2 Traditional and Innovative Ways of Working

Full-time employment

The reduction of working time among full-time workers is being sought simultaneously in a number of European countries. The action programme of the European Trade Union Confederation (ETUC) recommends, *inter alia*, a 10 per cent reduction in working hours without reductions in earnings, the right to retire at age 60 without pension reductions, six weeks annual leave, and a normal working week of 35 hours (Cuvillier, 1984). Recent experience in Britain suggests that there is still some way yet to go before the recommendations of the ETUC will benefit British workers. In Britain, nearly 90 per cent of men and over 75 per cent of unmarried women in employment work on a full-time basis. Moreover, as Hill notes, fixed timetables of employment remain the norm for the majority of these full-time workers:

> Experience to date shows [flexibility] to be an illusion, with the vast majority of employees being 'prisoners of time'; facing rigid and inflexible working patterns of the traditional 40 or 39 hour week type, if they have any employment choice at all (Hill, 1987:31).

Hill's assertion remains more or less accurate despite the fact that variation in average hours of work per week exists between men and women and between manual and non-manual workers. In 1984, normal (not including overtime) weekly hours of work for men in full-time manual employment stood at 39.2 hours; for men in non-manual employment, at 37.1 hours; for women in manual employment, at 38.1 hours; and for women in non-manual employment, at 36.1 hours (*Employment Gazette*). Since the late 1960s, actual reductions in hours of work have been relatively marginal, ranging in the decade 1975-1985 from 0.7 hours per week for manually-employed men to 0.1 hours for non-manually-employed women (*Employment Gazette*). Moreover, the process of negotiating reduced working hours remains very slow: in 1987, a survey of over 600 trade union agreements revealed only 19 cases of reduced hours negotiated (IDS, September 1987); during the same year, talks to reduce hours of work in the engineering industry from 39 to 37.5 per week failed. Furthermore, in recent years marginal decreases in average weekly hours have been swamped by increases in overtime working. Due to strong economic growth, a larger proportion of the labour force now works overtime hours than in any previous period since the 1950s (IDS, July 1988). In April 1987, just over 38 per cent of men, and 18 per cent of women received payments for overtime working hours ranging from 9.8 hours per week for manually employed men to 3.5 hours per week for women in non-manual work (NES, Part A, 1987). For men and women seeking to participate in activities outside employment, whether within the family or in the community, the static conditions of full-time working and the demands of a strong economy seem to offer little scope for flexibility.

Innovations in full-time employment

However, although the overwhelming majority of men in employment, and significant numbers of employed women, remain tied to fixed schedules of full-time hours of work, change is occurring. Among the most notable of these changes are the introduction of flexible working hours, annual working hours, and compressed working weeks.

Flexible working hours

One of the most compelling reasons for the introduction of flexible working hours, or flexi-time, was an attempt to reduce absenteeism, especially among women employees. As Piotet notes (1986:128-129) female absenteeism is due primarily to inflexibilities in both the workplace and society at large which result in problems associated with children, either during school holidays or illnesses, together with problems of access to social and commercial services whose hours of availability coincide with an employee's own working hours. The usual pattern of systems of flexible hours involves a core time during which all employees must be present, with flexibility at the beginning and end of the day and often around meal breaks. In addition, arrangements sometimes include provision for employees to accumulate credit time, allowing additional days or half days of leave to be taken, although restrictions may exist governing the maximum amount of flexi-leave allowed within any one week or month.

The invention of formal plans for flexible hours is usually credited to Germany in the 1960s, and in particular, to Messerschmitt-Bolkow-Blohm near Munich. The concept was quickly taken up in neighbouring countries such as Austria and Switzerland, and then spread worldwide. Clutterbuck and Hill (1981) suggest that systems of flexible working hours exist in 5,000 European companies and in 20,000 companies worldwide, with 28 countries represented. In the United States, the proportion of wage and salary workers on flexi-time rose from approximately 4 per cent in 1974 to 12 per cent in 1985 (Monthly Labour Review Nov 86). One estimate suggests that between one and two million workers in Britain enjoy flexible working hours (EOC Ref: 11/12/2 BOOK1); while a recent ACAS survey of nearly 600 employers revealed that 14 per cent had introduced flexi-time within the previous three years (ACAS 1988). These figures do not include the many professionals – lawyers, journalists, academics – or self-employed individuals who have always had flexible hours without any formal provision.

Flexible working hours are found most frequently among white-collar workers, and have proved particularly attractive to women wishing to combine careers with family responsibilities. However, Clutterbuck and Hill (1981) report on the extension of flexi-time arrangements to manual workers in Germany and France, while in this country there are a number of examples of flexible working hours to be found among production industries, notably in pharmaceuticals, but also in engineering, food, hosiery and photographic materials. Often, though, schemes encompassing manual workers entail rather less flexibility than is possible in non-manual work. The EOC suggests that more scope exists for the introduction of flexible working hours into assembly line and production work, with potentially important benefits for women workers. On these grounds, the EOC recommends the setting up of pilot schemes to test the advantages and disadvantages of this alternative working arrangement (EOC, Ref: 11/12/2 BOOK1).

Annual hours

An even more striking innovation in working arrangements is the flexible year or system of annualized hours. Under this system, employees contract to work a set number of hours per year (usually 1,600 hours for full-time employees), and then agree with the employer on the actual distribution of hours by days, weeks, or seasons to fit their mutual convenience. Thus, under a flexible working year, workers may work from 9-5 or any variety of flexi-hours; they may work for three or four days each week; a specified number of days each month; or a variety of alternating shift arrangements.

As with flexible working hours, Germany is credited with the introduction of the flexible year, with at least 12 German companies comprising some 1,000 workers experimenting with this form of work organisation in the late 1970s and early 1980s (Clutterbuck and Hill, 1981). In Britain, local authority employers and three major manual workers' unions negotiated in 1987 a move away from the conventional 39 hour week and towards flexibility in working arrangements which included the calculation of working time over a fortnight, a month, or a year. Upon implementation, over one million manual workers in local authorities gained the opportunity to negotiate their working hours. In the Civil Service, a pioneer project covering 92,000 employees is being carried out to test the feasibility of combining a system of annual hours, including flexible working hours negotiated by individual employees, with provision for sub-contracting, working at home, part-time and temporary employment. If successful, the project will be extended to cover some 500,000 civil servants (*The Guardian*, 25.11.87). In the private sector, manufacturing employers in textiles, cement, paper and board processing and fertilisers have introduced systems of annual hours generally based on combined shift systems and flexible hours (IDS, September 1988).

Introduction of the flexible working year is in its infancy, not only in Britain but worldwide. One of the major arguments for both flexible working hours and the flexible working year is that they provide workers with considerable freedom to combine full-time employment with other activities, in particular family commitments. With such an advantage, growth in both flexi-time arrangements and in the flexible working year can be expected.

Compressed working weeks

Under a compressed working week, employees work standard hours but in less than a normal five day week. Work may be carried out on three, four, or four and a half days or, alternatively, five and four days, with correspondingly shorter hours per day. In the United States, compressed working weeks attracted considerable interest from the beginning of the 1970s. However, by 1975 their use had stabilised at between two and four per cent of the work force, mainly through a four day week, but with minorities on four and a half or three days. The idea of longer blocks of working time and longer blocks of time for education, leisure, and the family proved attractive to young and single people rather than to those with family responsibilities; it also proved more attractive to men than to women. Many early experiments failed through not taking account of the preferences of different types of employees, and through operating and union difficulties. There proved, however, to be a lasting place for compressed weeks in a limited range of cases and where their introduction was carefully planned.

The British experience has been similar. An important starting point was the national shiftwork agreement in engineering in 1964 under which some 160,000 night workers in federated firms had moved to a four and a half night system and an additional 35,000 to a four night system by 1980. A further boost came from experience with the three day work temporarily imposed by the coal and power stoppages in the winter of 1973-74 (Sloane, 1975), and from the need to re-think shift systems as a result of the move towards shorter hours in the early 1980s. By 1980, a number of unions were considering four day weeks, including the National Union of Mineworkers and APEX for white-collar workers. However, as in the United States, compressed weeks have ultimately proved suitable and acceptable only for selected groups of employee and under conditions where they do not lead to fatigue and boredom among workers or to interruption of communication with suppliers or customers. Blyton (1985) suggests that the growing proportion of women in the labour force may actually inhibit the growth of compressed working weeks, given the difficulties women with children would have in reconciling an extended workday with family responsibilities. Britain, like the United States, has its share of compressed working schemes which have been abandoned, and until systematic data is available about this form of working, ways of overcoming the disadvantages leading to abandonment will remain uncertain.

Part-time employment

Above all other ways of working, part-time employment represents the means whereby married women combine paid work with family responsibilities:

> Women's priorities...appear to vary over their life-cycle. In their early years of working occupational preferences have priority whereas during the family formation period women often trade-off their preferred occupation in order to obtain a job with fewer hours. Much downward occupational mobility resulted from women taking part-time jobs after childbirth. The hours of work thus become the main priority, over family formation, superceding occupational preferences, although the latter can come to dominate again in later life (Dex, 1987:122).

The growth of part-time employment accounts for virtually all of the increase in women's labour force participation since the 1950s, with the proportion of women in *full-time* employment remaining relatively stable at about 30 per cent, while the proportion of women in *part-time* employment rose from 5 per cent of all women in the labour force in 1951 to 27 per cent in 1981 (Joshi et al, 1983). In 1987, over 4 million women were in part-time employment, representing 44 per cent of all employed women (*Employment Gazette*, July 1988). Married women, moveover, account for between 80 to 90 per cent of these part-time workers.

The part-time jobs married women undertake are concentrated mainly in the service industries. In 1986, wholesale and retail distribution, catering, cleaning and other personal services, clerical work, sales, teaching, nursing and related services accounted for almost 3.5 million part-time jobs held by women. Part-time working in professional and managerial jobs is the single largest factor behind the retention of significant numbers of career women in the labour market during their years of family formation (Institute of Manpower Studies, 1986). Britain is not unique, however, in the growth of part-time employment among married women. For the period 1973-1983, Germany experienced a 65.2 per cent increase in female part-time employment; France experienced a 104.5 per cent increase; and the Netherlands, an enormous 436.4 per cent increase. In these three countries, however, part-time working in 1973 was relatively unpopular and therefore increases were occurring on a small base. In contrast, in Japan, the United States and the United Kingdom, part-time working formed a relatively large part of total employment in 1973. Consequently, growth rates of part-time employment over the decade appear more modest. Japan and the United States, for example, experienced growth of part-time working among women of 32.2 per cent and 23.9 per cent respectively, while the UK saw an increase over this period of only 18.2 per cent (de Neubourg, 1985:565).

The reasons behind the dramatic increase of part-time employment in the Netherlands are instructive in that they reflect the British experience both in an earlier time period and at present. In the Netherlands, an extremely low labour force participation rate among women in general at the beginning of the period was combined with a persistently traditional sexual division of labour in the household, thus leading married women to seek part-time working hours when looking for employment (de Neubourg, 1985:572). These reasons mirror the situation of married women in Britain first, with regard to changes in female labour force participation in Britain during the 1960s and early 1970s, and, second, with regard to British women's continuing assumption of responsibility for family and household. British married women primarily seek part-time employment in order to accommodate the dual demands on their time arising from paid work and domestic life.

The relationship between part-time hours of work and family responsibilities is readily demonstrated. The 1980 survey, *Women and Employment*, obtained employment histories from approximately 5,000 women across Britain (WES, 1984). Analysis of these employment histories reveals that until women have children, childless women and women with children spend approximately equal amounts of time in full and part-time paid employment. Childless women spent 83 per cent of their time in full-time work, and 4 per cent in part-time work over their working careers, in comparison with women with children who spent 84 per cent of their time in full-time work and 2 per cent of their time in part-time work up to the time of their first birth. Moreover, little variation by age of woman or period of first birth was found, with women in their fifties having had much the same work histories until childbirth as found among younger women (WES, 1984:99). The similarity between childless women and women with children ceases, however, with the first birth as the majority of mothers remaining in employment turn to part-time hours of work. Table 1 below sets out the proportion of part-time workers among all women with children included in the 1985 General Household Survey.

Table 2.1 Employment of women with children, by age of children and by part-time employment

	% in employment	% working part-time
Age of youngest child		
0-4 years	30	22
5-9 years	60	46
10+ years	70	42

Source: GHS 1985, Table 6.13, p.70.

Two points may be noted from this table. First, the labour force participation of women with children increases steadily as their children get older; and second, there is an overwhelming tendency for mothers' employment to be on a part-time basis. Twenty-nine per cent of the mothers with pre-school children in the GHS were in employment when surveyed: 22 per cent on a part-time basis. Even among those mothers whose youngest child had reached age 10, 60 per cent of the mothers in employment continued to work on a part-time basis. The findings of the *Women and Employment Survey* suggest that the majority of these mothers will return to full-time employment when their children are grown, eventually spending some 60 per cent of their time in work in *full-time* employment; until then, part-time employment provides the avenue for combining work and family life.

However, if part-time working enables mothers to accommodate the dual demands of work and family life, it does not do so without cost. In a recent analysis of the MRC 1946 Birth Cohort, Joshi and Newell (1987) demonstrate that childless women earned about 30 per cent more than mothers. The association of motherhood with lower pay, Joshi and Newell (1987) argue, operates indirectly through reduced employment experience, downward occupational mobility when returning to work after childrearing, and lower wage rates paid for part-time work. Furthermore, part-time work is frequently associated with exemption from employment rights accruing under the

Employment Protection Acts, as well as with ineligibility for social welfare benefits gained from National Insurance contributions3 Among women interviewed in the *Women and Employment Survey*, 40 per cent of part-time employees were found to be excluded from employment protection legislation, nearly half of whom failed to qualify by virtue of working between 8 and 16 hours weekly but without continuous employment with one employer for the minimum requirement of five years (WES, 1984:35). In addition, 40 per cent of the female part-timers interviewed did not pay NI contributions (WES,1984:43). Moreover, the loss of state welfare benefits was not redeemed for these part-time workers by the existence of occupationally-based sick pay and pension provisions. Among the women covered by the WES, 19 per cent of part-timers had no paid holidays, 35 per cent no sick pay, and 91 per cent no occupational pension. In all cases, part-timers were more than twice as likely not to have such benefits as women employed full-time (WES, 1984:35). Extrapolation from the Women and Employment Survey suggests that in 1986 at least 1.6 million women working part-time were exempt from these rights and benefits normally associated with full-time employment4.

The advantages inherent in part-time employment for women with family responsibilities are clear: such women are able to fulfil their obligations as mothers and wives and to enjoy the satisfactions of family life while continuing to gain the personal, social and financial benefits of employment. Given this, it is not surprising that married women dominate part-time employment. However, there are also men who participate in the labour force on a part-time basis, although whether such men do so in order to accommodate the dual demands of employment and family life – as most women do – is questionable. In 1951 there were only 45,000 part-time jobs held by men, representing 0.3 per cent of total male employment. Between 1961 and 1971, the number of part-time jobs held by men increased from 1.2 per cent to 4.3 per cent of male employment; and by September 1981, 5.9 per cent of total male employment, encompassing some 718,000 jobs, was undertaken on a part-time basis. These changes represent an overall increase of 23 per cent in part-time jobs held by men from 1971-1981, a decade which also saw a 10 per cent decline in total male employment (LMQR May 1985).

As with women, the overwhelming majority of male part-time employment – some 600,000 jobs – occurs in the service industries.

Moreover, like women in part-time employment, some of these male part-timers will be excluded from both employment protection legislation and the social welfare benefits gained from National Insurance contributions. However, the congruence between men and women in part-time employment cannot be carried much further than these few points. Where women generally work part-time in order to accommodate the demands of family life, men generally undertake such employment either before they marry or after family responsibilities have diminished. Seventy per cent of the men employed part-time in 1981 were either under age 20 or over age 65 (LMQR Sept 1985). The mean age of men in part-time work in the UK in 1981 was 55.2 years, a figure which stands in contrast to that found in the United States where the mean age of men working part-time was 34.0 years in 1981, and to the mean age of 43.7 years found among part-time women in the UK (Neubourg, 1985:566). Thus, although part-time working among men has certainly increased since the 1950s, it appears unlikely that it has done so in response to men seeking more harmonious ways of combining paid employment with familial responsibilities. This suggestion is given added force by the fact that over 200,000 of the part-time jobs held by men in 1981 were undertaken in addition to full-time employment5. Far from entering into part-time employment as a flexible response to combining work and family, men in such jobs appear to be either beginning or extending their working careers, or taking on extra hours of paid employment, probably for financial reasons. Little evidence exists which suggests that men in part-time employment are seeking to lessen the demands of the workplace in order to accommodate the demands of the home.

Innovative part-time employment: job-sharing

Job-sharing is a form of part-time working wherein two people choose to share the salary, benefits and responsibilities of one full-time job. With job-sharing, the working week can be divided in a variety of ways, depending upon the needs of both workers and employers. Workers may divide days or weeks or may work on alternate days or weeks. Work can be divided by task or by time, or by some combination of the two. At present, and provided each job-sharer works a minimum of 16 hours or more a week in any week worked, employment continuity is maintained and each worker is entitled to protection under employment legislation6.

Job-sharing is an innovative approach to part-time working which allows workers continuity of employment and an opportunity to combine family life with continuing work careers. The Equal Opportunities Commission, which encourages the growth of job-sharing, has documented the advantages that accrue to job-sharers. These advantages include the following:

- job-sharing facilitates more opportunities for part-time employment;
- it allows workers seeking part-time employment work which matches their skills;
- it eases returning to work after maternity leave;
- it offers part-time workers similar benefits and rights in employment as full-time workers;
- it allows workers to keep their skills up-to-date;
- it creates opportunities to pursue interests other than employment (EOC, Ref: 11/6/8 BOOK).

Job-sharing is becoming increasingly popular, although it is not yet as widespread as might have been expected from newspaper accounts of the practice in the early 1980s. As job-sharing is not distinguished from part-time employment in official statistics, it is not known how many job-sharers there are at present, but it is unlikely that more than a few thousand workers, mainly women, are job-sharers. One recent estimate puts the number of job-sharers at about 2,500, with the majority employed in the public sector (Epstein, 1986). Most job-sharing is in the public sector, with more than 40 per cent of local authorities operating sharing schemes (*The Independent*, 6 April 1987). Doctors, nurses, teachers, librarians and legal advisors are among those engaged in job-sharing. In addition to these professional occupations, job-sharing exists at other levels. GEC, for example, created a scheme in 1981 for young workers at its Coventry and Aycliffe factories, and Barclays Bank has used job-sharing since the 1940s for secretarial and administrative staff.

The vast majority of job-sharers are women who wish to maintain paid work at the same time as bringing up children. Nonetheless, *New Ways to Work* reports that one quarter of its 2,000 annual enquiries about job-sharing now come from men. Unlike women seeking job-sharing in order to accommodate work and family life, men are typically looking to job-sharing as a means of changing career direction, often through self-employment (*The Independent*, 6 April

1987). Despite this, job-sharing remains an ideal option for parents with small children. It overcomes many of the disadvantages inherent in conventional part-time employment while allowing similar amounts of work-free time. Hence one may plausibly anticipate growth in this flexible way of working. A recent study based upon case-study analyses of 30 employers in both manufacturing and the service sector showed some evidence of an upward trend in the use of job-sharing in recent years (Meager and Buchan, 1988).

Homeworking

For married women in employment – if not for married men – working part-time is the most common way through which the demands of family and paid work are reconciled. Homeworking, whereby paid work is undertaken either at or from home, represents an alternative means of accomplishing the same end. According to a national survey conducted in 1981, the homeworking labour force included over 600,000 men and women in England and Wales, with women making up just over 70 per cent of those working *at home*, and men making up just over 70 per cent of those working *from home*. The types of job undertaken at home extend across all occupational groups except security and transport operating, with manufacturing homework undertaken only by a minority. Jobs undertaken from home extend across all occupations without exception, with sales accounting for one third of all jobs done from home (Hakim, 1987).

The inherent advantages of homeworking as a means of harmonising family life with paid employment are available to both men and women. However, the sexual division of homeworking noted above, with the majority of women working at home and the majority of men working from home, suggests that it is primarily women who undertake homeworking for family reasons. Other details provided by the national survey of homeworking support this suggestion. First, two-thirds of men in the homeworking labour force work on a full-time basis. In contrast, two-thirds of homeworking women work part-time hours of less than 16 hours per week. These differences in hours of work correspond to the two main groups within the homeworking labour force: the majority of at home homeworkers work part-time, while the majority who work from home work full-time. Secondly, two-thirds of men in the homeworking labour force do so by choice, in comparison to only one-third of women. Moreover, one-third of the women report that they are employed in their homes because they must be – domestic responsibilities mean they have no other choice. Thirdly, men working from home have longer histories as home-based workers, with six or more years being a typical pattern. Almost half of the male homeworking labour force had been six years or longer in their current job, and 10 per cent had been home-based workers for over twenty years. In contrast, homeworking women typically had been so employed for less than six years.

From these details it is possible to characterise the homeworking labour force as comprising two broad groups: women working at home on a part-time basis for four or five years in order to combine family life with paid work; and men choosing a home-based 'career' as their preferred style of employment. Giving substance to this broad characterisation is the fact that homeworking women are particularly likely to have one or more children under 16 living at home. Such a division demonstrates that, like women employed part-time, it is women homeworkers who have chosen an alternative way of working in order to combine work with family life, while men home-based workers appear simply to have chosen an alternative way of working.

As with part-time working, homeworking is not undertaken without penalty to the worker. Moreover, the costs associated with homeworking accrue differentially to men and women, reflecting, perhaps, the difference between choosing to work from home as a career and working at home in order to bring up children. For women, one of the primary costs of homeworking is low pay. The homeworking labour force includes workers who are among the highest and lowest paid workers in Britain. One fifth of the homeworking labour force have hourly earnings in the top 10 per cent bracket; one third have hourly earnings in the lowest 10 per cent bracket. And, not surprisingly perhaps, the lowest-paid jobs – manufacturing homework and childminding – are usually done by women. The majority of high-earners in the homeworking labour force are men; the majority of low-earners are women. In addition, one third of workers at home (mainly women) fall outside the auspices of employment protection legislation by virtue of working fewer than eight hours weekly, and many more are likely to do so as a consequence of interrupted employment. Workers at home are significantly more likely than workers from home (mainly men) to suffer involuntary breaks in employment, and thus are considerably less able to establish continuity of employment. The majority of workers from home, in contrast, have no difficulty establishing continuity of employment.

Both men and women in the homeworking labour force are better qualified educationally than the labour force as a whole, with one quarter having degree level or other higher educational qualifications. This means that many homeworkers are over-qualified for the jobs they do, given the relatively limited range of home-based jobs available. Of particular relevance is the fact that most homeworkers (mainly women) consider that the skills used in, and experience acquired by, homeworking will be of little value when, in due course, they seek work outside the home. From this it may be inferred that many women who choose homeworking as a way of combining paid work with family responsibilities experience downward occupational mobility in doing so, risk losing previous skills while homeworking, and learn little which will assist them in finding new occupations once their family responsibilities lessen. For these women, the costs of flexibility are high.

Innovative homeworking: new technology homeworking and networking

New technology homeworking based upon microelectronics and telecommunications, at both routine and higher professional levels, has attracted widespread interest, though not yet widespread application. According to Huws, initial interest in new forms of homeworking arose in response to the oil crisis of the early 1970s, and was motivated by a desire to conserve energy by reducing the fuel consumption entailed in transporting commuters to and from work each day (Huws, 1984a). Improvement of the quality of working and home life, if considered at all, was secondary. Today, however, new technology homeworkers are typically married women computer professionals, with children at home, who have chosen homeworking in order to combine paid work with family commitments.

In Britain, three firms have pioneered the development of off-site or home-based working in the area of information technology and computer programming: F International, ICL, and Rank Xerox. F International provides specialist services to the computer industry and employment for computer professionals unable to commit themselves to the conventional 9-5 pattern of work. Ninety-four per cent of the people who work for F International are women, over half of whom have children under school age. F International offers women not just jobs, but continuation of careers. Staff must have at least four years on-site experience in data processing before they may join F International, and are provided with technological up-dating and appropriate training courses throughout their employment. One indication of the success F International enjoys through the creation of alternative ways of working for women with family commitments may be gleaned from the fact that most of its female staff remain with F International after their children are in school despite the renewed feasibility of on-site working.

ICL set up its home-based work scheme under conditions of skilled staff shortages in order to overcome the loss of expertise resulting from women giving up employment in order to start families. Originally designed for women with children, ICL's *work-from-home* scheme now includes a minority of others. An Equal Opportunities Commission report describes the typical pattern followed by ICL's workers: members join when their first child is about two months old, and work for 16 hours a week. As their families increase, and children get older, entering school and playgroups, women members increase their hours of work. When both (or all) children are in school, members take on increased job responsibility. Full-time employment may be sought after about 10 years on the scheme (EOC, Ref: 11/6/8 BOOK). As with F International, scheme participants must have at least four years' experience within the firm, and are provided with technological up-dating and re-training.

ICL and F International have set the standard for other firms with respect to homeworking among technology and computer professionals. The advantages which accrue to their employees are clear: commuting is reduced; career continuity is maintained; skills are preserved and up-dated; family commitments are accommodated. As Huws notes, however, these two firms are by no means unique in their use of new technology homeworkers. The computer industry provides work for homeworkers in a variety of other organisations including hospitals, universities and local authorities, as well as in small software companies and data processing departments in both small and medium-sized computer user firms (Huws, 1984b).

Networking, whereby executives leave full-time employment within the parent company in order to work from home, was created by Rank Xerox in order to reduce extremely high administrative overheads. Senior and middle management posts were partitioned off on the basis that the post holder contracts with Rank Xerox to supply specified services on a part-time basis (usually two days per week for one year) in exchange for financial and material assistance in setting up his/her own business. The advantages to workers under this scheme are clear: the employee gains independence, but with the support of Rank Xerox and of an organised network of other scheme participants. The opportunity also exists of at least equal, if not greater, earnings from self-employment, and evidence suggests that in a number of cases this opportunity has been effectively taken (Rank Xerox, 1982). Moreover, as the EOC notes, Rank Xerox's scheme provides maximum choice and flexibility to the workers, while blurring stereotyped boundaries between full-time work, part-time work, and women's work (EOC Ref: 11/6/8 BOOK).

Rank Xerox is the pioneer of networking, and sets an example others could follow in creating alternative ways of working and easing the demanding task of combining work and family life. In addition to Rank Xerox's scheme, other, smaller ventures into networking exist. A study of women architects at the end of the 1970s found signs of networking in a looser form than at Rank Xerox. A small number of both women and men architects work through commercial employment agencies which are essentially concerned with finding spare hands for routine work. The next step for this venture, it was suggested, could be to organise experienced architects through a cooperative with a central office with library facilities for contact and promotion with clients. The basis of the cooperative would entail members taking on full-scale and highly-qualified projects in addition to routine work. Practical experience in networking suggested that continuing development was feasible (Fogarty et al, 1971).

In addition, Foy (in Fogarty et al, 1971) describes a still less formal type of networking, again for professionals in particular, which consists in maintaining networks of information with a minimum of formal organisation. This networking essentially comprises promotion of personal and telephone contacts and group discussions, leading to the 'power of the unpowerful network'. A good secretary is needed to weave and maintain the web of contacts according to Foy, but otherwise the main requirements are a focus rather than a goal and groups rather than committees.

In a study of high technology homeworkers, Huws (1984b) notes that their most common primary goal was to combine paid work with family commitments. Both homeworking and networking allow workers to care for children and organise the running of households with maximum flexibility. At present, high technology homeworking and networking remain the prerogative of a minority of workers. However, with the eventual advent of an advanced technological society – as Britain is bound to become – both ways of working can be expected to increase substantially. Already industrial leaders are investigating ways of increasing the numbers of those working at home. Delegates to an industrial conference organised jointly by the CBI and British Telecom in September 1988 were told that telecommuters were likely to be four times more productive than on-site employees, thus virtually ensuring increased profits. A report by the Henley Centre for Forecasting suggests that by 1995 as many as four million workers could be working from home, linked to their offices by computer and telephone (*The Times*, 30.8.88). And according to another forecast, based upon 100 opinion-formers in business and industry, by the year 2010 most companies in Britain will be decentralised, with between 25 per cent and 35 per cent of the workforce engaged in telecommunicating ways of working (NEDO, *IT Futures Surveyed*, Planning No 676, 1986).

Shiftwork

The term *shiftwork* covers a wide variety of working time arrangements, including almost anything that is outside the normal working day. Shiftwork can refer to conditions as various as permanent nightwork (9pm-6am), part-time evening shifts (6pm-10pm), weekend shifts, split-shift schedules, and rotational shifts of varying types. A simple definition of shiftwork is a situation in which one worker replaces another on the same job within a 24 hour period (Ingram and Sloane, 1984:168, cited in Blyton 1985). The proportion of manufacturing workers on shifts doubled to 25 per cent from 1954 to 1968, rose again before returning to the same level in 1975, and then rose once more to stand at approximately 30 per cent of manual workers in 1983. In recent years, shiftwork has extended into services industries such as banking and computer/information technology (*EF News*, 5 Oct/Dec 1986). Findings of an ACAS survey carried out in 1987 indicate that the single largest change in working time arrangements has been in increased shiftworking, with some 28 per cent of employers bringing in such changes in the previous three years. And although shiftworking largely remains the prerogative of men, with 25 per cent of all male employees in manufacturing receiving shift payments in 1978 in contrast to only six per cent of females (*Eurostat*, 1978), shiftworking among women is increasing. In 1983, 12.3 per cent of all employed women engaged in some form of shiftwork (Bourner and Frost, 1985), predominantly in the service sector where in 1980 some 16 per cent of shiftworkers were women (IFF Research, 1980).

In terms of family life, both advantages and disadvantages derive from shiftworking. The main benefit is increased earnings. One estimate suggests that average hourly earnings of male shift workers in manual jobs are as much as 17 per cent higher than similarly-employed manual workers not working shifts (Fudge, 1980; cited in Blyton 1985). Another suggests a spread of additional earnings for shiftworkers ranging from 13 per cent for workers on the early shift of a double day pattern to over 25 per cent for workers on permanent nightshifts (Boswell and Dawkins, 1981). The advantage of increased earnings might well explain the fact that proportionally more men with young families undertake shiftwork than either young men without children or older men whose children are grown (Blyton, 1985). The second main benefit of shiftwork is added free time. This advantage can, however, be accompanied by considerable disruption to family life.

The type of shiftwork most likely to affect family life adversely is nightshift. In 1964, some 23 per cent of workers were on alternating day and night shifts, with an additional 12 per cent on permanent nights. By 1978, the proportion of workers on permanent nightshift had decreased to 7 per cent, while the proportion of workers on alternating days and nights remained approximately the same. As Blyton argues, however, the overall increase in the incidence of shiftworking doubtlessly means that, while the proportion of workers on nightshifts has decreased, the absolute number of such workers is likely to have increased (Blyton, 1985). Moreover, as Blyton goes on to describe, working nights can affect both the day-to-day organisation of family life, as well as the quality of family relations. Workers on nightshifts are awake and working when their families are relaxing and sleeping. The whole of family life can be disturbed by this. Children must be kept quiet when a parent sleeps; relations between husbands and wives can be subject to considerable restriction. It is likely that for some shiftworkers, the additional free time which accompanies shiftworking more than compensates for these disadvantages; shiftworking may thus be the preferred choice of many workers. But for others, it is likely that economic necessity - or the threat of unemployment - is the overriding factor behind shiftworking, with disadvantages simply to be borne. In a recent study of attitudes towards shiftworking among women, no more than half of the couples where the husband, but not the wife, worked shifts reported being happy with his working arrangements, while one in five reported considerable discontentment (Marsh, 1979). Shiftworking may facilitate employment, but it does not necessarily promote happy family life.

Women in particular may suffer adverse consequences from shiftworking. Almost half of all shiftworking women (46 per cent) work on a part-time basis (Carter and Corlett, 1982). A detailed study carried out in seven companies in one local labour market in Britain found that women workers desired shiftwork as a way of continuing to care for their children themselves while engaging in paid work. Cumulative exhaustion was the most damaging consequence for these women, together with the low pay and poor chances of promotion that often accompany part-time employment. For these women, the suitability of shiftworking hours was the primary reason for wanting shiftwork, despite the adverse consequences for family relations and personal health (Brown and Charles, 1982).

Cumulative tiredness and strains on family life may be the main reasons why it is that men comprise the great majority of the shiftworking labour force. But in addition, until recently women have been subject to legislative restrictions limiting the amount of shiftwork allowed. In particular, women have been prohibited from working between 10pm and 6am, unless exemption from legislative restrictions has been authorised by the Secretary of State for Employment. In practice, however, such exemptions are not infrequent. Bosworth and Dawkins (1980) note that between 1960 and 1977 exemptions increased seventeen times, so that by the end of 1977 over 56,000 exemptions had been granted. But in addition to legislative prohibitions against women working shifts, it appears that family commitments may well deter women from seeking shiftwork. In Marsh’s study of attitudes towards women’s shiftworking noted above, between 85 and 90 per cent of couples surveyed disapproved of wives working weekends and nightshifts. According to Marsh (1979:36), approval or disapproval of women working shifts is dependent upon domestic situations:

> ...there is fairly widespread approval of single women working shifts; there is considerably less approval for married women working shifts; there is widespread disapproval of married women with young children working shifts, except in the case of part-time evening shifts.

Over 80 per cent of couples surveyed by Marsh approved of wives working evening shifts (6pm-10pm). In practice, however, this form of shiftwork has declined over the last decade, and represented only five per cent of shiftworking in 1978 (Blyton, 1985). Thus it seems that women's opportunities for combining paid employment with family responsibilities through shiftwork are limited, first, by familial disapproval of certain forms of shiftwork and, second, by decreasing availability of approved forms.

Innovations in shiftworking

As Blyton (1985) notes, there have been few large scale changes in shiftworking arrangements in Britain, and those innovations which do exist have taken place within individual companies rather than across entire industries or sectors of the economy. Shell Chemicals (Carrington), for example, negotiated an annual hours contract under which work groups in a continuous shift system were given a wide range of rotas (seven rotas were operating at one time within the plant), with manning levels adequate to cover all normal work requirements without overtime, and with extra leave entitlements. In return, workers undertook to cover all planned and, in cooperation with management, unplanned absences in their work group, and to work a small number of additional hours in emergencies. Employees gained a new degree of control over their own timetables, and the employer benefited by the reduction of unplanned or uncovered absence and overtime. ESSO (Fawley) process workers were offered a choice between four shift patterns, two with 8 hour rotas and two with 12 hour rotas. Workers voted for the latter pattern, which also included provision for annual hours and a constant weekly wage. In 1982, Cadbury (Bournville) similarly introduced a 36 hour week consisting of three 12 hour shifts. In most of these cases, personal flexibility is built into the shift system by provisions such as freedom to exchange shifts, floating holidays, or *rota'd out time* to be taken at the employee's discretion.

The extension of five crew work patterns also represents an important innovation in shiftworking arrangements. Most often, continuous shiftwork is based upon a four crew pattern: at any given time, three crews are working and the fourth crew is having time off. As the four crew pattern has a subtantial amount of overtime built in to its operation, employers have welcomed the five crew pattern as a way of reducing overtime via an increase in the overall level of labour (Blyton, 1985). In one study, McEwan Young (1981) found that the introduction of the five crew pattern resulted in benefits for workers in the form of additional time off and for management through reduced absenteeism. McEwan Young's findings were confirmed by Rathkey (1984) who found that the introduction of a five crew pattern resulted in a reduction of weekly hours, additional days off, and an expansion in the number of jobs. The employer gained through a halving of overtime, lower absenteeism and reduced accident rates. Given these advantages for workers, it is not surprising that the five crew pattern has been advocated by a number of trades unions in Britain as well as internationally (Blyton, 1985).

As men comprise the bulk of the shiftworking labour force, innovations in shiftworking arrangements generally carry the possibility of providing men with more free time, time which could be spent with families. In this way, innovative shiftwork represents an option for change in men's roles within family life. However, innovations in shiftworking may also be of benefit to women with families. In one study, 11 per cent of women with pre-school children reported that their employers provided a special shift suitable to their family responsibilities. Thus there are indications that shiftworking arrangements can be altered with a view to increasing worker flexibility and easing the combination of paid work and family responsibilities. As Blyton (1985) suggests, shiftwork schedules have been shown to be amenable to far greater flexibility than previously considered possible. Given this, and the expected continued growth of shiftworking arrangements, closer investigation is warranted of the ways in which this mode of working could be modified, thus improving the quality of both job and home life.

This section has provided an overview of the development of flexible ways of working in Britain in the 1980s. Overall, few widespread changes have occurred in the way our working lives are organised, and the majority of men remain tied to traditional full-time fixed schedules of work, while the majority of married women in employment continue to juggle the demands of family and work through a variety of ways of working, predominantly through part-time hours. However, it is also clear that change is occurring, albeit in a slow and somewhat patchy fashion. The introduction of job-sharing, networking and high technology homeworking, innovative shift schedules, although as yet of benefit only to relatively few workers, are steps in the right direction. The process of change has begun. The challenge now is to ensure that change continues and accelerates. In order for this to occur, trades unions and employers alike must be engaged on the task of changing tradition. Thus, in the following section, the perspective of employers and unions towards increased flexibility in working arrangements are discussed.