

Gender (in)equality and the future of work

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EUROPEAN UNION
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EXECUTIVE SUMMARY

This report concerns the future of work in the UK. The world of work is changing rapidly. There is increasing economic competition in an increasingly global market place; development in knowledge based-work; new forms of technology; innovation in forms of work organisation; and renewed interest in enhancing performance and productivity.

Social and demographic changes mean shifts in the composition of the workforce, with changing employment opportunities for women, ethnic minorities, migrants and older workers.

There is likely to be a continuing expansion in the number of jobs, but the nature of the quality of working life and the distribution of these jobs between women and men is subject to change. Projections of the future are based on extrapolation of trends and their interactions. Existing broad projections of the future of work rarely include a comprehensive gender analysis. The EOC commissioned this report to inform its 'Transformation of Work' investigation, in order to investigate the difference that including a gender (in)equality analysis makes to the broad picture of the future of work.

Key themes

Mainstreaming gender

The report mainstreams gender into the analysis of the future of work. Most projections of the future of work ignore the gender dimension. The analysis of gender relations at work tends to be isolated from the mainstream, indeed ghettoised. We need to: break out of the gender ghetto; treat gender as an input into the analysis of the future of work as well as an output; treat gender more broadly than reducing it to motherhood, as important as that is; and consider the gender dimension of productivity as well as justice.

Gender as input

Gendered practices have an impact on the future of work and should be treated as inputs not only outputs of the analysis. The way in which women are treated as workers makes a difference to the size and quality of the supply of labour, and to the level of output and productivity of the economy. There are many significant changes in gender relations which affect the likelihood of women wanting paid employment as well as their skill level. For example, the increasing education of young women relative to young men is increasing the likelihood that women will be available to fill the new jobs in the knowledge economy that require high levels of education. In turn

higher levels of education increase the propensity of women to keep working while they have children, rather than interrupting their labour market participation. We need to factor these gendered changes into the models predicting the future of work, going beyond the current practice of ignoring them.

Gender equality and productivity

Any measure of productivity has implications for gender equality, and is a big issue for economic policy. If women's potential contribution to the employment is held back then productivity suffers. The gender productivity gap contributes to the lesser productivity of the UK economy as compared with some of its competitors. The nature of gender relations in employment affects the productivity and performance of the economy as a whole. Productivity and fairness are not alternates but both are necessary for the realisation of the other. Decreasing gender inequality will increase the productivity of the British economy.

Gendered changes in education, flexible well regulated working practices to combine employment and caring, fairer labour markets that have removed discrimination all have the potential to feed a virtuous circle of increasing employment and increasing quality of employment. This simultaneously delivers decreased gender inequality and increased productivity of the economy.

Projected work trends when gender is taken into account

There is widespread agreement that the number of jobs is going to continue to increase. But there is far less agreement on whether these jobs will be taken by women or men, and whether they will be decent high quality jobs or not.

Job quantity

There will be further growth in the number of jobs, continuing the trends of the last 20 years or so. Wilson et al. (2006) estimate that between 2004 and 2014 the number of people employed in the UK will rise by 1.3 million. This estimate is derived from projections from recent changes in the industrial and occupational structure. However, estimates of how many of these jobs will be taken by women have varied widely. The argument here is that in order to produce a robust estimate of the gender composition of the future workforce we need explicitly to factor in the ongoing changes in gender relations.

Job quality and skill levels

Jobs are likely to increase in skill levels, as the UK moves up the value chain, although the pressures of global competition may act as a brake on this process. The change in skills levels involves gender. Women increasingly have higher levels of

education and greater amounts of work experience, which means that they are increasingly equipped for high level jobs, however, occupational segregation, discriminatory practices and an absence of flexibility may limit the extent to which women's skills are rewarded.

Both men and women are projected to have an increase in the proportion employed in the top set of occupations, and small declines in the middle and lowest band of occupations. The upward shift is projected to be slightly greater for women than for men, in that women have a 5 per cent increase in the higher occupations as compared with 4 per cent for men; and women have a 3 per cent decline in the lowest level occupations as compared with 1 per cent for men. Nevertheless, this is far from equality. Even after the projected changes, women are much more likely than men to be in the lowest level occupations and less likely to be in the highest level occupations. A reduction in the gap between women's and men's representation in the higher occupations from 6 per cent to 5 per cent constitutes only slow change over this ten year period. If the rate of narrowing of the gap each decade stayed at 1 per cent, this would take another 50 years, or until 2064 before there is equality here.

Gender and the knowledge economy

There is more than one definition of the knowledge economy. The choice of definition makes a difference to the extent to which the knowledge economy is seen as a male preserve, or whether it has a gender balance (Walby 2006; 2007). The knowledge economy is expected to grow and to employ an increasing proportion of the workforce. It is likely to be the face of the future.

Women are doing relatively poorly in those sections of the knowledge economy associated with manufacturing, such as high technology manufacturing, information and communication technologies, but doing better in the knowledge intensive services. Policies to promote the knowledge economy that encompass all its aspects including knowledge intensive services will have a positive effect for women, while those that focus narrowly on science and technology will not, unless compensating measures are adopted.

Part-time working

Most part-time jobs in the UK are currently low paid, low skill, poor quality forms of employment. Most part-time working is by women who reduced their hours of work when they had children to care for. Many get stuck, not returning to full-time work when their children grow up (around half of women working part-time do not have dependent children).

The future of the quality and productivity of work depends very much on what happens to part-time jobs, since this is where the poorest jobs are currently concentrated. There are considerable variations in views on the future of part-time work. Wilson et al. (2006) basing their projection on changes in the industrial and occupational structure, suggest an increase. However, that estimate does not take into account changes in the nature of gender relations inside or outside the labour market.

The argument here is that the future of part-time work depends on alternative scenarios for the future of gendered work. The issue hinges on the extent to which women are able to either access high quality part-time work, or move from part-time to full-time work when their children grow up. This depends upon whether women are able to use their increased skills to become integrated into a high skill, high productivity economy or whether they continue to be situated in low paid, segregated occupations of a divided economy.

If the first scenario were to happen then the proportion of low-paid, low skill, part-time jobs in the economy would shrink; in the second there would be little change.

Flexible working hours

There has been an increase in flexible working hours, which is expected to continue. Special working hours arrangements are more common in high technology manufacturing (23-29 per cent) and knowledge intensive services (26 per cent) than in the economy as a whole (21 per cent) (Walby 2006), so may be expected to increase as these sectors of the economy continue to grow disproportionately.

Long hours working

Long hours working is a 'quality of working life' issue that appears to affect primarily men's employment, since it is men who usually work these long hours. However, this practice has implications for the gender balance and division of labour within a household; and it may restrict mothers' opportunities for employment in those fields where long hours are the norm. There has been a steady reduction in long hours working in recent years, however, these hours are still long by EU and international standards. Across the economy as a whole the proportion working over 45 hours a week fell from 26 per cent in 1997 to 21 per cent in 2005. The fall was especially among men, where the proportion working over 45 hours fell from 39 per cent in 1997 to 31 per cent in 2005, while among women there was a small change from 11 per cent to 10 per cent (Labour Market Trends 2005b). There are pressures to reduce these long working hours following the integration of the EU Working Time Directive into UK law, which requires either the elimination of working over 48 hours, or an opt out based on the employees' voluntary agreement to these hours.

Homeworking and teleworking

Homeworking (working at or from home) and teleworking (using a computer and telephone to work away from the employer) are increasing and are expected to further increase. The numbers of homeworkers have increased from 2.3 million in 1997 to 3.1 million in 2005. Most (2.4 million) used a phone and computer, while 2.1 million could not work without this technology. Teleworkers have increased from 4 per cent of the workforce in 1997 to 8 per cent in 2005. Two-thirds (65 per cent) of teleworkers are men. Among men, 11 per cent are teleworkers as compared with 6 per cent among women. Men are more likely (9 per cent) than women (3 per cent) to work using their home as a base. Women are slightly more likely (3 per cent) than men (2 per cent) to work in their own home (Ruiz and Walling 2005).

Homeworking may appear to have advantages in offering for women (and men) a different way of combining employment and childcare. However, there are also notes of caution from those who note the loss of the sociability of the workplace.

Not the end of careers

The career, in the sense of a developing sequence of related employment, is not ending for men or women, although it is less likely to be carried out in a single organisation and may involve some zig-zags in the sense of lateral as well as upward moves.

The proportion of jobs that are explicitly temporary has not been increasing and is not expected to increase, though permanent jobs rarely last for ever. Women and men are equally likely to work in non-permanent jobs.

Traditionally, women have been seen to be less likely to have a career than men, because they may interrupt employment for childcare, with dramatic consequences for their life-time earnings. However, there are changes for at least some groups of women. This is both because women are increasingly having children without interrupting their employment (especially if they have high levels of educational qualifications and have gained access to professional occupations) and also because taking a break from employment for childcare does not necessarily mean the end of the chance of a career. However, the continuation of this trend depends on flexible working practices and the availability of quality affordable childcare.

Self-employment

The amount of self-employment has been stable over the last 15 years and is not expected to change. Self-employment is a disproportionately male practice. In 2005, 18 per cent of male workers were self-employed as compared with 7 per cent of women (Walby 2006).

It is hard to make generalisations about whether self-employment offers better or worse opportunities, not least because it is found in a very diverse set of industries, precluding simple generalisations about the character of the work. It is found in both the old economy, such as construction, as well as the new, such as information work. It offers both more freedom, but also higher risks if all does not go well.

Networks

The development of networked forms of work coordination is small, but is expected to continue to grow and has been much heralded. Networked working relies on horizontal cooperative links between people, rather than a top-down management within an organisation. This 'softer', less formal organisational form, is often perceived to be less hierarchical. However, it is sometimes questioned as to whether it does open up more opportunities for women and minority groups since networks can be subject to informal social closure. Indeed, this is the reason that 'word of mouth' recruiting can be considered to have racially discriminatory consequences.

Intersection of gender and other inequalities

No discussion of gender is adequate outside of a discussion of its intersection with other complex inequalities.

Age

There are increasing numbers of both male and especially female older workers. There is an increasing propensity of older people to be economically active. The future involves further gendered change, as the state pension age for women is raised in stages between 2010 and 2020 from 60 until it reaches that for men, 65. If this encourages women to stay in employment for an additional five years, it will further lead to the changing gender composition of the workforce and increase the supply of labour. An extra five years of employment for women would make a significant difference to the size of the labour supply. If the average woman were to work for just under 50 years, then this would be slightly more than a 10 per cent increase in the size of the female labour force. This is a potential future change that is rarely noted in analyses of the future workforce, despite its scale.

Disability/sickness

Disability and sickness are important factors underlying absence from work and economic inactivity, though patterns are changing. Inactivity among men aged 16-64 rose from 6 per cent in 1973-6 to 16 per cent in 2001-4, and more rapidly among those aged (25-54) rather than among older (55-64) workers. In 2004, 2.7 million people, mainly men, were claiming incapacity benefits, a three-fold increase since 1979 (Moynagh and Worsley 2005). However, in the period 1997-2005, the

percentage of men who were economically inactive who gave long term sickness as the reason for this declined from 43 per cent to 38 per cent. Among women, during this same period a near-constant 20 per cent gave this reason (Labour Market Trends 2005d).

Ethnicity and faith

There is far greater variation in women's than men's employment rates between different ethnic groups. There has been an increase in the employment rates of women in most ethnic groups. This is expected to continue, especially in groups where these are currently low, as levels of education rise.

Class and socio-economic inequalities

The size of the gender pay gap is linked to the size of the overall income spread. If overall inequality were to diminish, this is likely to contribute to a reduction in the gender pay gap, since female workers are disproportionately found among lower income earners.

Migration

Migration will continue to be a two-way flow of people into and out of the UK. This will include people from the rest of the European Union, especially as more countries from the poorer parts of Europe join, as well as beyond. The several purposes of migration, employment, asylum and family formation are also likely to continue. The popular gender image of migrants, a male worker who seeks to bring his non-working dependents to Britain later on, is misplaced, since several of the specific occupations that seek to recruit labour from abroad include those with female majorities, such as nursing and carework. The level and nature of migration depends heavily on politics and policy, so is hard to predict.

What needs to change

Transformation in the structuring of part-time employment

The argument here is for transformation in the structuring of part-time employment. Most part-time jobs are currently low paid, low skill, poor quality forms of employment. The future of this labour market segment is key to the quality of employment in the future. The future of part-time working shows in sharp relief the alternative gendered futures of the economy. The continued existence of the current feminised low skill part-time sector is a drag on the productivity of the economy as a whole.

Currently, many women move from full-time to part-time employment on returning to work after having children. While this is often seen as a short-term solution to the

practicalities of combining employment and caring for children, quite frequently the duration of part-time employment lasts way beyond the presence of dependent children in the household. Many women never return to full-time employment after their children have grown up and left home. Around one half of women working part-time do not have dependent children at home.

A shift towards care as investment

The provision of care has traditionally been seen as an issue of welfare. However, it is simultaneously an issue of productivity. This means that it can be seen as an investment in the economy, not merely a form of consumption or expenditure.

The impact of the provision of publicly funded childcare on the productivity and output of the economy can be estimated quantitatively (Duncan et al. 1995; Graafland 2000). PricewaterhouseCoopers (2003) found that the increase in the productivity and output of the economy as a consequence of providing publicly subsidised childcare could meet the costs of the provision. It is particularly women with least advantages in the labour market who could benefit the most from publicly funded childcare. Women with the least education are the group most likely to take long breaks from employment for childcare.

Increased flexibility and decreased rigidity

Increased flexibility and decreased rigidity would improve the functioning of the labour market, making it simultaneously more competitive and fairer.

Increased flexibility enables the combination of employment and caring would thus be of benefit to individual women and their careers, to the firm for continuity of employment of their workers, and to the economy as a whole in the higher level of output and productivity.

Decreased rigidity follows from the removal of discriminatory practices that limit recruitment and promotion to only half the potential workforce. This would expand the pool of talent from which employers could recruit, and result in reduced occupational segregation, and greater gender equality. It benefits productivity by expanding the pool of talent from which employers can draw, as well as offering gender justice.

Future scenarios

There are two possible futures for work in the UK. These are significantly affected by gender (in)equality.

The first scenario is of a full employment, high productivity, high wage economy. It is made possible by the increase in the productivity of women, especially those currently in part-time, low productivity, low paid work. The drivers include increased education for women, a less discriminatory working environment, and policies to enable the combination of work and caring. Further factors are the predicted expansion of the economy, especially in areas where women are currently employed, and the development of the knowledge economy pulling the UK up the value chain.

The second scenario is of a divided workforce, in which there is a polarisation between jobs that are high productivity and high wage and jobs that are low productivity and low wage. The latter jobs are largely part-time and held by women. The drivers for this scenario are different from the first, in that women have restricted opportunities to access high level employment, especially because of occupational segregation and the nature of part-time working. This would be compounded if the response to global competitive pressures were to be that of cost cutting, rather than a drive to go up the value chain via policies that share the goals of both justice and productivity.

Conclusions and implications

The size of the workforce needs to increase if the economy is to continue to grow. Women could take up a large proportion of these new jobs if the circumstances were right. Whether or not this occurs depends on which of the two scenarios for the future of work is developed.

Gender is a key driver of changes in work. But its impact is too often neglected in studies of the future of work. Gender is an input, not merely output of change.

The development of gender equality could contribute to the productivity of the British economy by increasing the quantity and quality of labour available to employers. There are several gendered drivers of this process, including: increases in women's education; decreasing interruptions to women's employment experience by providing childcare and developing flexible working practices; and increasing the fairness of labour markets by removing discriminatory practices and labour market rigidities such as occupational segregation.

The importance of gender (in)equality for the future of work matters to everyone. It matters to women and their families in the development of decent work; it matters to employers so as to ensure the productivity of their firms; and it matters to government in its concern for the economy as a whole and the well-being of its

population. Taking gender (in)equality at work seriously is essential to the values of liberty, responsibility and fairness.

Policies to address gender (in)equality at work are simultaneously policies that would increase the future productivity of the British economy.

1 INTRODUCTION

1.1 Context

This report concerns the future of work in the United Kingdom (UK). The world of work is changing rapidly. There is increasing economic competition in an increasingly global market place; development in knowledge based-work; new forms of technology; innovation in forms of work organisation; and renewed interest in enhancing performance and productivity.

Social and demographic changes mean shifts in the composition of the workforce, with changing employment opportunities for women, ethnic minorities, migrants and older workers.

This may mean enhanced employment prospects for all, including those previously marginalised. But this is not certain. Obstacles to full participation and to equality in employment may endure. This is the challenge facing Government, policy makers and employers.

1.2 Gender and the future of work

It is important to know what is likely to happen, so that employers and policy makers can plan accordingly. The aim is to provide a picture of the quantity, quality, form and location of jobs in the future.

There is likely to be a continuing expansion in the number of jobs, but the nature of the quality of working life and the distribution of these jobs between women and men is subject to change. Projections of the future are based on extrapolation of trends and their interactions. Existing broad projections of the future of work rarely include a comprehensive gender analysis. This report concerns the difference that including a gender (in)equality analysis makes to the broad picture of the future of work.

The questions addressed in this report are:

1. What changes in work are predicted in the next decade and beyond?
2. How do writers analyse gender and predict changes for women and men in relation to future work trends?
3. In what ways will women and men benefit differently from predicted work-related opportunities and developments?
4. What does the future of work look like if gender is included as a driver of change?
5. What needs to change in order to improve productivity and gender equality?

1.3 Productivity and gender (in)equality

Productivity is a key issue for economic policy. Differences between women's and men's contributions to the economy through their employment have implications for the level and growth of the productivity and output of the economy.

Increasing productivity is one of the key goals of HM Treasury (2006a). The 2006 Budget declares 'Productivity growth, alongside stable and high levels of employment, is central to long term economic performance. . . . Productivity growth underpins strong economic performance and sustained increases in living standards. Raising productivity growth is critical to meeting the opportunities and challenges of globalisation' (HM Treasury 2006a: 1.16; 3). Productivity is a measure of the efficiency of the economy, being a ratio of the output (goods and services) of the economy and the input (labour especially) that is used. Labour productivity is the central productivity definition used by HM Government, being usually measured as output per worker, though sometimes per hour worked (HM Treasury 2006b).

Any measure of productivity has implications for gender equality, and is a big issue for economic policy. If women's potential contribution to the employment is held back then productivity suffers. The gender productivity gap contributes to the lesser productivity of the UK economy as compared with some of its competitors. The nature of gender relations in employment affects the productivity and performance of the economy as a whole. This gender inequality may be a result of discrimination, lack of training, labour market rigidity, or an inability to combine employment and caring. Gender inequality affects the economy as well as the economy affecting gender inequality. This is a two-way, not one-way, process because the availability and skill level of women's labour makes a difference to the achievement of economic growth.

Productivity can be understood at the level of the individual, firm, and the economy as a whole.

Individual level

Productivity at an individual level may be understood especially in relation to the skills that an individual possesses and is able to contribute to the better performance of their work. Skills may be acquired through education, on-the-job training and employment experience accumulated over the years. The totality of skills and experience is sometimes called 'human capital', distinguishing it from 'fixed capital'. HM Treasury (2006b: 4.73) considers that the level of basic skills the UK workforce compares poorly with some other countries. The gender gap in human capital contributes to the productivity gap between the UK and other countries (Walby and Olsen 2002). While the educational disadvantage of girls relative to boys has now

been narrowed, this addresses only one part of the way in which human capital is acquired. Difficulties in accessing training, for example by those working part-time, and less employment experience, as a result of interruptions to employment in the absence of adequate childcare, can lead to reduced potential for productivity at an individual level. Highly educated women are less likely than highly educated men to be in high quality well paid jobs (Jones and Dickerson 2007). Women returning to the labour market after a period of intensive child care sometimes take jobs that are beneath their skill level, just in order to find one that has the right hours and sufficiently flexible arrangements (Blackwell 2001).

Firm level

Productivity at the firm level is constituted not only by the factors that individual workers bring to a company but also the fixed capital of machinery and technology, as well as the ingenuity of the management in coordinating all this successfully. The productivity of the firm is affected by the extent to which employers and managers make the best and most effective use of the human capital, the education, experience and talents, of their workers. A prejudiced approach may well lead to the firm under-performing if it neglects the potential and capacities of groups of workers. A firm not draw on the full pool of talent that is available if it neglects women as workers. Discriminatory practices and the rigidity of sex segregation of jobs reduce the productivity of the firm. This is the agenda of the 'business case' for equal opportunities.

Whole economy level

Productivity at the level of the whole economy is different again. Rather than the balance sheet of an individual firm, the focus is the balance sheet of the economy as a whole, including the Exchequer, which pays out funds to those in need. When the focus is on the whole economy rather than specific businesses a range of additional processes affecting productivity comes into view. These include the cost of the maintenance of living standards by the welfare state of those who do have not sufficient resources from employment to care for themselves. Thus for instance, the pension credits paid to elderly women who worked part time in poorly paid employment and did not build up adequate funds for their own pensions are a cost to the economy as a whole, but not to an individual business. Their support by the state is a cost to the economy as a whole. The ability of a business to pay discriminatory low wages may be a drain on the economy as a whole. Thus a factor affecting the productivity of the economy as a whole is that of whether the employment of women provides sufficient funds for support over their life-time, not only during periods of employment itself.

1.4 Studies of work trends

Predicting the future of work has been the purpose of many studies. These include holistic accounts extrapolating the future from specific new developments, such as Handy (1990) and Rifkin (1995), detailed quantitative estimates of future of employment based on past trends (Wilson, Homenidou and Dickerson 2004, 2006) and an entire programme of research on the future of work funded by the Economic and Social Research Council (ESRC 2005; Moynagh and Worsley 2005; Nolan and Woods 2003). While this type of analysis is not an exact science, nonetheless, it can generate reasonable estimates.

While all of these studies have contributed much to our understanding of the dynamics of change in employment, they are each less than fully satisfactory in how they engage with the implications of changing gender relations. We have yet to see the full integration of an analysis of gender relations into projections as to the future of work. Limitations of current studies include:

The Gender Ghetto

Gender is treated as a separate topic in a chapter or section of its own and its implications for other issues not considered. This practice is very common and not confined to the field of the future of work; see for example Castells (1996, 1997, 1998) on globalisation, where gender is also confined one chapter. An example is Moynagh and Worsley (2005) in their summary of the ESRC Future of Work Programme. While the ESRC programme contains a wide variety of projects on gender relations, the report on its findings by Moynagh and Worsley confines gender to one chapter.

Gender as Motherhood

The analysis of gender relations is sometimes treated narrowly as if women were only mothers and the only dimension of gender relations that mattered was childrearing. Discussions of gender in employment can then be limited to 'work-life balance' (Handy 1990). While the gender projects in the ESRC Future of Work programme include not only work-life balance, but also a wider range of issues, for example, Dale on minority ethnic women; Booth on flexible employment; Charles on job insecurity; Bruegel on the gender composition of unemployment and employer conceptions of skill; Bradley on minority ethnic women and trade unions (ESRC 2005), summary accounts (e.g. Moynagh and Worsley 2005) focus disproportionately on the 'problem' of motherhood as the main gendered issue. So while detailed studies can situate motherhood in a broader context, some summaries are reductionist.

Gender as a Justice issue

The analysis of gender is treated as one of fairness, justice and inequality, but not one of productivity. An example is Moynagh and Worsley (2005), who name their single chapter on gender 'better opportunities for women?', but this is a widespread practice in the literature on gender and work and not confined to these writers. Such an approach leaves out of focus the contribution that gender (in)equality might make to the productivity of the firm and the economy as a whole.

Gender as Outcome not Input

Gender relations are treated as an outcome of other processes, rather than as contributing to the shaping of the employment system. An example is Wilson, Homenidou and Dickerson (2004) in which future levels of employment and its gender composition of employment are predicted by a meticulous process of extrapolation from complex trends in the economy as a whole, and in the size of industrial sectors and occupations. However, changes in gender relations are not considered a possible input into these projections, despite changes in gendered processes, for example changes in gendered human capital as a result of changing gendered educational practices. They could be.

1.5 The way forward for analysis

The argument here is for:

Gender Mainstreaming

Gender analysis should be mainstreamed, or integrated, into all dimensions of the future of work and not be confined to the gender ghetto.

Gender is More than Motherhood

Gender relations are not restricted to women as mothers, but extend across all dimensions of work.

Gender concerns both Productivity and Justice simultaneously

Gender is an issue of equality, but it is also one of the productivity of both firms and the whole economy. While gender inequality is an issue of justice and fairness, it is, at the same time, relevant to the productivity of the economy.

Gender as Input as well as Output.

Gendered practices have an impact on the future of work and should be treated as inputs not only outputs of the analysis. The way in which women are treated as workers makes a difference to the size and quality of the supply of labour, and to the level of output and productivity of the economy. There are many significant changes in gender relations which affect the likelihood of women wanting paid employment as

well as their skill level. For example, the increasing education of young women relative to young men is increasing the likelihood that women will be available to fill the new jobs in the knowledge economy that require high levels of education. In turn higher levels of education increase the propensity of women to keep working while they have children, rather than interrupting their labour market participation. We need to factor these gendered changes into the models predicting the future of work, going beyond the current practice of ignoring them.

1.6 Projected changes?

There are several projected work trends in the UK over the next decade where there is widespread consensus:

- An increase in the number of jobs;
- A shift towards services and away from agriculture and manufacturing;
- The development of a knowledge-based economy;
- An increase in high skilled jobs in management and the professions;
- Increase in some low skilled jobs: personal care work;
- Decrease in other low skilled jobs: elementary (unskilled manual) jobs.

There are other projected work trends where there is little consensus:

- The gender composition of the workforce and of its occupations and industries;
- The quality of working life and organisational forms;
- Whether more flexible patterns of working time will involve long unsocial hours, or be supportive of work-life balance;
- Whether the changing relationship with the employer will shift towards self-employment or working from home for an employer.

1.7 Alternative futures

The current trends in gender relations in employment offer progress towards a more productive UK economy. But the continuation of change in this direction is not assured. There are alternative futures, which depend at least partly on policy decisions.

1. One possible future is of a full employment economy, with a growth in not only the quantity, but also the quality of jobs. In this, women are increasingly integrated into employment, moving away from the margins of the economy where they are currently disproportionately found in just a few occupations and low paid low skill part-time work, to a wider distribution through the full range of forms of employment. This scenario is based on a shift towards a knowledge based economy that leads to higher level, more skilled, more interesting, more flexible jobs, co-ordinated through networks and 'flatter' forms of organisations than traditional hierarchies. However, there is a challenge to meet the need for care.

2. In a second possible future, most women remain at the margins of employment, thereby maintaining a large gender gap in pay and productivity, with consequences for the productivity of the economy as a whole and the UK's position in the increasingly competitive global order. This scenario assumes the increased competitive pressures of a world globalising as a result of new information and communication technologies, leading to the degradation of work, with longer and more unsocial hours working and fewer employment protections. It is an outcome if there are no adequate policy interventions.

1.8 Report structure

This report has four further sections. The first addresses the future of job quantity, job quality and skills in a gender segregated industries and occupations. The second addresses the implications of the intersection of gender with other social divisions. The third explores the implications of new forms of work organisation. The fourth and concluding section explores the implications of the findings for major stakeholders.

2 JOB QUANTITY AND SKILLS

2.1 Introduction

There is widespread agreement that the number of jobs is going to continue to increase. But there is far less agreement on whether these jobs will be taken by women or men, and whether they will be decent high quality jobs or not.

2.2 Increase in the number of jobs

There will be further growth in the number of jobs, continuing the trends of the last 20 years or so (Moynagh and Worsley 2005; White et al. 2004; Wilson et al. 2006). Wilson et al. (2006) estimate that between 2004 and 2014 the number of people employed in the UK will rise by 1.3 million.

Moynagh and Worsley (2005) attribute this growth in jobs to global economic growth and to the development of the knowledge economy, especially knowledge intensive services and interpersonal work. Rather than seeing globalisation as undermining UK employment, they see it as an opportunity for further growth with the UK well-placed to take advantage of this growth, especially in business services, health and education, high-tech manufacturing and royalties and licence payments. They expect that there will be a larger increase in the number of women in employment than in men, but are not specific about the extent of this. They question whether women might stay in part-time jobs to the same extent.

Wilson, Homenidou and Dickerson (2006) consider the main drivers of change in employment to include: technological change, productivity growth, international competition, globalisation, specialisation and sub-contracting, economic growth and increase in real incomes, regulatory and legislative changes and changing patterns of expenditure. They provide detailed estimates of the amount and location of job growth based on projections on the size of the economy overall, the relative size of industries and of their component occupations. They use a multisectoral macroeconomic model of the economy to generate estimates of the likely changes in employment in the main industrial sectors. The projections of the nature of the consequent employment change are then further based on extrapolations of 25 sub-major occupational groups. The gender composition of each of these occupational groups and the balance between full-time and part-time working is assumed to remain largely constant.

2.3 Growth of services, decline of agriculture and manufacturing

Employment will continue to shift away from agriculture and manufacturing towards services, continuing the trends of the last half century or more. Wilson et al., (2006:

51) estimate the following changes in the proportion of employment in major industrial sectors between 2004 and 2014:

- *Primary and utilities* (e.g. agriculture and mining) will decline from 2.0 per cent to 1.6 per cent of total employment;
- *Manufacturing* will decline from 11.8 per cent to 10.1 per cent;
- *Construction* will decline slightly from 6.9 per cent to 6.4 per cent;
- *Distribution and transport* will increase slightly from 29.3 per cent to 29.7 per cent;
- *Business and other services* (e.g. financial services) will increase from 26.0 per cent to 27.9 per cent;
- *Non-marketised services* (e.g. education and health) will increase slightly from 23.9 per cent to 24.3 per cent.

2.4 Growth in high skill and low skill occupations

High skill occupations (managers, professionals, associate professionals) are projected to grow; overall low skill occupations will stay about the same, though some (personal service and sales) will grow and others (operatives and elementary occupations) will decline; jobs in the middle (secretarial and skilled manual) will decline. Overall, there will be an average upskilling of the jobs in the economy, but with considerable unevenness.

Wilson et al. (2006) estimate the following changes in the number of jobs in major groups of occupations between 2004 and 2014:

- *Managers and senior officials*: increase of 617,000 jobs.
- *Professional occupations*: increase of 697,000
- *Associate professionals and technical occupations*: increase of 238,000
- *Administrative, clerical and secretarial occupations*: decrease of 164,000
- *Skilled trades occupations*: decrease of 150,000
- *Personal service occupations*: increase of 424,000
- *Sales and customer service occupations*: increase of 375,000
- *Machine and transport operatives*: decrease of 118,000
- *Elementary occupations*: decrease of 675,000

2.5 Gender and job increases

How many of these jobs will be taken by women? The Warwick team (Wilson et al.) has produced, in consecutive reports, radically different estimates of the extent to which women or men are in these new jobs. Wilson, Homenidou and Dickerson (2004) estimate that between 2002 and 2012 the number of people employed in the UK will rise by 1,322,000, made up of just over a million women and just under 300,000 men and leading to a change in the gender composition of the workforce as

a whole from 47.0 per cent in 2002 to 48.4 per cent in 2012. However, Wilson Homenidou and Dickerson (2006) estimate that while between 2004 and 2014 the number of people employed in the UK will still rise by 1,300,000, the gender composition is quite different. In the more recent report they estimate that this increase is made up of roughly equal numbers of men and women: 635,000 men and 665,000 women. This would entail a very minor change in the gender composition of the workforce as a whole from 46.5 per cent in 2004 to 46.7 per cent in 2014. Thus between the two reports they revise downward their estimate of the increase in the number of employed women from 1,000,000 to 665,000, and revise upwards that of men from 300,000 to 635,000. This instability in the estimate suggests that, in relation to gender, their underlying analytic procedure is in need of reconsideration.

The argument here is that we need explicitly to factor in the ongoing changes in gender relations in order to produce a robust estimate of the gender composition of the future workforce. This involves estimating the effects of women's increasing education, development of childcare, and the decreasing propensity of mothers to stay at home on the supply of female labour and thus the supply of labour as a whole.

2.6 Will the jobs for women and men be in the same industries?

Wilson et al., (2006) identify the industrial sectors in which they expect employment changes take place (as below). Embedded within these sectors are occupations, so it is possible that women might be in 'traditional' occupations (such as secretarial work) in 'non-traditional' industrial sectors (such as construction).

Primary and utilities (e.g. agriculture and mining) will decline as a percentage of the total workforce (2.0 per cent to 1.6 per cent), with a slight decrease in the proportion of women (26.5 per cent to 25.6 per cent);

Manufacturing will decline, from 11.8 per cent to 10.1 per cent of the workforce, with a decline in the proportion of women, from 29.7 per cent to 23.5 per cent;

Construction will slightly decline from 6.9 per cent of the workforce to 6.4 per cent, but the proportion of women will rise from 9.2 per cent to 10.7 per cent;

Distribution and transport will be near stable at 29.3 per cent then 29.7 per cent of the workforce, while the proportion of women workers will decrease slightly from 46.2 per cent to 45.6 per cent;

Business and other services (e.g. financial services) will increase from 26.0 per cent of the workforce to 27.9 per cent, but the proportion of women will decline from 45.7 per cent to 43.7 per cent;

Non-marketised services (e.g. education and health) will increase slightly from 23.9 per cent to 24.3 per cent of the workforce, and the proportion of women will increase from 67.2 per cent to 70.0 per cent.

2.7 Will the jobs for women and men be at the same occupational level?

Wilson et al. (2006b) provide estimates of the changing gender composition of occupations. The table below shows these estimates recalculated into three bands of occupations: managers, professionals and technicians; secretarial and skilled trades; personal service, sales, operatives and elementary occupations. Both men and women are projected to have an increase in the proportion employed in the top set of occupations, and small declines in the middle and lowest band of occupations. The upward shift is projected to be slightly greater for women than for men, in that women have a 5 per cent increase in the higher occupations as compared with 4 per cent for men; and women have a 3 per cent decline in the lowest level occupations as compared with 1 per cent for men. Nevertheless, this is far from equality. Even after the projected changes, women are much more likely than men to be in the lowest level occupations and less likely to be in the highest level occupations. A reduction in the gap between women's and men's representation in the higher occupations from 6 per cent to 5 per cent constitutes only slow change over this ten year period. If the rate of narrowing of the gap each decade stayed at 1 per cent, this would take another 50 years, or until 2064 before there is equality here.

Table 1 Estimated employment by occupation and gender 2004-2014

	2004	2014
	Per cent	Per cent
Male		
Managers, professionals, technicians	44	48
Secretarial and skilled trades	24	23
Personal Service, Sales, operatives, elementary	30	29
All occupations	100	100
Female	2004	2014
Managers, professionals, technicians	38	43
Secretarial and skilled trades	23	20
Personal Service, Sales, operatives, elementary	40	37
All occupations	100	100

Source: Table calculated from data in Wilson et al. (2006b).

Notes: Figures may not sum to 100 due to rounding.

It is possible that these estimates may be either too pessimistic or too optimistic. If gendered changes, such as women's increasing education and increasing childcare provision, were both sustained and explicitly included in the model, the rate of change might speed up. However, these changes depend upon the development of a

knowledge economy with high level jobs, which may or may not be successfully sustained.

2.8 The development of a knowledge based economy

The knowledge economy is that section or dimension of the economy that especially uses knowledge or information as a factor in production. Non-knowledge economy work includes not only manual work, but also routine clerical and administrative work and personal service work.

Gender and the knowledge economy

There is more than one definition of the knowledge economy. The choice of definition makes a difference to the extent to which the knowledge economy is seen as a male preserve, or whether it has a gender balance (Walby 2006; 2007). The following statistics are drawn from an analysis of the Labour Force Survey, using definitions provided by the EU (high technology manufacturing, knowledge intensive services), OECD (high technology manufacturing) and UN (information) (Walby 2006; 2007).

- High technology manufacturing. The workforce is predominantly (68-71 per cent) male, although there are a few more women (29-32 per cent) than in manufacturing as a whole (26 per cent). Despite its importance, this sector involves only a tiny (1-2 per cent) proportion of the total workforce.
- Information. These are industries concerned with the processing of information, computer services, software, data processing, publishing, telecommunications, recording and broadcasting. The workforce is nearly two-thirds (64 per cent) male. This is also a small (4 per cent) proportion of the total workforce.
- Knowledge intensive services. This includes services that employ people with high levels of education such as telecommunications, financial services, education and health. The workforce has a higher proportion of women than men (39 per cent male; 61 per cent female). This sector is much larger than the others and involves nearly half (42 per cent) of the workforce.

The knowledge economy is expected to grow and to employ an increasing proportion of the workforce. It is likely to be the face of the future.

Women are doing relatively poorly in those sections of the knowledge economy associated with manufacturing, such as high technology manufacturing, information and information and communication technologies, but doing better in the knowledge intensive services. Policies to promote the knowledge economy that encompass all its aspects including knowledge intensive services will have a positive effect for women, while those that focus narrowly on science and technology will not, unless compensating measures are adopted.

2.9 Conclusions

The number of jobs in the economy is likely to keep growing if the knowledge economy were to fulfil its promise. The conventional projection is that these will be taken equally by men and women. My prediction is that women will fill the majority of the new jobs. This prediction rests on the assumption that changes in gender relations are driving an increase in the proportion of women seeking paid employment, not least the increased education of women and increased provision of childcare. However, these developments are sensitive to changes in both the global environment and the policy regime.

3 THE ORGANISATION OF WORK

3.1 Introduction

The organisation of work and the nature of the workplace are changing and will continue to change. There is continuing growth in new and non-standard forms of employment. These include: increased flexibility of working hours/time, (e.g. special hours working arrangements, over-time, flexitime, compressed hours, job share annualised hours term-time only); use of sub-contracted workers (e.g. freelance workers, outsourcing); and flexible locations (e.g. teleworking, homeworking, satellites, mobile working). They involve new configurations of the relationship between workers and employers, and new forms of working time practices. These practices often provide simultaneously greater freedom (e.g. for self-determined work-life balance) and greater risks (e.g. less frequent employers' pension and sick pay schemes) for workers; the balance between the two depending on the circumstances. In terms of the quality of working life, on average, practices that improve quality appear to be increasing more than those that do not, but the balance of the changes is uneven between different types of work.

3.2 Organisational structures and careers

Self-employment

The level of self-employment in the economy was 13 per cent in 2005 (Labour Market Trends 2005e) and is not projected to change significantly. This percentage has been fairly stable over the last 15 years, being 12 per cent in 1990. During the 1970s the level was lower, at 7 per cent, rising to the current level during the 1980s (OECD 2000).

Self-employment is a disproportionately male practice. In 2005, 18 per cent of male workers were self-employed as compared with 7 per cent of women (Walby 2006).

It is hard to make generalisations about whether self-employment offers better or worse opportunities, not least because it is found in a very diverse set of industries, precluding simple generalisations about the character of the work. It is found in both the old economy, such as construction, as well as the new, such as information work. It offers both more freedom, but also higher risks if all does not go well.

Networks

The development of networks as an alternative way to organise work has been much heralded. Networks entail informal horizontal forms of coordination rather than formal hierarchies within specific organisations. Networked forms of organisation currently

involve quite a small proportion of the workforce. However, they may well increase, especially with the increase in the information sector where it is most common.

This 'softer', less formal organisational form, is often perceived to be less hierarchical. However, questions have been raised as to whether it does open up more opportunities for women and minority groups (Rutherford 1999). Networks can be subject to greater informal closure than more bureaucratic organisational forms. This may be because of the greater significance of cultural stereotypes and of 'who you know' in informal rather than formal settings. Important decisions may be made by consulting those you know rather than all who might be relevant. For example, 'word of mouth' recruiting is widely regarded to have discriminatory consequences because it draws on informal social networks that tend to be constituted by similar types of people (e.g. all male, or all white) thus tending to reduce the diversity of people under consideration.

3.3 Not the end of careers

The career, in the sense of a developing sequence of related employment is not ending, although it is less likely to be carried out in a single organisation and may involve some zig-zags in the sense of lateral as well as upward moves.

Traditionally, women have been seen to be less likely to have a career than men, because they may interrupt employment for childcare, with dramatic consequences for their lifetime earnings. However, there are changes for at least some groups of women. This is both because women are increasingly having children without interrupting their employment (especially if they have high levels of educational qualifications and have gained access to professional occupations) and also because taking a break from employment for childcare does not necessarily mean the end of the chance of a career. However, the continuation of this trend depends on flexible working practices and the availability of quality affordable childcare.

Jobs in the UK are usually permanent, and the proportion of such jobs is not changing significantly. There is little temporary working in the UK and it is not increasing. However, permanent jobs rarely last forever. In 1983 6 per cent of the workforce held temporary jobs (OECD 1993), the same proportion (6 per cent) as in 2005 (Labour Market Trends 2005a). In the 1990s there had been a slight increase to 7-8 per cent (OECD 2002), before resuming the level found in the 1980s. Equal proportions of women and men held temporary jobs in 2005, as compared with 7 per cent of men and 9 per cent of women in 1997 (Labour Market Trends 2005a), thereby closing the small gender gap, which had been to women's disadvantage.

3.4 Organising when and how we work

Flexible working has the potential to affect many issues concerning work/life balance, with significant implications for gender equality. These may have advantages for both employee and employer, if the right practices can be developed. There are several forms of flexibility, some of which provide more opportunities than others.

Flexibility

There has been an increase in flexible working hours, which is expected to continue. Surveys of employers show both an increase in various forms of flexibility over recent years and plans to increase this, especially in flexible hours working (Smeaton et al. 2006). Special working hours arrangements are more common in high technology manufacturing (23-29 per cent) and knowledge intensive services (26 per cent) than in the economy as a whole (21 per cent) (Walby 2006), so may be expected to increase as these sectors of the economy continue to grow disproportionately.

There are various forms of special hours working arrangements, including flexitime, annualised hours contracts, term time working, job sharing, nine day fortnight, four and a half day week, and zero hours contracts. More flexitime working is found in high technology manufacturing (15-19 per cent) and information (13 per cent), than in the economy as a whole (11 per cent), though it is at the same level as in knowledge intensive services (11 per cent). Special hours working is practised by more women than men (16 per cent men; 27 per cent women), and the proportions vary between the different forms. While flexitime is practised by both men and women (9 per cent men and 13 per cent women), term time working is found almost exclusively among women (1 per cent men; 8 per cent women). Among men, high technology manufacturing is distinctive in its opportunities for flexitime; being found among 17-19 per cent of male workers in this sector, as compared with 9 per cent among men in the economy as a whole.

Part-time working

Part-time work simultaneously provides flexible opportunities for combining employment and caring, while typically only offering conditions of low pay, low skill, and poor quality forms of employment. Nearly half (43 per cent) of employed women worked part-time in 2005 (Labour Market Trends 2005a), so it is of great significance to both women and to the economy as a whole.

There are contrary predictions as to the future of part-time work. Moynagh and Worsley question whether this high level of part-time working among women will continue, while Wilson et al., (2006) predict an increase in part-time working among women as well as among men.

In the period 1997-2005, the proportion of part-time employment in the economy has crept upwards by 1 per cent from 25 per cent to 26 per cent. This is made up of contrary gender trends. Among women, the percentage working part-time has undergone a very slight decline from 45 per cent to 43 per cent, as the rate of increase in full-time jobs among women was greater than the increase in part-time working. Among men, the percentage working part-time increased slightly from 9 per cent to 11 per cent (often associated with being a student). Figures calculated from Labour Market Trends (2005a).

There are several possibilities for the future of part-time employment:

- No change.
- An increase in the range of jobs in which part time work can be performed so as to increase the number of high quality part-time jobs. In particular this means staying with the same employer in the same job during the transition from full-time to part-time working. Those who stay with the same employer in the same job while they have children are more likely to return to full-time employment when their children grow up. This is dependent on effective implementation of workplace policies to allow this kind of flexibility.
- A decrease in the part-time sector. Although there are various components of the part-time sector, nonetheless it is disproportionately low skill, low paid and low productivity. There are two reasons why this sector might be expected to shrink. First, if the UK economy successfully goes 'up the skill chain', then the sector will diminish. Second, as women increase their human capital (by higher levels of education, more quality employment experience), they will seek better forms of employment than those typically available part-time.

The future of part-time work depends on which of two scenarios for employment is to be the future. If there is a divided workforce with polarisation between jobs that are high productivity and high wage and jobs that are low productivity and low wage then there is little likelihood for change for part-time working. If instead there is a full employment, high productivity, high wage scenario, then there is the likelihood that the proportion of low-paid, low skill, part-time jobs in the economy will shrink. This would be for the following reasons:

- Increasing human capital of women with higher levels of education and employment experience.
- Increasing availability of part-time working in high level jobs reduces the number of women available to take poor quality part-time jobs. Women will exercise their choices.
- Disincentive to create part-time jobs just to avoid paying fringe benefits, as a result of legislation making it illegal to treat part-timers worse than full-timers (1999 Part-Time Workers Directive). This removes the incentive for some

employers to divide up work into part-time packages just to cut costs. This reduces some of the incentive on some employers to create part-time rather than full-time jobs.

- Lower rates of part-time working in the knowledge economy than in the economy as a whole. The knowledge sector of the economy is growing faster than the rest of the economy, so this is likely to mean proportionately fewer part-time jobs.
- The national minimum wage removes the economic basis of some of the poorly paid jobs, many of which are part-time. The minimum wage is key to the working tax credit system, since if it is too low than government subsidises poorly performing employers.
- Comparative experience from other countries, including US and Sweden, is of a trajectory in which part-time employment rises as female employment rises, but that after full female employment is reached (not far from the same employment rate as men), then the rate of part-time working first plateaus and then falls. In the UK, full female employment is nearly reached and the rate of female part-time employment has already plateaued. In the short to medium term we should expect a fall in the female rate of part-time working and a shift towards a higher proportion of women working full-time.

Long hours working

Long hours working is a 'quality of working life' issue that appears to affect primarily men's employment, since it is men who usually work these long hours. However, this practice has implications for the gender balance and division of labour within a household; and it may restrict mothers' opportunities for employment in those fields where long hours are the norm. There has been a steady reduction in long hours working in recent years, however, these hours are still long by EU and international standards. Across the economy as a whole the proportion working over 45 hours a week fell from 26 per cent in 1997 to 21 per cent in 2005. The fall was especially among men, where the proportion working over 45 hours fell from 39 per cent in 1997 to 31 per cent in 2005, while among women there was a small change from 11 per cent to 10 per cent (Labour Market Trends 2005b).

There are pressures to reduce these long working hours following the integration of the EU Working Time Directive into UK law, which requires either the elimination of working over 48 hours, or an opt out based on the employees' voluntary agreement to these hours. In a survey of 2,000 employers in 2002, White et al. (2004: 153) found that 5 per cent of employers had reduced hours, 14 per cent had used the opt out, 4 per cent had reduced hours for some and used opt outs for others, while 77 per cent had experienced no change.

While there are regulatory pressures to reduce long hours working, there is a tendency for more over-time to be worked in the knowledge sectors of the economy than in the economy as a whole (Walby 2006).

There are contrary pressures for change which make it hard to predict the future here: on the one hand, the development and implementation of EU regulations tends to reduce some instances of long working hours; on the other hand, overtime working is more common in the knowledge sectors of the economy than in the economy as a whole.

Homeworking and teleworking

Homeworking (working at or from home) and teleworking (using a computer and telephone to work away from the employer) are increasing and are expected to further increase. The numbers of homeworkers have increased from 2.3 million in 1997 to 3.1 million in 2005. Most (2.4 million) used a phone and computer, while 2.1 million could not work without this technology. Teleworkers have increased from 4 per cent of the workforce in 1997 to 8 per cent in 2005. Teleworkers are now the majority (77 per cent) of homeworkers. Most (62 per cent) of teleworkers are self-employed; indeed 41 per cent of self-employed people are teleworkers (Ruiz and Walling 2005).

Two-thirds (65 per cent) of teleworkers are men. Among men, 11 per cent are teleworkers as compared with 6 per cent among women. Men are more likely (9 per cent) than women (3 per cent) to work using their home as a base. Women are slightly more likely (3 per cent) than men (2 per cent) to work in their own home (Ruiz and Walling 2005).

Homeworking may appear to have advantages in offering for women (and men) a different way of combining employment and childcare. However, there are also notes of caution. While on average those working from home are better paid than those who do not, manual workers doing so from home are paid considerably less than manual workers who do not (Felstead, Jewson, Phizacklea and Walters 2001). There is also the loss of the sociability of the workplace (Felstead, Jewson and Walters 2005).

3.5 Conclusions

There are significant changes occurring in the organisation of work, with implications for careers and when and where people work. Many of these changes can be linked to positive increases in flexibility, which is preferred by both workers and employers, and would facilitate further developments in work-life balance, however, some are potentially more mixed in their effects.

4 DEMOGRAPHIC AND SOCIAL CHANGE

4.1 Introduction

Long-run demographic and socio-economic changes have implications for the future of work. The age of workers is increasing, beginning to reverse decades of ever-earlier retirement, as a consequence of better health and longevity and pressure on pension schemes. The proportion of women in the workforce is changing as a consequent of widespread changes in gender relations, including better education, better fertility control, more effective representation in decision making bodies, and cultural practices. Changes in cultural and gendered ideals as to the best way to balance work and life, especially employment and care, have further implications for the future of work.

4.2 The intersection of gender with other forms of complex inequalities

No discussion of gender is adequate without a discussion of the intersection of gender with other forms of complex inequalities. These include: age, disability/sickness, class, ethnicity, religion and domestic relations. All of these are affected by mobilities, such as migration, or the lack of it, such as living in regions with varying employment and educational opportunities.

Sometimes discussions of multiple social divisions in the future of work are framed by the question of 'who will do this work' (Moynagh and Worsley 2005). This asks which of several groups that currently have a marginalised relationship to employment is likely to take up the new jobs as the economy develops. More appropriate here, for the discussion of the gendered future of work, is the question of the intersection of these complex inequalities with gender relations in future employment.

4.3 Older people and retirement

The age of retirement is changing. There will be increasing numbers of older workers and both male and female workers will become on average older. Since the mid 1990s the employment rates of both women and men who are aged over 50 and less than state pension age (65 for men, 60 for women) have been rising steadily though slowly. While the average age of retirement for men fell steadily between 1950 and 1995, this trend has now been reversed. The age of retirement for women fluctuated during this period, before also starting to rise. In 1975 nearly 90 per cent of men aged 50-65 were employed, falling to just over 60 per cent in 1993, while among women just under 60 per cent aged 50-59 were in employment throughout the period 1975 to 1993 (Moynagh and Worsley 2005).

Since the mid-1990s there has been an increasing propensity for older people to be economically active. The percentage of workers aged between 50 and retirement (59

for women, 65 for men) that are economically active is increasing, rising from 69 per cent in 1997 to 72 per cent in 2005. The increase is greater among women than among men in this period, for women rising from 64 per cent to 69 per cent, as compared with 72 per cent to 75 per cent among men (Labour Market Trends 2005 c). The gender gap in activity rates among older workers is narrowing.

The future involves further gendered change, as the state pension age for women is raised in stages between 2010 and 2020 from 60 until it reaches that for men, 65. If this encourages women to stay in employment for an additional five years, it will further lead to the changing gender composition of the workforce and increase the supply of labour. An extra five years of employment for women would make a significant difference to the size of the labour supply. If the average woman were to work for just under 50 years, then this would be slightly more than a 10 per cent increase in the size of the female labour force. This is a potential future change that is rarely noted in analyses of the future workforce, despite its scale.

4.4 Disability/sickness and employment

Disability and sickness are important factors underlying absence from work and economic inactivity, though patterns are changing. Inactivity among men aged 16-64 rose from 6 per cent in 1973-6 to 16 per cent in 2001-4, and more rapidly among those aged (25-54) rather than among older (55-64) workers. In 2004, 2.7 million people, mainly men, were claiming incapacity benefits, a three-fold increase since 1979 (Moynagh and Worsley 2005). However, in the period 1997-2005, the percentage of men who were economically inactive who gave long term sickness as the reason for this declined from 43 per cent to 38 per cent. Among women, during this same period a near-constant 20 per cent gave this reason (Labour Market Trends 2005d).

It appears that disability and sickness related economic inactivity is in decline for men, while among women, for whom it has not been so important in the past, it is stable.

4.5 Ethnicity and faith

There is greater variation in women's than men's employment rates between different ethnic groups. Women in white and Black/African groups have higher employment rates than women from Asian groups, especially among Muslim Asian groups. In 2000/2 Black Caribbean women had the highest levels of full-time working (45 per cent), while Pakistani and Bangladeshi women had the lowest (14 per cent and 9 per cent respectively). Between 1992/5 and 2000/2, there was an increase in the employment rates among women in most ethnic groups (Lindley, Dale and Dex 2004). This increase is expected to continue, especially in groups where these are

currently low, particularly as levels of education here rise, though discrimination may affect this (EOC 2006). This increase in education among those minority ethnic groups where it was previously low is expected to lead to a narrowing in the gaps between women of different ethnic groups in their rates of employment.

4.6 Class and socio-economic inequalities

The size of the gender pay gap is linked to the size of the overall income spread (Blau and Kahn 1996). If overall inequality were to diminish, this is likely to contribute to a reduction in the gender pay gap, since female workers are disproportionately found among lower income earners. However, if occupational and class inequalities in pay remain strong, then this has implications for women as well as men.

Women from lower socio-economic groups disproportionately benefit from public subsidies for and provision of childcare, since this has a proportionately greater impact on their ability to engage in paid employment as compared with middle class women (Anderson and Levine 1999). Such policies that support women's paid employment thus facilitate social mobility and the narrowing of class differentials.

4.7 Migration

Migration will continue to be a two-way flow of people into and out of the UK. This will include people from the rest of the European Union, especially as more countries from the poorer parts of Europe join, as well as beyond. The several purposes of migration, employment, asylum and family formation are also likely to continue. The popular gender image of migrants, a male worker who seeks to bring his non-working dependents to Britain later on, is misplaced, since several of the specific occupations that seek to recruit labour from abroad include those with female majorities, such as nursing and carework. The level and nature of migration depends heavily on politics and policy, so is hard to predict.

4.8 Changing implications of caring for employment

One of the most important issues for the future of gender relations in employment is that of changes in the extent and organisation of caring for others, especially, but not only, children. There is a huge and continuing change in how the young and frail are cared for. It is still the case that those with caring responsibilities are less likely to be employed, but the extent of the impact is declining in various ways. This means that domestic relations are likely to become less important in shaping women's employment practices. Among women who are economically inactive, a decreasing proportion give as the reason 'looking after family/home'. This declined from 50 per cent in 1997 to 45 per cent in 2005. Among men this reason for being economically inactive remained a constant tiny 6 per cent during this period (Labour Market Trends 2005d). Changes in the organisation of caring are key to the future of work.

4.9 Conclusions

Demographic and other social changes have important implications for the future of work. Women are not a homogenous group and experiences vary according to the intersection of gender with other complex inequalities. Current gender gaps in employment associated with age, disability and sickness, ethnicity and faith, and caring are likely to narrow in the future, but there is little reason to expect that gender gaps associated with class or migration will be changing.

5 INCLUDING GENDER AS A DRIVER IN THE ANALYSIS OF THE FUTURE OF WORK

5.1 Introduction

Changes in gender inequality and women's employment are not merely outcomes of ungendered changes in the economy. Changes in gender relations are themselves important in driving changes in the extent and nature of employment.

However, most existing projections of the future of work do not address gender as a driver of change. For example Wilson et al. (2006) do not treat changes in gender relations as a driver of change in employment at either the theoretical or substantive level. The gender composition of employment and its location in the economy is treated as an outcome of industrial changes. Changes in the gendering of human capital (the extent to which women or men have education, skills and employment experience), in the discriminatory nature of labour markets, in the balance of flexibility and rigidity of labour markets are left out of the model of change.

If gendered changes were included, then predictions of the future of work are likely to be different. Why presume that occupational segregation remains unchanged (as is implied by the model)? Why presume that men more than women take new opportunities in the professions (as predicted by the model), when it is young women who are becoming more highly educated than young men? Changing these assumptions by included gendered factors such as changes in education in the model would be likely to change the expected outcome.

Moynagh and Worsley (2005) include changes in gender relations as part of the reason for greater gender equality, but do not include gender as a driver of overall changes in employment. So while the increased education of women, changed preferences among women as to the balance of employment and caring, tight labour markets and increased employers' commitment to diversity (as the business case gains ground and HRM specialists increase in numbers and sophistication) are included as reasons why there might be greater gender equality, they are not linked to the issue of the quantity or quality of jobs in the economy. Rather the consequences of these changes are primarily focused on their implications for 'opportunities for women'. While they note briefly that they may increase the labour supply, they note as the main consequences that the gender gap in earnings will narrow, the gap in earnings between partners will also narrow with implications for the domestic division of labour, more women in senior positions in work, and that there will be more gender equality. This leaves their model of the drivers of changes in the overall economy ungendered.

What are the implications of including changes in gender relations as a potential driver of changes in the economy overall? What are the implications for the quantity and quality of jobs and for the productivity of the economy as a whole?

5.2 Gender as a driver of change

In order to understand the implications of including gender as a driver of industrial and occupational change, it is necessary first to identify the components of the gender gaps and how these are changing, and second to specify the linkages with the economy overall. The following factors are sources of change. Each is currently changing, with the potential to reduce the gender pay and productivity gap and to increase women's contribution to the productivity of the economy as a whole (Walby and Olsen 2002; Olsen and Walby 2004).

- Increased human capital among women:
 - Higher levels of education among new generations of women (young women are now more educated than young men)
 - More experience of employment
- Easier to combine work and caring thus reducing interruptions to employment for child and family care:
 - Childcare strategy increasing availability of childcare
 - Flexible working
 - Working time regulation e.g. maternity, paternity, parental leave
 - Higher incomes to purchase care
- Fairer markets for labour with less discrimination:
 - More effective equal treatment legislation
 - More employer policies to secure equal opportunities in a diverse workforce
- Changing attitudes towards full employment
 - Increases in women's employment lead to changes in attitudes towards increased support for women's employment alongside caring (see Himmelweit and Sigala 2004)

Each of these four developments leads to women gaining access to more skilled jobs and thereby higher wages, which in turn increase the propensity of women to be employed. This is a virtuous circle in which more employment experience among women leads to higher wages, which leads to more employment experience. This is a positive feedback loop driving change forward. However, the speed of these changes is uncertain and some factors push in the opposite direction, such as

changes in payment systems that create new opportunities for informal discrimination.

5.3 Implications of gender (in)equality in work for the economy as a whole

What are the implications of changes in gender relations for the future of the economy as a whole? These include:

- The quantity of the supply of labour increases;
- The quality, in terms of the human capital (education, skills, experience), of the workforce increases.
- The productivity of the UK economy increases as a result of these two changes.

The virtuous circle of increased education, increased employment, better circumstances to enable combination of employment and care leads directly to an increased labour supply, as women increase their capacity and willingness to be employed, and increased skill and experience of the workforce.

The models of job growth discussed above depend upon an increase in the supply of labour. Women will constitute the major source of this increase in labour supply. This is because changes in the nature of gender relations (such as education levels, family commitments, positive valuation of gender balance and equality), are increasing the willingness of women to be employed and their competence to be employed at higher level jobs. Without this gender-driven change in the extent and skill level of the labour supply, there will be major difficulties for employers and labour shortages will develop.

There is evidence of an increase in the level of skills in the economy over recent years (Felstead, Gallie and Green 2002). The drive to go further 'up the skill chain' (Moynagh and Worsley 2005) to take advantage of the possibilities in the developing knowledge economy depends upon the capacity of the workforce to do this. The changes in gender relations identified above suggest that it is women in particular who will move into many of these high skill jobs. Women will increasingly have more of the education, skills and experience needed for the high level jobs in the knowledge economy.

5.4 Two scenarios of change

The speed of these changes and the strength of barriers to them generate two scenarios or models of changes in the gender regime, that is, the pattern of gender relations, with implications for the future of work.

Women and men are integrated in a high skill, high productivity economy

The first scenario focuses on a shift towards fuller employment of women who have more human capital because they are more highly educated than previous generations of women; face a fairer less discriminatory working environment than in previous years; and find it easier to combine work and caring because of more childcare, more flexible working and better maternity/paternity/parental leave. This is a high skill, high productivity, high wage economy in which women as well as men are fully integrated. It is made possible by the increase in the productivity of women, especially those currently in part-time, low productivity, low paid work. Further factors are the predicted expansion of the economy, especially in areas where women are currently employed, and the development of the knowledge economy pulling the UK up the value chain.

Women continue to be situated in low paid, segregated occupations in a divided economy

The second scenario focuses on the continuation of occupational segregation, of low paid and low skilled part-time employment, unfair and discriminatory payment systems, and the difficulty of combining employment and caring. This is an economy that is divided, in which a low pay, low skill set of part-time jobs in segregated occupations reduces the overall performance of the economy. The latter jobs are largely part-time and held by women. The drivers for this scenario are different from the first, in that women have restricted opportunities to access high level employment, especially because of occupational segregation and the nature of part-time working. This would be compounded if the response to global competitive pressures were to be that of cost cutting, rather than a drive to go up the value chain via policies that share the goals of both justice and productivity.

5.5 What needs to change

Transformation in the structuring of part-time employment

The argument here is for transformation in the structuring of part-time employment. Most part-time jobs are currently low paid, low skill, poor quality forms of employment. The future of this labour market segment is key to the quality of employment in the future.

Currently, many women move from full-time to part-time employment on returning to work after having children. While this is often seen as a short-term solution to the practicalities of combining employment and caring for children, quite frequently the duration of part-time employment lasts way beyond the presence of dependent children in the household. Many women never return to full-time employment after their children have grown up and left home. Around one half of women working part-

time do not have dependent children at home (Walby and Olsen 2002). They are stuck in a part-time trap, with few skills and few possibilities to acquire any more. The point here is that only around half of those working part-time do so because they are constrained by arrangements surrounding childcare.

The future of part-time working shows in sharp relief the alternative gendered futures of the economy. The continued existence of the current feminised low skill part-time sector is a drag on the productivity of the economy as a whole. It is probable that such jobs will shrink as a proportion of the whole, though there are some obstacles that slow down this transition to a high wage, high skill, high productivity economy. Potential obstacles include the increasing global competitive pressure to reduce the cost of labour as well as resistance to the full and equal integration of women into the economy.

A shift towards care as investment

The provision of care has traditionally been seen as an issue of welfare. However, it is simultaneously an issue of productivity. This means that it can be seen as an investment in the economy, not merely a form of consumption or expenditure.

There are two ways in which care work is an investment. First, the care of children is necessary for the production of human beings who become workers. Better quality care has implications for the development of their capacities and capabilities. Second, the provision of childcare enables mothers (and fathers) to combine having children with employment more successfully. It can reduce the interruptions in employment that are so damaging to the career of the individual worker/carer and also to the employer who needs to rehire and retrain. In this way the provision of childcare can be considered as an investment in the productivity of the economy.

The impact of the provision of publicly funded childcare on the productivity and output of the economy can be estimated quantitatively (Duncan et al. 1995; Graafland 2000). PricewaterhouseCoopers (2003) found that the increase in the productivity and output of the economy as a consequence of providing publicly subsidised childcare could meet the costs of the provision.

It is particularly women with least advantages in the labour market who could benefit the most from publicly funded childcare. Women with the least education are the group most likely to take long breaks from employment for childcare.

Increased flexibility and decreased rigidity

Increased flexibility and decreased rigidity would improve the functioning of the labour market, making it simultaneously more competitive and fairer.

Increased flexibility in employment would increase the ability of women (and men) to combine employment and caring. Flexibility includes flexible hours of work, as well as flexible location of work (such as working from home). Many women currently interrupt their employment when they have children, because of the difficulty of combining employment and care. This is a loss to the employer who has to recruit and train a new worker, and a loss to the employee. This is a loss in respect of the break in itself, as well as a further loss on return to work since many women take a job at lower than their level of ability in order to find a job with the appropriate hours. Increased flexibility enables the combination of employment and caring would thus be of benefit to individual women and their careers, to the firm for continuity of employment of their workers, and to the economy as a whole in the higher level of output and productivity.

Decreased rigidity follows from the removal of discriminatory practices that limit recruitment and promotion to only half the potential workforce. This would expand the pool of talent from which employers could recruit, and result in reduced occupational segregation, and greater gender equality. It benefits productivity by expanding the pool of talent from which employers can draw, as well as offering gender justice.

5.6 Conclusions

Recognising that gender is a driver of changes affecting the future of work, rather than merely an outcome, has a series of implications. It produces a different focus to the analysis of gender and the future of work.

The restructuring of part-time employment, a shift towards viewing care as investment and increased flexibility and decreased rigidity would enable productivity and output to be increased at three different levels: the individual level by enabling a better fit between peoples' skills and employers' needs and by encouraging the development of human capital; at the firm level by increasing the size and diversity of the supply of labour; and at the level of the whole economy by its long-term implications for the increase in life-time earnings and reduced need for payment of benefits.

The productivity perspective, alongside that of the justice perspective, enables us to see the contribution and potential contribution of women to the economy more clearly. A reduction in gender inequality, with the narrowing of gender gaps in employment and skill levels, can contribute to the increase in the productivity and

output of the economy. In this perspective, discrimination against women and labour market rigidities associated with sex segregation of occupations and industries are to the detriment of the economy as a whole. A decrease in gender inequality would be good for the economy as a whole.

6 CONCLUSIONS AND IMPLICATIONS

6.1 Summary of predicted work trends and implications for gender (in)equality

The size of the workforce is likely to continue to increase if there are people available to be workers. Women could take up a large proportion of these new jobs if the circumstances were right. Changes in the nature of gender relations have the potential to increase the willingness of women to be in paid employment, and to reach for higher level jobs. However, whether or not this scenario is achieved depends on the circumstances. An alternative scenario is that in which polarisation in the economy remains.

6.2 Inadequacies of current studies and implications for future work

While existing studies of the future of work have made important contributions to understanding the future of work they have some limitations. In particular, gender is treated as an outcome, rather than as one of the causes of the process. Yet many dimensions of the future of work are driven by changes in the nature of gender relations. While it is right to treat gender as an issue of social justice, it is not only this, but also a factor in the explanation of the productivity of the British economy. Future studies of the future of work would be improved if they were to include changes gender relations among the factors driving changes in the economy.

6.3 The contribution of gender equality to the productivity of the British economy

Gender equality contributes to the productivity of the UK economy by increasing the quantity of labour and the quality of labour available to employers. Decreases in the gender gaps in productivity increase the performance of the British economy.

There are several gendered drivers of this process. They include:

- Increase in women's education.
- Decreasing the interruptions to women's employment experience by childcare and flexible working practices.
- Increasing the fairness labour markets by removing discriminatory practices and labour market rigidities such as occupational segregation.

These gendered drivers are forming a virtuous circle, encouraging greater participation of women in employment, higher skill levels, higher wages and greater participation in employment.

The growth and development of the UK economy, widely forecast, requires an increase in labour, and in particular, skilled labour. The decrease in gender equality helps to deliver on these needs for the UK economy. This is a win-win scenario.

Rather than equality and productivity being alternatives, they need each other. Gender equality means a more effective contribution of women to the economy as a whole.

If women gain access to decent employment, they will be able to fund their own pensions. If not, in old age, many women will have to make recourse to public funds. There is a general public interest in the achievement of equality. This would enable public funds to be spent in other ways.

6.4 Obstacles to greater gender equality and productivity

There are some obstacles to this win-win scenario of simultaneously achieving greater equality and greater productivity. These reside in labour market rigidities, especially in the present construction of part-time work and occupational segregation. If these obstacles remain, then the alternative scenario is that the low productivity sector of part-time occupations into which women are segregated will reduce the productivity of the economy as a whole.

6.5 Implications for stakeholders

The labour force of the future is likely to be more female than the workforce of today, with women possessing higher levels of education than before. The utilisation of the potential of women workers will thus become more important than ever before. This matters to women and their families. It is in the interests of employers and government to promote gender equality in order to secure their wider goals.

Employers

The productivity of the firm could be held back by poor management practices that fail to manage effectively the human capital of women. Examples might include inaccurate matching of performance to pay through old-fashioned discriminatory pay schemes, poor opportunities for promotion as a result of the rigidities of occupational sex segregation, and poor work-life balance policies that do not allow sufficient flexible working to enable parents to combine effectively care and employment.

Government

The implications for government concern its responsibility for the productivity of the economy as a whole, as well as its specific remits in the regulation of firms and the provision of an appropriate tax-benefit regime. Government issues include: legal and other policy instruments to modernise workplace practices so as to secure fair and

efficient labour markets that promote the development of skills in women as well as men; ensuring that the tax-benefit regime addresses the realities and diversity of women's lives as they balance care and employment over the life-course.

6.6 Liberty, responsibility and fairness

The simultaneous achievement of gender equality and high productivity in the future of work has implications for key values, such as those of liberty, responsibility, fairness and internationalism identified by Brown (2005). Liberty means both equal rights and equal access to material and moral means of realising one's potential. Responsibility involves a system to care for others, including future generations who are currently children. Fairness is interwoven with these values, and government has a role to secure its achievement.

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