Social Policy and Economic Performance

Helen Robinson

Abstract

Many government and third party interventions in the labour market are aimed at providing commodities that might not be offered if the private sector were left to its own devices. These "positive externalities" should help to improve equity and efficiency and hence economic performance. If this is the case, then it is useful to measure the impact of social policies and government intervention in the labour market within and across countries, and over time. For example, the proportion of workers covered by the minimum wage; the gender pay gap, or the proportion receiving Working Families Tax Credit in the UK are partly the result of government intervention, and by extension associated with the level of economic performance. Attempts at a cohesive social policy are implicitly a measure of the incorporation of hitherto non-standard workers such as women and provide a more comprehensive picture of economic performance. Here we consider various measures that affect performance at work, with an emphasis on comparative effects across gender.

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1 Review of the State of Social Policy

Many government and third party interventions in the labour market are aimed at providing goods and services that might not be offered if the private sector were left to its own devices. These "positive externalities" should help to directly improve efficiency and equity. Their provision should ease the functioning of the labour market, increase gross domestic product per capita, and improve economic performance. It is useful, therefore, to try and measure the impact of social policies in the labour market within and across countries, and over time, as a means of better understanding and comparing relative economic performance. We argue that in-work benefits and other attempts at a cohesive social policy are implicitly an improved measure of economic performance. Survey data sets are increasingly becoming comparable across countries and therefore allow the development of a new range of international social indicators. Although social policies may be country-specific, such policies are likely to have an impact on the wage and hours distribution of workers, and employment rates in general, and with access to survey data the effects of this can be measured. So the introduction of a certain policy may allow us to witness a structural break in a long-term trend in order to assess its efficacy. In what follows we present evidence for Britain of labour market developments that have been influenced by government intervention. This methodology could be readily applied in countries with similar data sets in order to make cross-country comparisons.

Often social policies have direct implications for labour market performance across gender. For example, the extent to which an aim such as a low unemployment rate is associated with improved economic performance is clouded by the gender composition of the workforce. It is well known that in Britain some women fail to show up in either the ILO definition of unemployment or the claimant count, as they remain on the margins of the workforce. Some attempt to qualify the definition of unemployment to take account of those individuals who would prefer part-time work whilst looking after children or relatives is informative. The effects of social policies are often reflected in changes to employment, hours and wages so that a wider perspective than the calculation of a simple unemployment rate is needed. With ever increasing levels of female participation, the

move towards job retention over the child-bearing years is usually thought to be complementary to better economic performance (the effect on children aside). Often direct measures of processes affecting women such as women's labour market status (for example, the number of women on maternity leave) are unavailable in British survey data. However, indirect measures, such as the proportion of women with young children who have continuous job tenure, could help to gauge the extent of maternity leave provision and any changes therein.

In what follows, we analyse how social policy affects women in the labour market. In essence, we consider how a range of policies can be measured and by extension give some indication of how an economy is performing. Other issues, such as the proportion of workers covered by the minimum wage; the gender pay gap, the number working beyond various government legislated thresholds such as 16 or 48 hours[1] each week (and second job-holders) indicate not only the extent of government intervention, but help in the assessment of economic performance. Direct measures of all these are not always available, but attempts may be made to estimate the proportions of women involved from statistics readily gathered from household survey data.

One of the most notable recent labour market features has been the advancement of women at the workplace relative to men. The improved prospects of women are apparent in both employment and earnings. Economists, demographers and labour market policy-makers have all cited reasons for these developments, with varying degrees of emphasis on fertility, labour supply and demand (summarised in Ferber (1998)). Declining fertility rates, marital dissolution, changing attitudes toward women in the workplace, improvements in household labour-saving technology and the facilitation of the involvement of women in work through maternity leave and the state provision of in-work benefits and childcare/support have all contributed to the increase in female labour market participation (see amongst others Joshi, Layard and Owen (1985), and Joshi and Paci (1999)). Deindustrialisation has seen the rise of the non-manual service sector with

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[1] These represent the hours limit for Income Support in the UK and the EU prescribed maximum working week respectively.

its provision of part-time jobs. Social policy can increase growth along either the extensive or intensive margins. More women in work should act to increase the output of an economy (provided this is not offset by a decline in male participation). Raising the productivity of workers through policies aimed at increasing wages or encouraging lengthier job tenure act on the intensive margins. Women may be crudely viewed historically as one group of non-standard workers (Rees (1999)) due to low participation rates. However, casual observation would suggest that, whilst female labour market participation has increased, this has not been of the same order across groups of women with different family status or educational attainment. For example, there has traditionally been a strong negative correlation between the presence of very young children in the household and female labour supply (see Nakamura and Nakamura (1981)). The presence of children affects the participation of women over the life cycle albeit by ever-decreasing amounts. Similarly, the experience of work is different for women at different points in the wage distribution. So whilst arguing for a gender perspective in the assessment of economic performance, it is important to guard against generalised, aggregate conclusions. Care should be taken to report the break down of statistics into sub-groups, wherever possible.

To summarise, we analyse how social policy affects women in the labour market and how this interrelates with economic performance. We include the study of the number of women working extra hours each week via the analysis of second job-holders. We go on to examine the patterns of low pay and part-time work in their relationship to economic performance. The paper is organised as follows. The next section describes our chosen data sets and the third section documents the gender patterns over the last two decades. Section Four introduces our set of new social indicators and concludes.

2 Data

The provision of improved social indicators requires consistent, reliable and relevant data sets that stretch over a long period of time. For countries such as Britain, large, longitudinal data sets have only come into existence quite recently: although there are a number of big cross-section surveys. Here, we use two such sources that have

counterpart data sets in other countries such that the goal of comparable worldwide indicators may be attainable. Their information on wages, hours of work and individual worker characteristics is exactly what is required.

General Household Survey

The General Household Survey (GHS) is now a biennial survey carried out in every month of the year by the Office of Population Censuses and Surveys, based on a sample of the population living in private (post-coded) households in Britain. The Survey began in 1971 and, until 1996/97, it was carried out annually. It covers around 10,000 households. Each member aged 16 and over in the household is interviewed. The survey has around a 66 per cent response rate. Certain subjects are only covered from time to time and the GHS Annual Reports include a summary of the main topics covered for that year. The GHS is the only nationally representative data set that contains, amongst the other information that we require, wage data over a consecutive twenty-two year period. However, the earnings data sample is comparatively small, at around 8,000 men and women each year and this sometimes limits the level of disaggregation.

The wage variable we use below was derived from the responses individuals gave on questions on their usual take home pay (after income tax and other deductions but including overtime and bonuses). Individuals were subsequently asked to say for which time period this wage was paid and whether this was their usual hours for a typical week. From this, we have calculated the gross weekly and hourly wage variable and indexed this to prices to create the real variables used. From the GHS we also use information on part- and full-time earnings, where the definition of part-time work was derived from a working week of less than 30 hours. We use the GHS to analyse employment rates, wages and job tenure.

The Labour Force Survey

The Labour Force Survey (LFS) provides the most comprehensive source of labour market information in the UK. It is a nationally representative sample of around 60,000 households, which can be weighted in order to permit population estimates. The survey

has been carried out on a quarterly basis since 1992 and households are kept in the survey for five consecutive quarters. There was no information on pay before 1992. For our sample period since 1997, pay information is collected in the first and fifth waves of a household's participation. This represent around 16 000 individuals with earnings data each quarter. Here we use the LFS for our analysis of second job-holders, as it is the only British survey that offers sufficiently large sample sizes to permit such analysis. In addition, we provide estimates of the full- to part-time pay gap and the proportion of low paid workers using the LFS.

Earnings information from the household surveys are sometimes less accurate than employer-based information, such as the New Earnings Survey, especially where responses are obtained from proxy respondents (some 30 per cent of responses). Historically, hourly pay estimates from survey data can only be derived from questions relating to the last usual pay amount and the relevant pay period. Workers in the low wage sectors who do not regularly receive a pay slip tend to understate pay levels and this limitation is exacerbated by the omission of any bonus payments. Further, there exists disparities between employer and employee estimates of the number of hours worked.

3   Main Findings

Employment rates and family status

The relative advancement of women in the world of work is a key feature of the post-war British labour market. But the pattern of aggregate employment rates tells us little of the variety of experience within gender. Figure 1 shows the employment rates of men and women conditional on age in the mid-70's and mid-90's. The figures portray three-year averages, in order to boost the sample sizes within each age group. For female workers in the earlier period, one of the notable features was the fall in employment for women in their mid-twenties to early thirties and subsequent recovery. Hitherto, many women seemed to stop working in their childbearing years. By the mid-90's, this shape was no longer so clearly discernible. Indeed, the pattern is very similar to that of male rates of the second panel. Male employment rates have fallen at every age over time: more so for those under 24 and those over 50 years of age. This reflects rises in the staying-on rates

in higher education and the movement into inactivity of men over 50. The trends for men and women act to narrow the employment gaps by age. By the mid-90's, male 16 year-olds enjoyed similar economic activity patterns to females of the same age. However, females aged 25 in the mid-90's still had lower economic activity rates than males. The employment gap had narrowed most for males and females over fifty. These trends have continued into the late-90s. In passing, we note that Figure 1 suggests the move to postpone the birth and rearing of children (witness the dip in age-specific employment rate moves to the right). Also noteworthy is that the frequency and length of breaks around childbirth is becoming smaller (the dip becomes shallower). Whilst the graph of the female employment rate is smoother than before, the drop in the rate now occurs at a higher age. The traditional pattern of discontinuous economic activity throughout the early twenties until mid-thirties is in stark contrast to patterns observed in mainland Europe (in countries such as France, say). It would seem that French women fall into two separate groups: those who work continuously without career breaks and those who are permanently out of the labour force (Dex, Walters and Alden (1993)). The comparatively recent provision of cross-country survey data sets, such as the Europanel, should enable analysts to identify such European trends more easily.

The take up of new European maternity rights[2] has meant that increasing numbers of British women are now able to retain a foothold in the labour market throughout their childbearing years. A sizeable proportion of these women return to, and then remain with, their pre-break employer. Our data above cannot however confirm whether the women return to the same employer. Since the employment rate is a product of the inflow rate and the average duration of employment, the evidence of higher employment rates (in the age range 26 to 35 years) can arise from any of the following. A rise in the average duration; or a rise in the inflow rate; or a combination of both these factors. The inflow rate may reflect child-rearing experiences for this age range that in turn indicate both fertility rates and the speed of return to work. For a given inflow rate, the higher employment rates could suggest a longer duration at work.

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[2] The 1993 amendments brought down the qualification period of maternity leave to 1 year (from 2 years) for full-time workers and to 1 year (from 5 years) for part-time workers.

Figure 2 shows how employment rates across gender vary with the age of the youngest child present in the household. It can be seen how the absence of young children leads to a pattern of female employment rates which most closely mimics those of men. We witness that for women with no children, the employment rate over the fifteen year period has remained relatively constant. Employment rates for women with children are lower than for women with no dependent children. One explanation of the constraining force of the presence of young children on female labour supply is that young children have high costs in terms of time and thereby raise the reservation wage of being in work. As the age of the youngest child rises, the decision to participate (and thereby the employment rates of women) is less affected by the presence of children. This is what we observe in the data: female employment rates do rise with the age of the youngest child. Figure 2 also shows how the employment rate has risen most in the last decade for women with very young children. These women are currently in employment in greater numbers than ever before. Note that there is no association between employment rates and the age of youngest child for men. Table 1 reports the employment rates of various groups of women. For the sample in work, when split by marital status, lone parents have the lowest rates, (a mean of .46 for our time period) whereas married women have the highest (a mean of .70). There are only small differences in the rate of increase in employment rates between married women with and without children: married women with children have experienced a five point rise with the largest increase being reserved for married women with children less than or equal to one year, and for lone mothers. This could be an indication of the impact of levels of in-work benefits and the increased take-up of maternity leave provision.

An additional social policy response to these processes by the British government was the introduction of finely tapered in-work benefits in autumn 1999. Subject to working at least 16 hours each week, a parent may qualify for Working Families Tax Credit in the form of a monetary benefit and help with childcare costs administered through the Inland Revenue. Such a policy is geared at facilitating the participation of women, even in very low-paid jobs, whilst their children are young. Hitherto, it is clear that some of these

women would have withdrawn from the labour market, so the policy is directly aimed at reducing their intermittent participation. As such, it allows the harnessing of extra labour to influence total output, thereby increasing economic performance. Simply by extending the size of the workforce, the total amount of goods and services may rise.

Job tenure

In recent years, higher female employment rates have occurred alongside lengthier female job tenure. The retention of good jobs over the life cycle is sometimes associated with improved economic performance via the accumulation of firm-specific human capital and the associated increase in the marginal productivity of labour. We now study these changes in female job tenure.

Maternity leave legislation, introduced in Britain in 1978 and then amended in 1993, has allowed increasing numbers of women to retain a good job match over their child-rearing years. Although this would be enhanced by the right to return to part-time work, such an improvement does not yet seem likely to occur in Britain. Indeed, various US authors such as Barrett (1982) argue that some such accommodations are not in the interest of female workers: part-timers have less opportunity for training and promotion, and so genuine improvements can only come from enabling women to operate on a level playing field in the full-time world. Part-time hours allow men and women to manage both home and work and to commit women to the traditional role of homemakers. Waldfogel, Higuchi and Abe (1998) find that increased job retention via maternity leave holds for a number of countries. Here, using GHS data, we confirm in Table 2 how the length of job tenure for women with young children does appear to be lengthening. The percentage of women aged less than 35 years with children under 5 years old with job tenure of more than 5 years rose from 5.8 per cent in 1983 to 39.1 per cent in 1998. However, the percentage of women of the same age with no children (or with off-spring older than 16 years) with tenure of more than 5 years only rose from 10.5 per cent in 1983 to 26.2 per cent in 1998. Whilst the length of job tenure for men in Britain has been falling, job tenure for women with children has generally been rising. To the extent that this

generates increased productivity resulting from a good job match for women, it is indicative of a process acting on the intensive margins.

What we may be observing in Table 2 is the effect of the provision and/or take-up of maternity leave. A specific social policy has been geared to tapered in-work benefits only since 1999. The Working Families Tax Credit is aimed at inducing the participation of women, even in very low-paid jobs, whilst their children are young with the objective of reducing the dependence on non-work benefits and increasing the provision of commodities alongside enhanced economic performance. With subsequent years of data, we should be able to witness this in our data.

Second jobholders

But whilst the convergence in employment rates across gender and the lengthier job tenure of women may provide a rosy picture of the world of work, such statistics could obscure the recent changes in the number of jobs held. Female workers may hold more than one job but this is not reflected in the employment (or unemployment) rates. It is pertinent, though, to the amount of work supplied by women. The increase in female labour force participation coupled with increases in the average hours worked during an economic upturn has a crucial impact on economic performance. In Britain, more women than men are second jobholders. For instance, a woman might hold down one full-time job and provide additional part-time hours in a second job or be active as an unpaid family worker. While this might increase performance at the extensive margins, squeezing an increasing number of goods and services from the greater supply of women in multi-jobs with low pay and long hours, it may not necessarily be linked to greater economic efficiency on the intensive side. Holding two part-time jobs may not be as productive as one full-time job. If individuals choose to take a second job as a result of low rates of pay in their first job (and the evidence in Table 4 seems to suggest this), one effect of the introduction (or increase) of the National Minimum Wage might be to reduce the need to hold more than one job. This might be complemented by the introduction of in-work benefit such as the Working Families Tax Credit.

Whilst the gender difference between the proportions of workers holding more than one job is around 2 per cent (see Table 3), second jobholders are over-represented amongst the pool of low paid workers. Table 3 shows that the estimated proportion of working age individuals with a second job in 1994 was just under 5 per cent. There is no real evidence of much change in these levels over time. The proportion of women second job-holders is around double the male figure.

Table 4 confirms that the second jobholders are typically less well paid in their main job than others. The size of the second job earnings as a percentage of the main weekly earnings is stable at just over 33 per cent. The other notable feature of Table 4 is that, for those poorly-paid workers who have a second job, the hourly wage from the second job is consistently higher than that of the main job (compare columns VI and VII). It would seem that individuals are induced to work more hours by taking on more jobs at higher wage rates. The average hourly wage exceeds the level of the National Minimum Wage which therefore does not have any bite.

The reward for taking another job is not the same across gender. Real hourly wages for women in second jobs are less than those for males. The mean gender pay gap is larger for second jobs than in main jobs. The hourly wage premium for the second job is also smaller for women than it is for men. It might be the case that some women are locked into supplying more hours of work by having more than one job, and receive a modest boost to their income in so doing. It is well known that part-time jobs are not, for the most part, particularly good ones in terms of pay and conditions (see, amongst others, Blank (1989)). It is to the issue of part-time work that we now turn.

Full time – Part time pay gaps
The availability of part-time work can facilitate female labour force participation. While this might increase performance at the extensive margins, producing more commodities from the greater supply of women in part-time jobs may not necessarily be linked to greater economic efficiency on the intensive side. The issue has to be qualified by the nature of pay and conditions these workers face. The British government has recently

begun to comply with European Union regulations to equalise the status of part-time work with that of full-time. From an employer's perspective, this may increase the cost of offering part-time jobs and thereby reduce the demand for part-time workers. Some women prefer to return to work part-time following a break, but such jobs may have an associated pay penalty on top of the penalty associated with gender. In Britain, the Equal Pay Act of 1970 made the process of offering different wages to men and women illegal. This was later extended in 1983 to cover equal pay to work of equal value. The Sex Discrimination Act implemented in 1975 prohibited gender discrimination in hiring. The subsequent Employment Protection Act, introduced in 1979, established the right to have maternity leave. In April 1999, the government legislated against low pay in the form of the National Minimum Wage. Since relatively more part-time work is low paid, such a move would be expected to affect more part-time jobs than full-time. It would be expected therefore to narrow the full to part-time pay gap. Table 6 shows that in 1995, a typical woman could expect to be paid an average of £7.10 an hour. However, a man could expect to earn £9.70 an hour (in January 1998 prices), so that, in 1995, women earned, on average, some 73 per cent of the average male hourly wage. That the gender pay gap had started to narrow over time since the early 1970's (particularly after the implementation of the Equal Pay Act in 1975) is well documented, (see Joshi and Paci (1998)). Table 6 shows that the gender pay gap fell by 11 points from .36 to .25 between 1980 and 1995. Wage rates differ considerably by full- and part-time work status. The average full-time job pays around 20 per cent more than the average part-time job. This may be because part-time workers receive lower returns to human capital characteristics, such as education and work experience, than their full-time counterparts, or because they simply have less human capital. Note that the gap between female full-time wages and male wages has narrowed more than the pay gap between female part-time and male wages (Table 6, columns VI and VII). On the basis of these unconditional statistics, it would seem that part-time jobs continue to be bad jobs in terms of pay.

What can be said about the overall gender pay gap? It could be argued that any narrowing of the gap reflects the accumulated effects of anti-discriminatory social policy. The monitoring of this statistic would therefore provide valuable information on the

progress of women in the labour market and by extension economic performance. Increased educational attainment and additional work experience (partly influenced by the same factors that facilitated increased participation) are cited as reasons for the narrowing of the mean gender pay gap (Harkness (1996)). We may expect these influences to vary across groups of women and to affect the pay gap by varying degrees. For example, differences in educational attainment or on-the-job training may mean that pay for older women lags behind, if younger cohorts are more educated or receive more training. The decision to work full- or part-time influences total earnings due to the pay penalties associated with working part-time. Differences in part-time working across age groups will then affect the life-cycle earnings profile. Since the majority of part-time workers are women, any part-time pay penalty will affect the overall gender pay gap. It is therefore important, when calibrating economic performance, to have some understanding of the nature and magnitude of these pay gaps.

In passing we note that Manning *et al* (2000) show that accounting for the fraction of part-timers that are labour market re-entrants is important in any discussion of gender pay. While 10 per cent of women full-timers are labour market entrants (a figure that is slightly lower than the overall figure for men), the entrant share for female part-timers is closer to 20 per cent. They conclude that it is the nature of intermittent participation that is the main source of the gap between women working full- and part-time. Whatever the source of the full to part-time pay gap, it is certainly persistent in nature. Table 7 illustrates that there is little or no change in the full- to part-time gender pay gap in Britain in recent years. And so low pay for female part-timers remains a feature of the British labour market.

Gender and Occupation

The progress of women in the labour market may also be monitored by measuring the gender balance across occupations. Table 8 shows the percentages of men and women in the professional group over time. Although there is little evidence of much progress into the group of professionals by women over the sample period such a statistic might be used to monitor the advancement of women. If we disaggregate the figures to consider

individuals in professional roles working in education, we find that women form a greater proportion of this group than men. This disaggregation may be perofrmed for any other target group to analyse women's advancement. Table 9 reports the industries and occupations least and most dominated by women. Clerical work continues to be dominated by women whilst it would seem that manual work is still largely taken up by men.

Low Pay

As a social policy response to some of these pressures, the British Labour government introduced the National Minimum Wage (NMW) in April 1999 in order to combat low pay. Allied to tax cuts and in-work benefits for the low paid, the NMW was seen as an important policy component of a poverty-reduction strategy. The policy was deemed to be especially important for women since women are disproportionately represented amongst the low paid (Low Pay Commission (2000)). In what follows, we define low pay as an hourly sum below £3.60, as this was the rate at which the NMW was initially set. Table 10 shows that the total estimated proportion of working age adults earning less than the minimum wage rate in 1998 was around 9 per cent. This fell by around 3 percentage points the following year.[3] Although this is not a huge fall, the rate of decline between 1998 and 1999 is statistically significant (even allowing for the effects of inflation).[4]

As expected, Table 10 illustrates differences in the proportions earning below the minimum wage by gender. The proportion of men earning below the NMW fell by 1.5 percentage points between 1998 and 1999 to 2 per cent. However, the proportion of women earning less than the minimum wage rate fell by more than twice that of men (by around 4 points to 9 per cent) in 1999. Figure 3 shows the social policy impact of the introduction of the NMW quite clearly. With the advent of the NMW, the share of female workers paid below £3.60 fell and the wage distribution moved slightly to the right. In contrast, although the left-hand tail of the male distribution is not as

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[3] The minimum wage itself is set in nominal terms. For this reason, these figures, too, relate to a nominal benchmark.
[4] Inevitably, these figures comprise some measurement error: a disadvantage of the use of survey data.

concentrated around the NMW, it does move again in expected fashion. The bottom panel of Figure 3 shows that in 1998 the male hourly wage distribution lies generally to the right of and it is also below that of women, for those paid less than £3.60. Relatively more women earn less than the minimum wage than men and the average pay of these low paid women lies further away from the £3.60 threshold than the average pay of these low paid men. So any social policy that affects low pay would act to improve the wages of relatively more women. Also, the introduction of the NMW should work to narrow the gender pay gap. Following the introduction of the NMW, the female distribution is swept up closer to the minimum wage floor. The bottom panel of Figure 3 also demonstrates that because the female left-hand tail moves more than the male tail between 1998 and 1999 that the gender gap does indeed narrow slightly around the NMW. Significantly, the peak (mode) of the 1998 female wage distribution lies just to the right of the £3.60 threshold in contrast to that of men where the mode is much further to the right. So for many low paid women, the introduction of the NMW in Britain would have had little impact. In order to have more impact, the NMW would have needed to be set a little higher. Thus any social policy that seeks to address low pay and its inextricable link with gender needs to be finely tuned to the prevailing knowledge on the wage distribution. When encouraging the participation of women in the labour market in order to improve economic performance, the ramifications of low pay must be considered.

Table 11 offers some summary statistics of the nominal hourly wage distributions. It suggests that there is recent evidence of compression in both male and female wage distributions from the bottom end during the end of the 1990's. The female 10th percentile rises by 9 per cent compared with 4 per cent for women at the 90th percentile between 1998 and 1999. The male 10th percentile rises by 7 per cent compared with 4 per cent for men at the 90th percentile over the same period. This is reflected in the compression in the within-gender pay ratios. The final panel of Table 11 shows that the cross gender pay ratios are little changed at the top, though they may have narrowed at the bottom between 1998 and 1999.

Information on the male and female hourly wage distributions is also contained in Figure 3 that shows that the bottom end of the wage distributions are quite often similar for men and women. However, there are obvious differences in the distributions for wage earners throughout the rest of the distribution. It could be argued that only with occupational restructuring that incorporates more women into higher occupational levels can the gender pay gap continue to narrow. Indeed the picture of occupational structure by gender may in itself inform us on how well an economy is performing.

Having reported in detail on the various social policies in the sub-sections above, we now assess the role for the provision of new statistics on economic performance in the concluding section.

4 Conclusion

We have so far considered the growth of female employment in the context of UK economic performance. We have discussed how policies such as WFTC link to the participation of women whilst their children are young. An assessment of the proportion of the workforce receiving in-work benefits such as WFTC would be peculiar to Britain. In order to make cross-country comparisons, we might compare the proportions of workers who are low paid and who would thereby implicitly qualify for in-work benefit. The definition of low pay might be the level of the minimum wage, where applicable, or set at half the level of median earnings. Whilst such analysis is worthwhile, it does not offer any causal explanation of the underlying processes. An awareness of the bite of the NMW, as in Gosling and Lemieux (2001), is meaningful for this analysis over time. The growth in the proportions of lone parents currently in work is a more accessible statistic than the number of WFTC recipients and it is also something that can be compared cross-nationally.

The length of female job tenure by age of child might be used as a proxy for how well maternity leave is encouraging women to remain in work. Where maternity leave is working effectively we would expect to see women remaining with their pre-break employer and ever-increasing lengths of job tenure. On top of increasing lengths of job

tenure, some women are increasing hours by holding more than one job. This group contains large numbers of low-income women. At a time when the number of second jobholders in most countries is rising, it would be beneficial to know the proportions of second jobholders by gender, the hourly rate of second jobs and the linkage to low pay.

An additional performance indicator would be the absolute size and the rate of decline of the average gender pay gap and the pay gap at other percentiles of the wage distribution. Given that wages at the very top and the very bottom of the wage distribution are often very similar, it is important to also measure the gender pay gap at, say, the tenth and ninetieth percentiles. It may be the case that the gender pay gap is narrowing more at the bottom end of the distribution than at the top and this is missed by measuring a simple average gender pay gap. Other easily gathered statistics such as the proportion of women in the top 10 per cent of earners may be produced or the proportion of women professionals. Further the full time – part time pay gap is an indicator of how well an economy is performing in terms of provision of a range of working hours and wage rates, and is linked to the changing nature of jobs.

Intervention in the labour market is aimed at providing commodities that might not be offered if the private sector were left to itself. We conclude that attempts at cohesive social policies are implicitly a measure of economic performance and that they provide a more comprehensive overview of such performance than simple figures such as a country's unemployment rate. It is crucial to try to measure the impact of such social policies and government intervention in the labour market within and across countries, and over time. Following the arguments above, there are statistics from survey data that could be used to indicate not only the extent of government intervention, but point to the overall performance of an economy.

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Figure 1.   Female and Male Employment Rates by Age

Source: General Household Survey
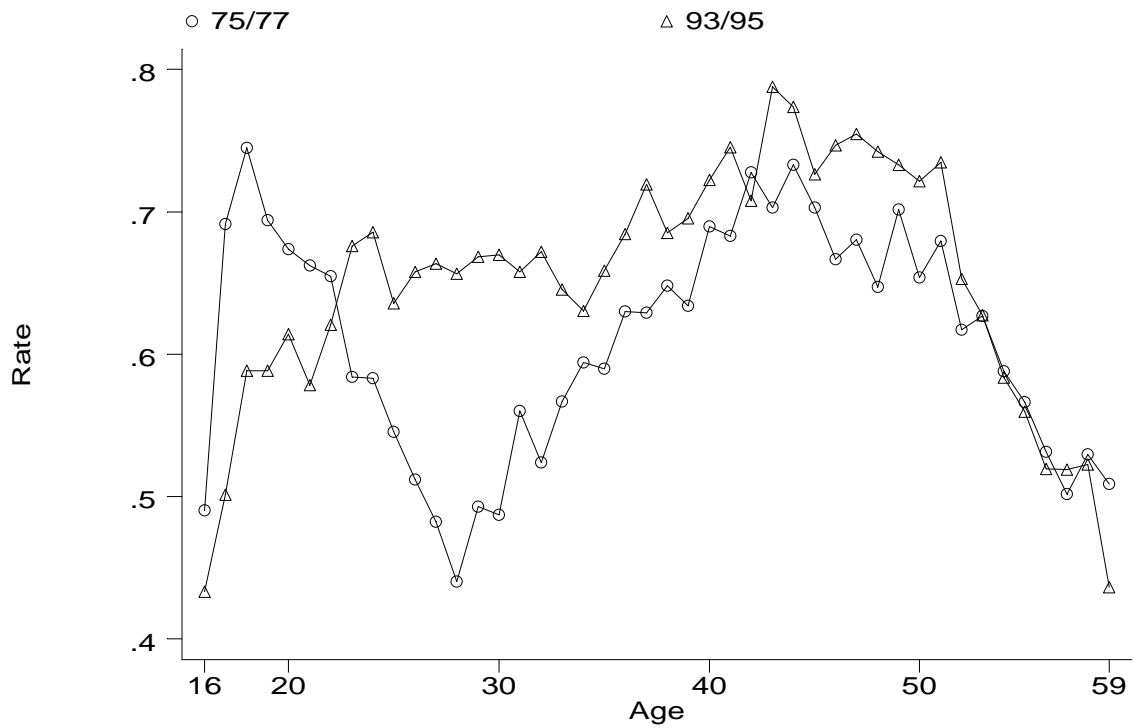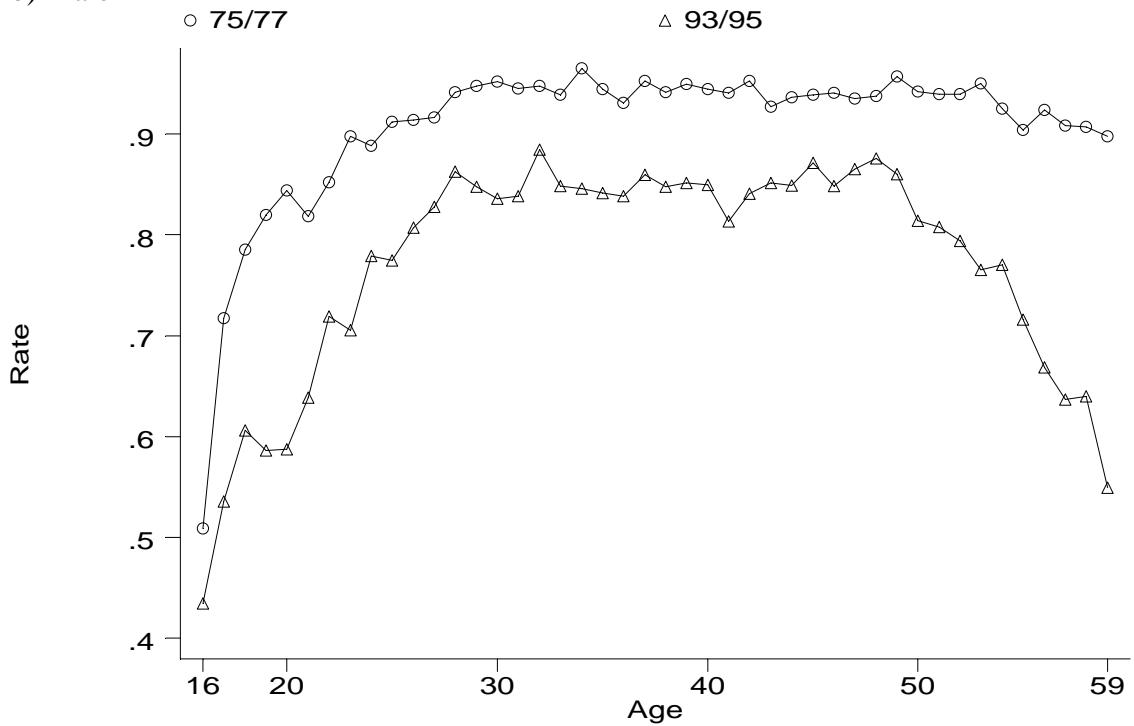
a) Female

b) Male

Figure 2.   Male and Female Employment Rates by Age of Youngest Child
Source: General Household Survey
a) Female
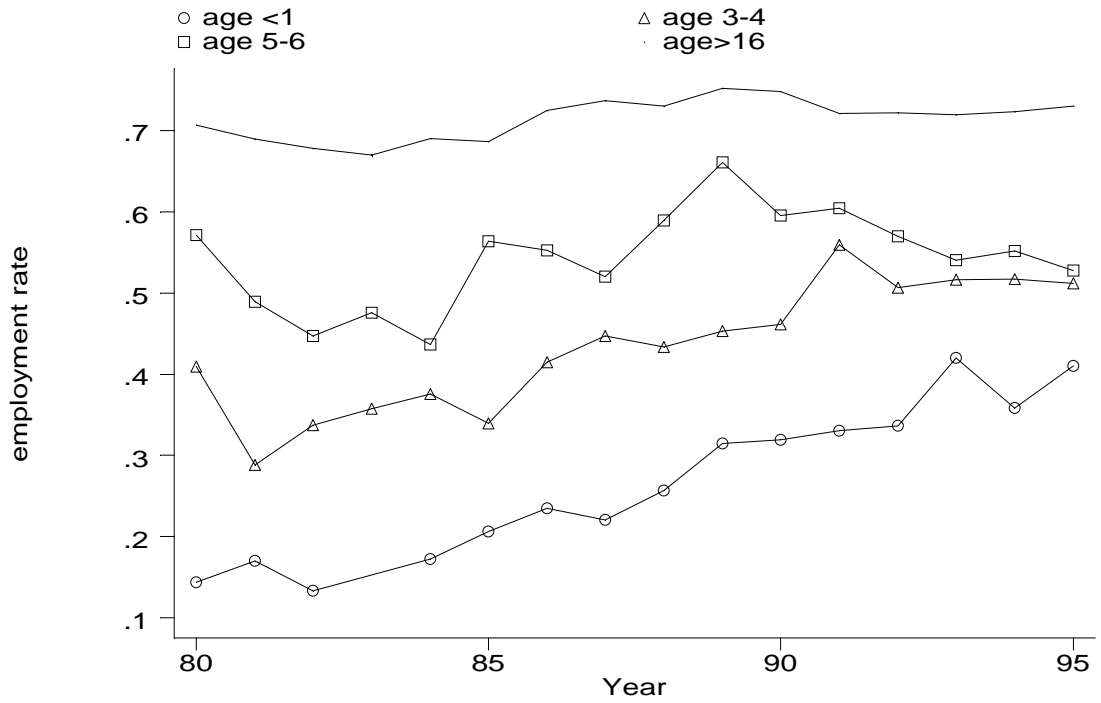
b) Male
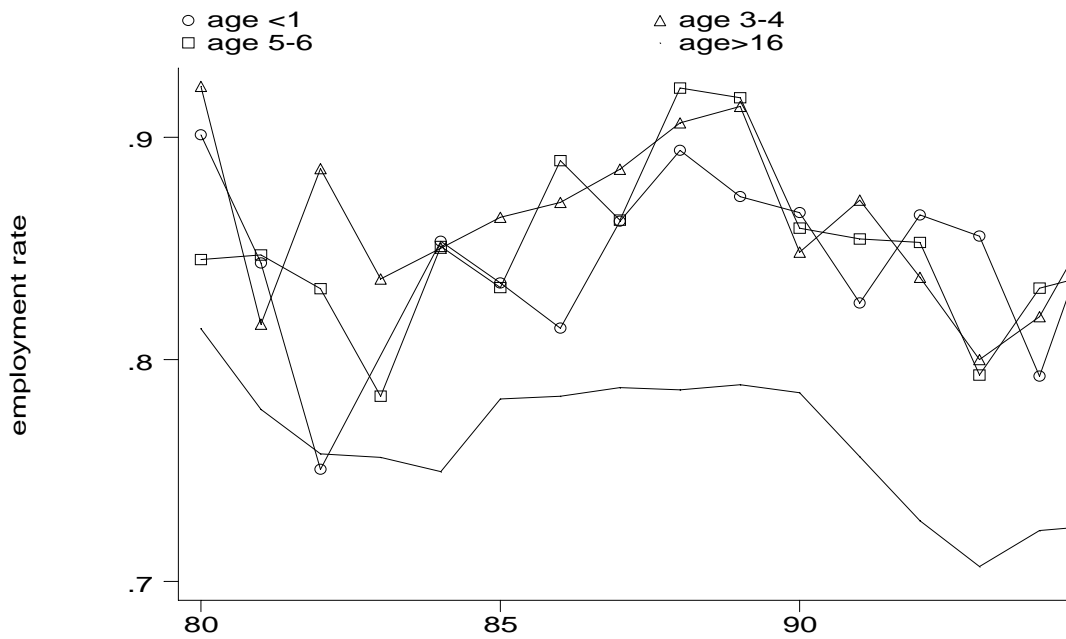
Figure 3.   Nominal Hourly Wage Distribution, 1998-99

Women

Men

Nominal hourly wage 1998

Nominal hourly wage 1999
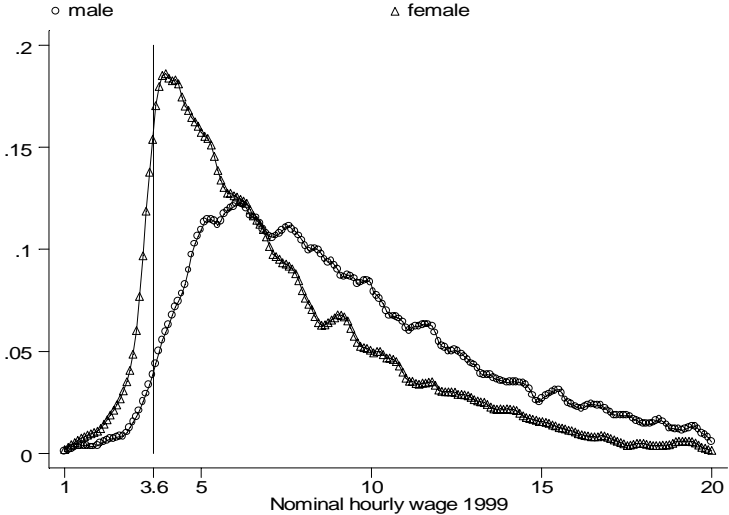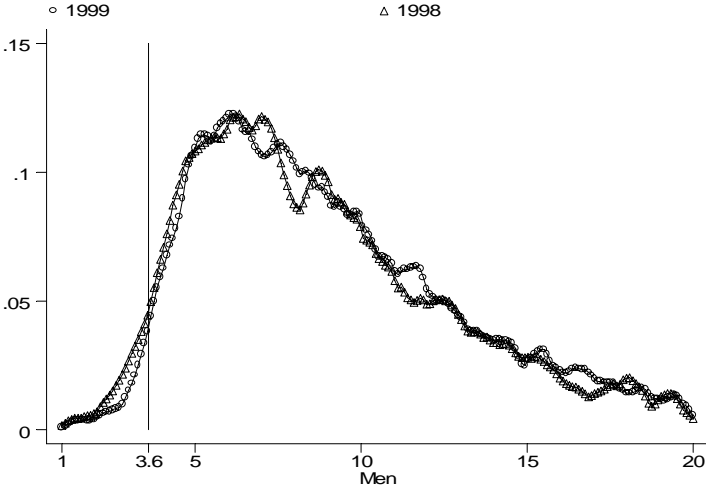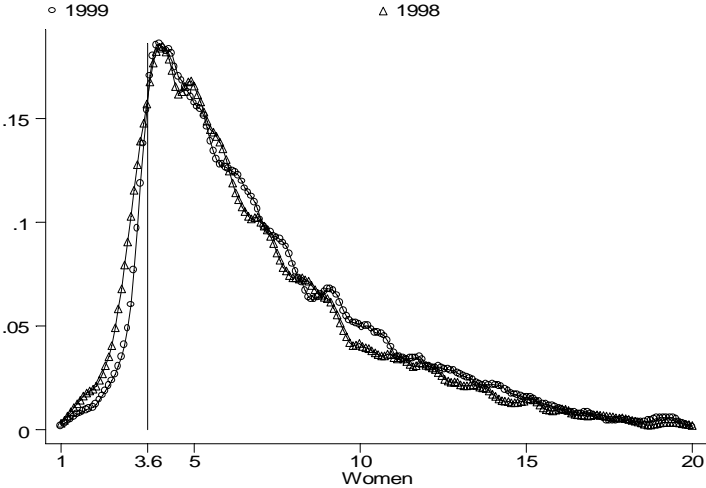
Table 1. Employment Rates by Gender

Year	Female Total	Married (total)	Lone mothers	Single	Married with children <16 years	Married with children <=1 years
	I	II	III	IV	V	VI
1993	.64	.67	.41	.58	.64	.47
	(.002)	(.003)	(.010)	(.005)	(.004)	(.010)
1996	.67	.70	.46	.63	.69	.52
	(.002)	(.003)	(.010)	(.005)	(.004)	(.010)
1998	.68	.71	.48	.65	.70	.55
	(.002)	(.002)	(.010)	(.003)	(.003)	(.010)
2000	.69	.72	.50	.65	.71	.58
	(.002)	(.003)	(.010)	(.004)	(.004)	(.010)

Source: Labour Force Survey. Standard errors are in parentheses.

Table 2. Female Job Tenure by Age of Youngest Child and Year

Length of Tenure	Child aged under 0 – 5 (%)	Child aged 5 – 16 (%)	No Children or Child over 16 (%)
Women less than 34			
1983			
0 – 12 mths	39.5	28.5	23.5
12- 2 years	41.2	48.2	44.7
2 - 5 years	13.6	19.3	21.4
5 years plus	5.8	4.0	10.5
1991			
0 – 12 mths	30.8	20.7	26.0
12- 2 years	16.5	26.1	17.0
2 - 5 years	24.8	30.4	29.8
5 years plus	27.8	22.8	27.1
1998			
0 – 12 mths	32.1	32.9	37.3
12- 2 years	11.0	10.5	14.4
2 - 5 years	17.7	25.2	22.1
5 years plus	39.1	31.5	26.2
Women older than 34 years			
1983			
0 – 12 mths	29.1	15.2	7.4
12- 2 years	36.4	37.0	19.5
2 - 5 years	18.2	33.2	22.0
5 years plus	16.4	14.6	51.1
1991			
0 – 12 mths	20.6	14.5	9.8
12- 2 years	26.5	13.5	7.3
2 - 5 years	17.7	28.5	19.4
5 years plus	35.3	43.5	63.5
1998			
0 – 12 mths	21.2	19.3	12.7
12- 2 years	6.1	10.0	6.5
2 - 5 years	18.2	24.5	15.4
5 years plus	54.6	46.1	65.5

Source: General Household Survey, various years

Table 3. Percentage of Workers with a Second Job Wages by Year and Gender

Year	Females	Males	Total
	Second Job (%)		
	I	II	III
1994	6.0	3.8	4.8
1996	6.4	3.9	5.0
1998	6.0	3.5	4.6
2000	5.8	3.7	4.5

Source: Labour Force Survey, various years

Table 4. Main Job and Second Job Wages by Year

	Real Weekly Wage				Real Hourly wage		
	Total	Second Job Holders			Total	Second Job Holders	
Year	Main job	Main Job	Second Job	III/II (%)	Main job	Main Job	Second Job
	I	II	III	IV	V	VI	VII
1994	286	186	68	36.6	7.90	6.60	8.50
1996	292	191	62	32.5	8.00	6.70	8.40
1998	299	180	62	34.4	8.10	6.50	7.70
2000	306	201	66	32.8	8.40	7.10	7.70

Source: Labour Force Survey, various years
Wages measured in January 2000 prices.

Table 5. Main and Second Job Hourly Wage by Year and Gender

	Males		Females	
	Mean Hourly Earnings		Mean Hourly Earnings	
	I	II	III	IV
Year	Main Job	Second Job	Main Job	Second Job
1994	7.70	10.40	6.10	7.60
1996	7.90	9.20	6.10	8.00
1998	7.40	9.70	6.20	6.90
2000	9.10	10.80	6.30	6.50

Source: Labour Force Survey, various years.
Wages measured in January 2000 prices.

Table 6. Mean Real Hourly Wages by Gender and Year

Year	Male	Female	Female FT	Female PT	Female/ Male Gap	FT/Male Gap	PT/Male Gap
	I	II	III	IV	V	VI	VII
1980	7.47	4.57	4.96	4.11	.36	.34	.43
1983	7.89	5.05	5.30	4.76	.35	.34	.38
1986	8.71	5.74	6.08	5.31	.32	.31	.37
1989	9.42	6.20	6.68	5.58	.31	.29	.37
1991	9.75	6.85	7.41	6.04	.28	.24	.37
1993	9.90	6.89	7.63	5.92	.28	.22	.37
1995	9.74	7.07	7.56	6.38	.25	.21	.34
1998	9.23	6.80	7.41	5.83	.24	.19	.36

Source: General Household Survey, various years. Indexed to January 1998 prices.

Table 7. Full- to Part-time Pay Gaps, 1996–1999, (Adults 22+)

Year	Ft-Pt gap	Ft-Pt gap	Share of women working part-time
	I	II	III
	Unadjusted	Adjusted	
1996	-.437*	-.150*	.41
	(.015)	(.015)	
1998	-.425*	-.161*	.40
	(.011)	(.010)	
2000	-.385*	-.142*	.41
	(.011)	(.011)	

Note. 1. White adjusted standard errors in parentheses. 2. Asterisk notes significance at 5% level.
3. Regional, industry, marital status, education, unionisation, temporary job status also included but results not reported in Column II. 4.   Dependent Variable: Log real hourly wage. 5. Sample: All workers (male and female) aged 22 years and over in various years. Coefficient represents the estimate on the part-time dummy variable. 5. Each year estimate refers to the 3rd quarter (Sept. to Nov.) of the year.
6. Source: Labour Force Survey, various years

Table 8 Employment by Occupational Group by Year and Gender

	Males			*Females*		
			of which:			of which:
Year	Professionals (%)	Males in professional group (%)	Teaching professionals (%)	Professionals (%)	Professional group (%)	Teaching professionals (%)
	I	II	III		IV	IV
'94	11.2	58.2	22.0	9.4	41.8	32.5
'96	11.7	58.7	19.5	9.6	41.3	31.3
'98	11.7	58.6	19.4	9.6	41.4	32.3
2000	11.8	57.4	20.6	10.1	42.6	31.7

Table 9 Employment by Occupational Group by Gender

Labour Force Survey, 1999

	% Female				% Part-time			
Industry		Occupation			Industry		Occupation	
Top								
Primary education	(91.3)	Medical secretary	(99.6)		Cloth-dyeing manufacture	(66.7)	Playgroup leader	(81.0)
Social work	(84.9)	Typist	(99.1)		Bars	(63.8)	Cleaner	(78.9)
Health work	(80.0)	Midwives	(99.0)		Restaurants	(49.6)	Kitchen hand	(75.9)
Hairdressing	(74.7)	Nursery nurse	(99.0)		General retail	(48.2)	Waitress	(75.3)
Canteen services	(74.2)	Dental nurse	(99.0)		Primary education	(47.7)	Shelf filler	(74.7)
Cloth manufacture	(73.1)	Beautician	(98.5)		Industrial cleaning	(46.2)	Bar staff	(73.0)
Travel agency	(72.3)	Legal secretary	(98.4)		Libraries	(45.4)	Other security	(72.4)
Veterinary activities	(71.3)	Playgroup leader	(97.5)		Religious organisations	(43.6)	Sales assistant	(68.9)
Social security activities	(70.0)	Receptionist	(97.3)		Canteens	(42.8)	Courier	(68.4)
Knitting manufacture	(67.4)	Chiropodist	(96.9)		Sports centre activities	(42.6)	Catering	(66.8)
Bottom								
Weapons manufacture	(9.5)	Seafarer	(0)		Tube manufacture	(1.7)	Plasterer	(0)
Ship repairing	(9.1)	Bricklayer	(0)		Manufacture of basic		Firefighter	(0)
					Precious metal	(1.5)		
Cement manufacture	(7.9)	Scaffolder	(0)		Mining	(1.4)	Police Officer	(0)
Alloy manufacture	(7.7)	Roofer	(0)		Weapons manufacture	(1.4)	Shotblaster	(0)
Fish farming	(6.9)	Paviours	(0)		Oil and gas services	(1.3)	Prison Officer	(0)
Logging	(6.6)	Plasterers	(0)		Textile weaving	(1.2)	Printer	(0)
Stone finishing	(5.0)	Stevedores	(0)		Railway manufacture	(.93)	Scaffolder	(0)
Railway manufacture	(4.7)	Glaziers	(0)		Aircraft manufacture	(.75)	Bus Inspector	(0)
Mining	(4.2)	Shotblasters	(0)		Refined petroleum manufacture	(.70)	Train driver	(0)
Scrap Metal	(3.8)	Fitters	(0)		Motor vehicles manufacture	(.60)	Quarry worker	(0)

Table 10. Proportion of Employees Paid Less Than £3.60 (Adults 22+)

Year	Total Total	Total Men	Total Women	Full-time Total	Full-time Men	Full-time Women	Part-time Total	Part-time Men	Part-time Women
1997	.11	.05	.16	.06	.04	.08	.26	.25	.26
	(.003)	(.003)	(.004)	(.002)	(.003)	(.004)	(.008)	(.028)	(.008)
1998	.09	.04	.13	.05	.03	.06	.22	.20	.22
	(.002)	(.003)	(.004)	(.002)	(.002)	(.004)	(.007)	(.025)	(.008)
1999	.06	.02	.09	.03	.02	.04	.16	.18	.16
	(.002)	(.002)	(.004)	(.002)	(.002)	(.003)	(.007)	(.025)	(.007)
2000	.05	.02	.07	.02	.02	.04	.11	.10	.11
	(.002)	(.002)	(.003)	(.002)	(.002)	(.003)	(.006)	(.020)	(.006)
Change (1998-1999)	.03	.02	.04	.02	.01	.02	.06	.02	.06

Source: Labour Force Survey, various years. Standard errors in parentheses.

Table 11. Summary statistics of Nominal Hourly Wage Distribution (Adults 22+)

	Females				Males		
	10th p'tile	50th	90th p'tile	Mean	10th p'tile	50th	90th p'tile
1997	3.3	5.6	11.6	6.7 (3.9)	4.2	7.7	15.4
1998	3.4	5.9	12.2	7.0 (4.2)	4.5	8.4	16.5
1999	3.7	6.2	12.7	7.4 (4.1)	4.8	8.6	17.1
2000	3.8	6.6	13.8	8.0 (4.7)	4.9	8.9	18.4

	Within-Gender Ratios			Within-Gender Ratios		
	50/10	90/10	90/50	50/10	90/10	90/50
1997	1.70	3.51	2.07	1.83	3.67	2.00
1998	1.74	3.59	2.07	1.87	3.67	1.96
1999	1.68	3.43	2.05	1.79	3.56	1.99
2000	1.74	3.63	2.09	1.82	3.76	2.07

Gender Ratios

	$10_F^{th}/10_M^{th}$	$50_F^{th}/50_M^{th}$	$90_F^{th}/90_M^{th}$	$10_F^{th}/90_M^{th}$	$10_F^{th}/50_M^{th}$
1997	0.79	0.73	0.75	0.21	0.43
1998	0.75	0.70	0.74	0.21	0.40
1999	0.77	0.72	0.74	0.22	0.43
2000	0.78	0.74	0.75	0.21	0.42

Note. 1. Estimates rounded to nearest tenth of a Pound. 2. Standard errors are in parentheses. 3. Each year estimate refers to the 3rd quarter (Sept. to Nov.) of the year. 4. Source: Labour Force Survey, various years