is consistent with a situation where increasing family incomes driven by higher male earnings secured a relaxation of the efforts of wives and children. Stagnant male earnings perhaps enforced the persistently high contributions from other family members in outworker families. Artisans appear to have made an early transition to a family structure in which women's and children's earnings were relatively unimportant, though they were not the highest earners and real male wages did not increase until 1835.

But what of alternative supply-side stories? Even if men's real earnings do not appear to have grown sufficiently rapidly to explain trends through income effects on women's leisure, it might still have been rational for families to reallocate women's labour time if their market earnings grew less rapidly than their productivity in the home. Unfortunately less is known about trends in women's real earnings in this period than about trends in men's earnings. Horrell and Humphries found that the variation in women's relative earning power over time and across occupations might help to explain the patterns and participation within their data. While for some occupations women's earnings increased relatively in the second quarter of the nineteenth century, for all occupations they grew at a lower rate than men's (or children's) earnings after 1840. What is also relevant is the value of what women could have produced if instead they had worked in the home. There is little evidence to suggest that women's productivity in housework was increasing relative to wages. [12] Historians of housework have suggested that domestic technology changed only slowly in the nineteenth century. Piped water, and later gas and electricity, were the macro innovations of housework, and they did not impact on working-class homes until the twentieth century.

It remains possible then that women and children were constrained by demand in their attempts to contribute to family income, and that a man's occupational status carried with it ideas about appropriate roles for married women that were independent of his earnings. However the standard demand-side interpretation has its problems. Trade unions, whether chauvinist or not, were not sufficiently powerful to have excluded women from jobs until after 1850 at the earliest, and unions, whether chauvinist or not, were not sufficiently powerful to have had the impact claimed for it. These institutions, along with marriage bars and gender stereotypes which questioned the respectability of married women's employment, are more appropriately identified as the pillars of capitalist patriarchy in the later nineteenth century.

Conclusions

Clearly the identification of the causes of these trends in women's work requires more investigation, but I shall end with a speculation. Perhaps the apparent decline in women's involvement in the industrialising economy has its roots in a rather obvious but neglected characteristic of that economy: the relative scarcity and insecurity of employment. Certainly an economic context where employment and earnings has to be rationed across families makes the emergence of institutions which limit women's paid work more understandable. Institutions which functioned to exclude women from many sectors of paid work, crowded them into the least well-paid jobs, and convinced men and women of the working class that respectable behaviour involved divided roles of breadwinning and dependence, did not boil out of the bitter crucible of industrialisation but grew instead in overstocked markets for easily acquired skills and in rural areas where agricultural employment and traditional rural outworking were both in decline. Perhaps patriarchy could graft itself on to nineteenth century capitalism so successfully because that capitalism was characterised by under-employment and unemployment.

References