'WORKING 9 TO 5? COMPLEX PATTERNS OF TIME ALLOCATION AMONG MANAGERS AND PROFESSIONALS IN DUAL CAREER HOUSEHOLDS'

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Abstract

This PhD is a theoretically informed empirical investigation of contemporary patterns of time allocation among managers and professionals in dual career households. Focus centres on three key elements of time allocation, namely work, care and commuting. Specifically, this thesis addresses three research questions: (1) Which theoretical approach(es) — mainstream, institutional or feminist — offer the most suitable explanation of individual and household choices and constraints in the allocation of time? (2) Do distinctions need to be made within the Professional-Managerial Class (PMC), and are these distinctions occupational and/or gender specific? (3) What challenges, in a policy context, do dual career households face in managing the combined demands of work-time, caring and commuting? A mixed methods approach is employed. This combines quantitative empirical analysis using published national statistics, specifically the Labour Force Survey (LFS) and the Census Special Licence Household Sample of Anonymised Records (SL-HSAR), with a mixed methods case study of Greater Nottingham, a major employment centre of the East Midlands region of the UK. The case study comprises a series of interviews with Human Resource Managers (HRMs) and a survey of managerial and professional workers. It allows analysis at two reference points, using primary data collected as part of the 'location and mobility decisions of dual career households' project funded by the Leverhulme Trust (grant F/740). This thesis makes four contributions to knowledge. First, distinctions are found within the PMC between the two major occupation groups - managers and professionals - which are often combined in research. Second, evidence is presented to support the notion of nodal living among dual career households, and of the commute substituting for permanent residential migration. The third contribution relates to gendered household dynamics. Females are found to increasingly mirror their male counterparts in patterns of work, especially work-time. However, they face spatial entrapment as a result of the continuing inequity within the home which limits their mobility. Finally, this thesis finds increasing time scarcity among households combining dual work routines and household responsibilities.

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Introduction

1.1 Introduction

The purpose of this PhD is to explore the complex decisions made in the allocation of time among managers and professionals. This analysis focuses on dual career households in the UK. Analysis is conducted at both individual and household levels. Key components of 'work-related' time-use are considered, exploring work in its broadest sense. These include work-time, caring, and commuting. The thesis explores the growing flexibility and mobility of work. Moreover specific reference is given to the allocation of household responsibilities, and issues of gender equity at work, and in the home.

Work, in the broadest sense, includes both paid and unpaid work. Unpaid work includes voluntary work, or it can be unpaid activity undertaken within the home, encompassed in the term, 'tasks of social reproduction' (Glucksmann, 1995). Work, particularly paid work, may be considered as performing an arduous task (Weiss and Kahn, 1960). However, Spencer (2009, 105) suggests that work should not only be considered a 'bad'. It can be a source of achievement and fulfilment. Work can be described as activity for which there is remuneration. The International Labour Organisation (ILO) defines work relative to hours of paid employment. Part-time work is defined as working under 30 hours per week.¹ The ILO considers working 30 hours or more per week as full-time.

For mainstream economists the key focus when considering work is 'paid' work, which is determined by workers supplying their labour in a trade-off between work (and income) and leisure. Heterodox approaches differ in their definitions of work. For example, radical economists consider work to include paid work

¹ The ILO also defines employment as an individual working at least one hour per week. This includes employees, the self-employed, those on government training programmes, and unpaid family workers (ONS, 1998).

which generates wages, and unpaid work for the employer which generates profits, interest, and rent for the employer.² Marx (1976) suggests that, in this sense, employees may be considered exploited under capitalism through unpaid work, as unpaid labour time benefits the employer (Spencer, 2009, 54). Feminists extend the definition of unpaid work to include unpaid housework — and other tasks of social reproduction performed within and away from the home — and, importantly, care (Himmelweit, 1995). The distinction between forms of unpaid work is important. Unpaid overtime is time for which there is no remuneration, but which is forgone to work. Unpaid housework represents work over which there may be more choice. However, the extent to which gendered norms may limit this choice is of key concern.

During the past two decades working routines have undergone a number of major changes, especially for those in dual career households. These include advances in Information and Communication Technologies (ICT), globalisation, and changes in the structure of employment, including the growth of the service sector. These have all had significant impacts on the way paid work is now conducted, and have led to greater labour market insecurity (Coyle and Quah, 2002; Nolan and Slater, 2003). In addition, female labour market participation has increased. Long hours cultures associated with male employment remain evident, especially among managerial and professional occupations, where commitment is also expected (White et al, 2003, 191; Sirianni and Negrey, 2000, 72). These changes to the nature of paid employment have created greater requirements for flexibility and mobility from employers (Boulin, 1993).

The flexible nature of work is considered, in this thesis, in reference to both *flexibility for the employer* and *flexibility for the employee* (as recognised by Costa et al, 2003). The former refers to the formal and informal workplace

² Radical economics developed in the US in the latter half of the twentieth century and is critical of the capitalist system, and thus of mainstream economics. Radicals argue that mainstream economics simply accepts existing institutions, such as the market, as given. It also creates closed systems through assumptions, resulting in a narrow conception of the world. Mainstream economics is considered as a major obstacle to resolving inequalities, as it ignores capitalist exploitation and power (Spencer, 2000, 546-7).

policies driven by customer demands, production goals, or other organisational requirements. The latter refers to flexibility in work and work-time driven by individual employees' preferences and needs. Flexible working is increasingly available to highly skilled workers, with a range of options available to help individuals and their households create a better balance between work and life (BERR, 2008; Clutterbuck, 2003). Measures include flexi-time, compressed hours, part-time, and teleworking. Flexible working aims to allow workers to alter their patterns of work to better suit their preferences, with consideration given to the impact of caring responsibilities on patterns of time-use (McDowell et al, 2006). Employers also benefit from flexibility, for example through extended opening times. However this may mean flexibility is driven by a focus on *flexibility for the employer*, not employee welfare.

Females, especially in managerial and professional occupations, today display a greater commitment to the labour market. This is reflected in terms of labour market participation, and in fewer women taking extended career breaks to have (and care for) children, while greater numbers remain in full-time employment following child birth. Household patterns of time-use have been significantly impacted by these changes. While some households may split responsibilities and tasks between partners, some do not (Hardill, 2002). Women are as a result often tasked with the majority of household and caring responsibilities (McDowell et al, 2005). The extent to which this may impact on women's careers is of great concern, due to the enduring link between full-time hours and perceived commitment (Jones, 2003; Sirianni and Negrey, 2000). Given the increasing gender equity in paid employment, in terms of work-time and participation, the more central question remains, is this equity also found within the home?

Paid work is becoming more mobile, led by advances in mobile technologies. It is increasingly leaking out of organisations, and being performed on the move, during travel, on trains, in railway stations and airports (Felstead et al, 2004). Similarly commutes have become increasingly complex during the last twenty years, with average journeys increasing in time and distance. Workers exhibit much more varied and diffuse patterns of travel, but reliance on the car remains a major feature of the journey to work, especially outside London and the South East (Pooley et al, 2005). This poses a particular problem as current policy seeks to reduce reliance on the car as a method of transport to work, as congestion and pollution have become key policy objectives (Department for Transport, 2006; 2007). Another key challenge for policy is that some workers are using the commute as an alternative to permanent residential migration (Green, 1995; Hardill and Green, 2003; Hardill et al, 2006), making for complex and intense patterns of travel for work, potentially impacting on both individual and household.

Given the growing complexity of work and home life today, this PhD contributes a theoretically informed empirical investigation of time allocation. Focus is on contemporary patterns of work and commuting among managers and professionals in dual career households. The thesis draws on strands of economic theory, human geography, sociology and social policy, and business and management to provide a gendered perspective on the complex lived experiences of members of these highly skilled households. This thesis seeks to answer three key research questions. These are:

- Which theoretical approach(es) mainstream, institutional or feminist

 offer the most suitable explanation of individual and household choices and constraints in the allocation of time?
- 2. Do distinctions need to be made within the Professional-Managerial Class (PMC), and are these distinctions occupational and/or gender specific?
- 3. What challenges, in a policy context, do dual career households face in managing the combined demands of work-time, caring and commuting?

To answer these questions a mixed methods approach is employed. This begins with a review of theoretical approaches to the allocation of time (especially work-time). Here mainstream economic approaches are critiqued using institutional and feminist economics. Relevant evidence and policy perspectives are then drawn out from academic and policy literature. The empirical element of the thesis combines the analysis of published secondary data sources for the UK, with a quantitative-qualitative case study of organisations in Greater Nottingham, a major employment centre of the East Midlands region. Data are taken from two large-scale national data sets suitable for analysis at both national (NUTS 1) and regional (NUTS 3) levels of aggregation. The data are the *Labour Force Survey*, which provides an individual perspective of those employed in the UK. This is complemented by the *Census of Population Special Licence Household Sample of Anonymised Records* (Census SL-HSAR),³ which allows analysis to be conducted at the level of the household.

Local analysis is conducted through a series of interviews with Human Resource Managers at 10 organisations in Greater Nottingham. In addition data is drawn from a survey of 81 managerial and professional households where at least one of the respondents was employed by these organisations. This element of the PhD also provides the opportunity to evaluate changes over time, by comparing the results of the 2006 case study with primary data collected as part of the 'location and mobility decisions of dual career households' project funded by the Leverhulme Trust (grant F/740) (see Hardill and Watson, 2004).

1.2 Concerning Dual Career Households

This thesis focuses on managers and professionals in dual career households, exploring lived experiences at the level of the individual and household. Dual earner households are those where both partners are in paid employment (McDowell et al, 2006, 145). Dual career households differ from dual earner households in that both partners are employed in highly skilled occupations i.e. managerial, professional or associate professional occupations (Hakim, 2000, 111). These households are characterised by both partners exhibiting a deep commitment to the labour market by pursuing a 'career'. An important note must therefore be made here in defining this term. A 'career' may be defined as "a succession of related jobs, arranged in a hierarchy of prestige through which persons move in an ordered sequence" (Wilensky, 1961, 53). Sennett (1998) describes a career as a succession of jobs of increasing levels of responsibility

³ "Data is Crown Copyright and reproduced with the permission of the Controller of HMSO".

throughout a working life. Equally the career may be viewed as a series of upward moves along a corporate ladder (Savickas, 2000, 55). Savage (1988) categorises three alternative career advancement, or social mobility strategies, that can be adopted in pursuing a career:

- 1. *Organisational strategy* in which the individual pursues his/her career by moving upwards through the structure of an individual (often large) organisation;
- 2. *Entrepreneurial strategy* in which a self-employed individual aims to become a small, and possibly large employer of labour;
- 3. *Occupational strategy* in which an individual continually invests in skillsbased (usually occupationally specific) assets — typically gaining experience with a range of different employers — in order to pursue his/her career within their profession.

However, paid employment is increasingly characterised by transactional relationships. There has been a movement away from long-term work relationships, as careers are now multi-directional, with acknowledgement given to both the needs of the organisation and the individual (Baruch, 2004). Success in multi-directional careers may be achieved through sideways movements, and/or movements between organisations. Equally careers may involve changing aspirations based on the individual seeking to maximise satisfaction, work-life balance, autonomy or freedom. Promotion will also be sought, which brings with it increases in income, rank, and status.

It must also be acknowledged that women often develop their careers differently from men. The distinction arises between 'practitioners' and 'careerists' as types of employee (Crompton and Sanderson, 1990). Careerist's take a linear route up the organisational ladder, often dependent on gaining qualifications, but may move between employers to make upward movements. Practitioners, in contrast, are not on career paths, are often in part-time employment, and job movements are sideways, not upwards. However it should be noted that these career structures assume an uninterrupted working life, something that is characteristic of men, but not women. Women's careers are more likely to be discontinuous including breaks to have children. While women display a deep commitment to the labour market, especially among highly skilled workers, the assumption of continuous employment seems to disregard the complexity of the female career. The household is an important site of non-market production. In many households domestic responsibilities, including caring, are predominantly undertaken by female partners (McDowell et al, 2005). If we are concerned about gender equality there is a need for a more adequate valuation of caring, and inclusion of caring in analyses of time-use (Folbre, 2001). Gendered roles within the household further impact on the flexibilisation of the family, and on employment patterns (Chapman, 1999; Nyberg, 2000). When both partners in a household have a deep commitment to the labour market, expressed in pursing a 'career', there are important impacts on the household through complex schedules. Key issues include shopping on the way home from work, dropping children off at school, and living in the most appropriate location to facilitate a multi-earner, and multiactivity, household (Jarvis et al, 2001, 25).

The economic nature of gendered roles has changed within the family and the household over recent decades (Folbre, 1994). This period has witnessed a growth in the number of dual career households in the UK, driven in part by the greater commitment to the labour market among women, and the growth in the service sector. Dual career households represent a growing minority of households. According to Green (1995) estimates from the 1991 *Census* indicate 1.21 million dual career households (6% of all couples in the UK); this had increased to 2.23 million (approximately 10%) in 2001 (Wheatley, 2008). The growth in this category of household has further resulted in the polarisation of 'work-rich, time-poor', and 'work-poor, time-rich' households (McDowell et al, 2005). Also noteworthy is that dual career households are concentrated in London and the South East. However, significant numbers are located in the remaining regions of the UK, including the East Midlands.

Research has suggested that the benefits for partners within dual career households, including increased household income, may outweigh the practical inconvenience of having no full-time homemaker, especially when dependent children are not present (Philliber and Vannoy-Hillier, 1990). Dual career households, however, must attempt to 'manage' two separate work schedules, alongside the shared projects of the household, creating real barriers to partners achieving a meaningful life together. This makes modern family life complicated and potentially problematic to maintain in the long run (Carnoy, 2000, 116). Moreover where partners do embark on two careers and have dependent children, this may require some form of full-time care. This may take the form of paid care or that provided outside of the market by friends or family members (Harris et al, 2007). It is females, more often than not, who compromise their career by fitting paid work around their household and caring responsibilities. They subsequently experience stress and anxiety from combining paid work with the home (McDowell et al, 2005).

The dual career household therefore represents a key site for analysis as it operates as a nexus for wider economic, cultural, demographic and spatial change (Buzar et al, 2005). Moreover dual earner households, of which dual career households are a subset, have been described as being the optimum 'survival kit household', surviving in a world of labour market insecurity. Flexibilisation of contemporary employment patterns, coupled with the deinstitutionalisation of the family, have resulted in significant change in the relationships between gender, economy and work (Buzar et al, 2005 429). And this thesis seeks to explore these changes for households where partners are employed in managerial and professional occupations.

1.3 Managerial and Professional Occupations

Managers and professionals encompass a large number of occupations and the grouping of these occupations into a single category for analysis is the subject of debate in this section. Together managers and professionals account for approximately 28.1% of those actively involved in the labour market in England (ONS, 2009). Individuals in both managerial and professional occupations are engaged in control and governance functions within their organisation. They create order through the implementation of an abstract decision process, and both create hierarchical relations to achieve this. Both managers and professionals apply their expert knowledge to both the office and the person (Hardill, 2002).

Careerists include managers (bureaucratic careers) and professionals. The debate on bureaucracy in sociology is extensive, founded on Max Weber's notion of rational-legal authority, in a hierarchically arranged, co-ordinated and specialised work environment (Hardill, 2002, 13). Typically, managerial and professional occupations demand a high degree of commitment and are intrinsically demanding in character (Rapoport and Rapoport, 1976). Labour market restructuring, changes in employment relationships and trends in the nature and spatial configuration of managerial and professional work, have created a new world of work, changing the demands faced by many in these occupations (see Box 1.1). Increasingly careers take on a non-linear form, while the boundaries between work and home have become increasingly blurred. There has also been an increasingly broad use of both manager and professional to describe roles.

Work organisation	Spatial reconfiguration
Externalisation of labour and ongoing organisational restructuring;	An apparent expansion in the spatial horizons of managers and professionals for career development - often necessitating international mobility;
A more highly qualified workforce but with different demands: 'commitment', 'putting the job first', presenteeism, and willingness to be mobile;	The blurring of business travel, short term business assignments and residential mobility;
More non-linear careers – with periods of labour market disconnection and investment in education capital through skills updating and skills enhancement; and standard employment contracts;	The re-arrangement of the spatial and temporal linkages between home and work, with tasks for paid work undertaken in a variety of locations such as while travelling, whilst at home, and whilst socialising;
The emergent centrality of Information Technology (IT) skills;	Residences increasingly chosen for their access to a number of labour markets (near to motorway hubs/ airports); or willingness to be a dual location or commuter couple.
More remote ICT-based work: through use of laptops, fax machines, cellular telephones, etc - 'enabling' individuals to work anytime, anywhere (including at home, commuting, business trips).	

Box 1.1: The new world of work for managers and professionals (*Sources*: adapted from Stanworth (2000, 23) and Hardill (2002, 12-13)).

Baran and Sweezy (1966) have explored the role of senior managers in the modern corporation from a radical perspective. Control of modern corporations is in the hands of senior management rather than shareholders, and management is viewed as a self-perpetuating group where, "each generation of managers recruits its own successors and trains, grooms, and promotes them according to

its own standards and values" (1966, 29). This renders managers more dependent on organisational career ladders compared to professionals (Savage et al, 1992).

Baran and Sweezy (1966) have senior managers in mind in their discussion. However it can be argued that relatively junior managers are similarly assimilated into this culture. At both senior and more junior levels the key unifying characteristic of the managerial role is the imposition of work on others. This may take the form of an "intensive" or "extensive" imposition of work. The latter — long hours of work — is often perceived as equating with commitment. The role of managers is the 'surveillance and regulation' of industrial processes on behalf of the firm or organisation; "the modern manager is dedicated to the advancement of the company: he is a 'company man'" (Baran and Sweezy, 1966, 43). However, it is the selective and moulding effects of institutions that are responsible for the behaviours of this 'company man'.

As a sector of employment 'management' has expanded over the last two decades. Bruegel (1996, 1433) describes the growth in the number of managerial grades, which she terms 'job title inflation'. Bruegel finds increases in managerial titles above other occupations in the service sector, including professionals. Crompton (1980, 117-119) highlights that positions increasingly carry managerial titles for 'cosmetic' reasons. The result is "an increasingly liberal use of managerial titles, over and above any occupational upgrading" (Breugel, 1996, 1433). Therefore, if this is true, the increase in management employment is more about descriptors rather than fundamental change.

Similar to the increases in the use of the term 'manager', there has been an increase in the use of the title 'professional', especially in roles associated with the service sector and ICT. These 'emerging' professions, for example the 'IT professional' (Sullivan, 1995), represent a departure from the traditional understanding of professionals in the context of honorific professions: law; medicine; and clergy. These were linked, in pre-Reformation England, to thenestablished institutions of church and state (Hardill, 2002). As a consequence there is more ambiguity in the public mind as to what occupations really are professional.

Professional practice differs from the bureaucratic in that professional expertise is derived from formalised training based on the organisation of knowledge. There is a creation of a mystique amongst an élite and the dependence and disabling of those who come to the professional as a client. Professions control knowledge; they create specialisations, celebrating depth rather than breadth. Professionals act autonomously, perhaps choosing to refer a difficult case to a more experienced colleague. But, they do not answer to a hierarchy of offices in the way the bureaucratic organisation envisages. Professionals offer detached 'understanding' and the portrayal of a professional concern (Hardill, 2002, 14-16). In this sense managers and professionals are different.

Many of today's professionals are no longer sole practitioners, but are part of the workforce of large bureaucratic organisations, whether it is in multinational companies, legal practices, or large hospitals (Hardill, 2002). The placement of professionals within large bureaucratic organisations, many of which pursue profit above all else, does not always support 'service' according to high professional standards as targets, deadlines and bureaucracy intervene. This has resulted in a decline in autonomy, traditionally associated with professional occupations. Indeed, Beck and Young (2005, 183) note that "professional practice is being more or less radically restructured, sometimes by direct government intervention, sometimes as a result of the more indirect but no less potent effects of marketization". Moreover, advances in technology, whether it is in hospitals, schools, universities or offices, have transformed the nature of work for many professionals. This has led to a blurring of the very nature of what it means to be a professional (Mahoney and Hextall, 1998, 15). The movement of professions towards a corporate structure has been accompanied by an increasing tendency for managers to seek professional status. Perhaps the greatest indication of this is found in the rise of the Master of Business Administration (MBA) degree (Hardill, 2002). More recently Doctor of Business Administration (DBA) degrees have begun to be offered, implying managers can achieve professional qualifications and status.

Changes in the labour market participation rates of women, and the feminisation of the labour market, have had a significant impact on managerial and professional occupations. The 'organisation man' has been replaced by the 'flexible woman' (Castells, 2000, 12). Delayering and team-working within organisations has increased the significance of 'feminised' patterns of working (Adkins, 2000). However, the key role of the manager in imposing work on others remains, regardless of gender. This has particular gender implications as the masculine nature of management acts as a barrier to females' career progression. Careers for female employees may be limited if they do not obey the norms of 'time-devouring male employment' cultures (Sirianni and Negrey, 2000, 72), built on the premise of the male-breadwinner, female-homemaker view of the household (Horrell and Humphries, 1995). As Liff and Ward (2001, 27) suggest, "women who leave work at 5pm are seen as scoring own goals". For female managers with considerable household responsibilities, opportunities for promotion are limited by their perceived lack of commitment.

To a certain extent this may be the result of the differences in how commitment is perceived by the male and female workers themselves. Singh and Vinnicombe (2000) suggest that females view commitment as involvement, availability, and being concerned for people. Meanwhile men view commitment as being innovative, adding value, and taking on challenges. Where female managers are in place, in many cases, they must abide by the traditionally viewed masculine characteristics of a manager. Women managers may be perceived as possessing negative qualities including bitterness, selfishness or being quarrelsome. However, this may simply reflect their assimilation into managerial cultures.

Professionally qualified women may be eased into sex-differentiated managerial roles, either in sales or human resources, where they are more likely to manage other women rather than men (Devine, 1992, 568). Devine suggests these positions offer women greater opportunities to move into managerial roles, because of the demands they face in combining paid employment with household responsibilities. As Evetts argues a department cannot be managed on reduced or flexible hours. She suggests that professional career ladders may therefore be more suitable for women (Evetts, 1994, 106). Gendered differences aside, this is indicative of both a disregard for the potential mutual benefits flexibility offers, and also of the lower levels of flexibility found in many managerial occupations.

The extent to which it is appropriate to group together managers and professionals has been subject to debate. For example Weber (1947) conflates 'professional' and 'managerial' characteristics. Parsons has argued that this fails to differentiate between 'professional services' and 'administrative hierarchy' (1947, 54). Some, such as Ehrenreich and Ehrenreich (1979), have grouped professionals and managers into a single class, the Professional-Managerial Class (PMC). They suggest the PMC is distinct from the working and capitalist classes, resulting in a '*three*-way polarization' in society (1979, 42). And the PMC is distinct from other classes in that it consists of 'salaried mental workers who do not own the means of production' (1979, 12).

Goldthorpe (1995) groups managers and professionals together within his 'service-class'. The service-class is a class of employees composed of managerial, professional and administrative workers. Goldthorpe suggests grouping these workers together because "it is employment relations that determine class positions, not the nature of work tasks and work roles *per se*, nor the degree of autonomy, authority etc. that is conferred to the individuals performing them" (1995, 315). Members of the service-class are characterised by a 'service relationship'. Employees supply their services to their employer in return for compensation, in the form of a salary (and various prerequisites). However, it is difficult to monitor the effort made by the service-class due to the nature of their work. Organisations therefore secure the 'moral' commitment of their workers through the construction of career ladders with prospective rewards, such as salary increments, pension rights and career opportunities (Erikson and Goldthorpe, 1992, 41-2).

Goldthorpe (1995, 319), suggests that the division between managers and professionals is 'one of situs', or functional context, and thus both are components of the service-class. In defending this categorisation Goldthorpe presents empirical evidence relating to mobility and marriage rates, which are considered to show more similarities than differences (1995, 320). While such data are interesting, they do not offer a thorough analysis of the disparate nature of the working patterns and occupational requirements of managerial and professional occupations. Goldthorpe (1995, 315) himself refers to key

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differences between these two occupational groups with reference to "professional autonomy" and "managerial or administrative authority".

Further criticisms of Goldthorpe can be made; for example Esping-Anderson has reaffirmed the need to differentiate between 'scientists-professionals' and 'managers-administrators' (1993, 13). There thus appears to be controversy about whether managers and professionals should be grouped together or not. Even if the notion of PMC is accepted it is nevertheless important to recognise the diversity of occupation groups within that class.⁴ Ehrenreich and Ehrenreich (1979) argue that by the middle of the twentieth century the PMC was 'minutely splintered', as they identify a key conflict between managers, administrators and engineers, and those employed in the liberal arts and service professions. While the first category is directly tied to business and industry, those in the second category are more likely to enjoy the 'relative shelter of the university or other non-profit agency' (Ehrenreich and Ehrenreich, 1979, 28). There is clearly a conflict then between what might broadly be identified as those in managerial roles and those in 'service professions', or between 'business and industry' on the one hand and 'non-profit agencies' on the other. Goldthorpe (1995) actually acknowledges further disparities between managers and professionals, in the form of political differences. Goldthorpe states that,

"the former (managers), reliant chiefly on organisational assets, tend, like employers, to be politically conservative; but the latter (professionals), through their command over cultural assets, have greater independence of employers or employing organisations and are thus more often of a radical or at least non-conservative kind" (1995, 323).

In terms of qualitative differences the issue of autonomy has been historically important in distinguishing managers and professionals. Managers (bureaucrats) represent the impersonalising, routinising, world of conformity. In contrast professional autonomy is characterised by the creative dynamic role of 'knowledge' (Savage et al., 1992). Individually, some professionals may act autonomously, with minimal hierarchy. However, there has been significant

⁴ This thesis recognises the use of the term PMC, but focuses on managers and professionals as occupation groups rather than considering them a class apart from other workers.

diminution of this autonomy in many professions during the last two decades. Many professionals are increasingly part of the workforce of large bureaucratic organisations. This may result in professionals being in conflict with managers of such organisations. For example medical doctors are principally concerned with delivering the best care they can for a particular patient. However, managers (in implementing *organisational* policy) are frequently charged with some form of cost-minimisation. While, historically, professionals may have been viewed as having an intangible output, increased managerialism seems indicative of more and more surveillance in previously exempt arenas.

In spite of the "blurring" of managerial and professional occupation there remain key differences in the nature of these occupations, as 'managers are not professionals in the sense that doctors and lawyers are' (Baran and Sweezy, 1966, 42). The essential role of both senior and junior managers is, generally, the imposition of work on other employees. This distinguishes them, fundamentally, from professionals (traditionally characterised by autonomy) and other workers. As Esping-Anderson suggests (1993) 'scientist-professionals' and 'managersadministrators' comprise groups with distinct characteristics. This is a key distinction for this thesis. The debate over the grouping of managers and professionals will be investigated further in the empirical chapters of this thesis.

1.4 Thesis Outline

After this introduction, the thesis is divided up into eight chapters. Chapter 2 provides an in-depth and nuanced discussion of a range of theoretical perspectives on time allocation, seeking to address the first research question. This begins with a discussion of mainstream individual labour supply theory, followed by Becker's (1976) theory of the allocation of time. Hakim's (2000) preference theory, a gender sensitive extension of mainstream theory, is then explored. Both of these mainstream approaches are critically examined in reference to a range of heterodox perspectives, drawing primarily on institutional and feminist economic theory, with discussion also drawn from radical economic theory. The institutional perspective is then explored, drawing on the work of theorists including Veblen (1909), Commons (1931) and, more recently, Hodgson (1988). These highlight the impact of customs, norms and habits on the

preference formation of individuals. Economic theory is then criticised, from a feminist perspective, for focusing on the individual, lacking acknowledgment of the household. This discussion draws on Folbre (1994) and Nelson (1995). Finally a theoretical perspective on care is considered, i.e. the feminist ethic of care (Williams, 2002).

Having developed a theoretical framework for the thesis, Chapters 3 and 4 comprise a review of academic and policy literature. Chapter 3 begins with a brief account of the history of work-time, before providing a discussion of the current work environment in the UK. The chapter then provides a discussion of evidence, including the policy literature, exploring key themes of work-life balance, flexible and home-working, and working hours. Policy discussion focuses on the *Working Time Regulations* and the *Work-life Balance Campaign*. Chapter 4 explores mobility, commuting and travel undertaken for the execution of paid work. This chapter initially focuses on the changing nature of mobility and employment, before exploring research on commuting patterns and policy. This includes discussion of current transport policy which focuses on reducing car use, including congestion charging and the proposed workplace parking levy in Greater Nottingham. The chapter brings the discussion together by considering contemporary issues of household mobility, including the concepts of nodal living, and the commuting migration trade-off.

The methodological approach to the empirical analysis is presented in Chapter 5. This includes discussion of the rationale for the use of mixed methods, the choice of secondary data sources, and the use of a case study approach. This chapter details the statistical techniques used in the subsequent empirical chapters, including cluster analysis and regression analyses.

Chapters 6 to 8 comprise the key empirical analysis and results chapters of the thesis. Initial analysis is conducted, in Chapter 6, using the *Labour Force Survey* (LFS). This material explores issues of work-time and presenteeism, preferences for work and the relative dissatisfaction with hours between occupation groups, and commuting patterns, at the level of the individual for managers and professionals in the UK. Discussion also centres on the differences between

managerial and professional occupations, and whether it is appropriate to group these occupations, as in the PMC. Chapter 7 then expands the analysis to include household data from the *Census Household Sample of Anonymised Records* (Census SL-HSAR). This chapter also provides the first results from the case study of Greater Nottingham, reporting findings from both the interviews with human resource managers and the survey of managers and professionals. The chapter highlights further problems of long hours, but focuses on the impacts of caring and the flexibility of contemporary work. Conflicts and issues surrounding human resource and public policy are reported. Chapter 8 then provides a comprehensive analysis of commuting behaviours in the East Midlands and Nottingham, including evidence of nodal living and the use of the commute as a substitute for migration. Focus then turns to gendered differences in work and commuting, reflecting on gender inequality in the workplace and at home.

Chapter 9 is the concluding chapter, which draws together the key findings of the thesis (including the theoretical debates). This chapter offers brief reflection on the effectiveness of the mixed methods approach, and summarises the contributions to knowledge offered in this thesis.

2

Theory on Time Use: The Individual and the Household

2.1 Introduction

This chapter develops the theoretical framework for this PhD. It explores a range of theoretical approaches to the allocation of time. This addresses the first research question by reporting on the adequacy of different approaches in attempting to explain contemporary patterns of time-use, especially work-time. Important to this thesis are concepts of time allocation which recognise not only the individual, but also the household. Theory must also acknowledge the different choices and constraints faced by men and women in the use of time, and the impact of such activities as caring.

Key to the debates of this chapter is the concept of constraint. It is essential, therefore, to define this term in reference to its use in this thesis. When used in mainstream utility theory, as described in the next section, constraint refers primarily to the idea of the 'budget constraint', i.e. the set of combinations of goods (including leisure) just obtainable given a level of income. Extensions of mainstream theory, such as Becker (1976), consider a range of constraints faced by economic agents, including time and goods constraints, as well as production relations. Becker suggests these can be grouped into a single 'total resource constraint'. In general, mainstream approaches view constraints as fixed or exogenous.

Institutional economists, in contrast, see constraints as more fluid, influencing and forming social norms and behaviours. Feminist economists, such as Folbre (1994), also recognise the influence of external factors. Collective bargaining, for example, results in the development of social norms. This leads to the creation of what Folbre (1994, 6-7) terms 'structures of constraint', which limit individual decision-making. Also of key concern to feminists is the concept of the household and how the household can act as a constraint, influencing individual decision-making. This broader conception of constraint is that which is used in this thesis, with the exception of the discussion of mainstream theory provided in this chapter.

Also important to this thesis, and key in determining the choice of theoretical approaches explored, is the distinction between positive and normative economics. As Friedman described, "positive economics is in principle independent of any particular ethical position or normative judgements" (1953, 181). It deals with what is, as opposed to what ought to be. In this approach economics becomes an objective science. This view is adopted by many mainstream economists, for example Becker (1976). However, the idea that research can be conducted 'value free' is somewhat questionable, given that economics deals with the analysis of human behaviour. Economics is linked to both ethics and the theory of rationality (Hausman and Mcpherson, 1953, 252).

This chapter begins with an exploration of the mainstream economic approach to labour supply, as well as Becker's (1976) extension of this theory incorporated in his theory of the allocation of time. The chapter then continues with a discussion of Hakim's (2000) gendered extension of mainstream theory, focussing on the alleged different preferences of women. These mainstream approaches are critically reviewed with reference to heterodox perspectives. These include institutional and feminist economic theory, with criticism also drawn from radical theoretical perspectives. Institutional theory is then discussed through the work of such theorists as Ayres (1951), Commons (1931), Veblen (1909), and Hodgson (1988). This work highlights the importance of habits and norms and the effect of institutions in determining patterns of time allocation. The investigation then moves to feminist theory, exploring this with reference to the work of Folbre (1994) and Nelson (1995), among others. This body of work treats the activities of the household as central. The final section discusses the work of Williams (2004), who proposes a feminist ethic of care. As such this thesis does not disregard positive economics, but is critical of the failings of much mainstream research which excludes families, society and institutions, equity, and normative concerns (Nelson, 2004, 11).

2.2 Neoclassical Theory of Labour Supply

This section is concerned with the 'neoclassical' approach to labour supply. The foundations of mainstream economics can be traced back to the 1870s. At this time there was growing focus on the concepts of marginalism and utilitarianism. The term that developed to describe this change in the nature of economic theory was 'neoclassical' (Colander, 2000, 131). This description was initially coined by Veblen (1900), in describing the work of Marshall. At this time neoclassical theory was not 'mainstream'. However, by the late 1930s the term 'neoclassical' had extended to encompass all marginalist theory including that of Jevons and Menger. Subsequently it has been used in a much broader sense to refer to the use of calculus, marginal productivity theory (Colander, 2000, 131), and a focus on simultaneous relative price determination through the interaction of supply and demand. Its use in this thesis reflects this broader definition.

Neoclassical, or mainstream labour supply theory, is founded upon the model of rational choice. The concept of rational choice is founded on a series of axioms. These characterise the 'rational' behaviour of an individual and begin with the concept of 'preference'. Preference denotes that if a situation A is preferable to a situation B, then the individual will be better off under situation A. This relationship assumes three basic properties. The first is that an individual can, without indecision, rank their preference for two or more alternatives, referred to as completeness. The second is that an individual will be consistent in their decision-making, so that if they prefer situation A over B, and B over C, then they will also prefer A over C. This is referred to as transitivity. Finally, the concept of preference also assumes continuity. If A is preferable to C, then situations close to A will be preferred over situations close to C.

The mainstream approach to an individual's choice concerning hours to be worked, in its simplest form, involves a choice between work and leisure, subject to an income or budget constraint. The model begins with the premise that an individual will obtain a level of utility contingent upon income derived from work and leisure time. The model assumes the only utility generated from work is the income received. Leisure also generates utility. Marginal utility of leisure is assumed to always be positive, so that greater hours of leisure are always preferable; this can be termed 'leisure-as-bliss' (Spencer, 2006). Implicit in this is the nonsatiation axiom. The 'rational' individual wishes to maximise their utility, and is assumed to be 'free' to determine the hours they wish to work. This relationship is shown in Figure 2.1a.

The choice of how much labour to supply (hours worked), and how much leisure time to take, is made simultaneously. The model assumes the two are mutually exclusive.⁵ For an individual the maximum length of the working day is represented by H_m . This may reflect physical, mental or legal limits. It is important, too, to consider the existence of non-linear income (i.e. benefits) which may impose a floor. This is represented by 0b in Figure 2.1a. There are different wage rates in the example depicted in Figure 2.1a, given by R_1 , R_2 , and R_3 . Preferences are reflected in the indifference curves I_1 , I_2 , and I_3 . Given the particular preferences of this individual a backward bending labour supply curve can be observed, as in Figure 2.1b.

Concentrating on the labour supply curve, as the wage rate increases from R_1 to R_2 , the individual offers to work longer hours, at the cost of leisure time. The individual experiences both a 'substitution effect' and an 'income effect' concurrently. The substitution effect is greater below wage rate R_2 . The increase in the wage from R_1 to R_2 will result in the individual tending toward work as the relative cost of leisure increased. The income effect, however, is greater beyond wage rate R_2 . The individual will tend toward leisure and offer fewer hours of labour beyond R_2 as they are able to have more income and leisure by working fewer hours at the higher wage rate. The individual's labour supply curve is therefore backward bending. Hours worked can be represented by the function,

$$H = f(w, b)$$

⁵ It has been argued that the time taken for individuals to consume goods should be included in the analysis of time-use, but that this may generate contradictory results (Steedman, 2001, 17-19).

For a given individual's set of preferences, working hours (H) are a function of, and therefore determined by, the real wage (w), and real non-labour income (b).



Figure 2.1a: Neoclassical income-work trade-off

Figure 2.1b: An individual's labour supply curve

A number of objections have been made to the assumptions made in this model of labour supply. For example, Spencer (2006, 461-2) highlights two issues with the assumptions of the neoclassical model, specifically in relation to leisure time. He suggests that the marginal utility gained from leisure is heavily dependent on the nature of this leisure time. Spare time for those on welfare payments is unlikely to be used in the same way as it will be by wealthier individuals. Second, he highlights that unemployment is not the same as leisure time. As such unemployment cannot be classified as leisure. Issues relating to the classification of leisure time are returned to throughout this chapter. This suggests it is inappropriate to treat the commute and caring as forms of 'leisure'.

Preferences for Work

A simplified version of mainstream preference theory, which does not rely on a complete preference map, has been offered by Samuelson. Samuelson (1948) considers an individual's choice between two goods, which could, in the context of this thesis, refer to income and leisure. It is suggested that by examining different combinations of goods (in this case income and work) preferred outcomes can be inferred, thus revealing the preferences of the individual. For a given budget line the individual will choose their preferred combination of goods in each situation. The combinations of goods which lie on the same indifference curve as the preferred outcome, are neither better or worse solutions for the individual. The individual is indifferent towards them. The budget constraints, R_1 , R_2 and R_3 , from Figure 2.1b can be used to observe an individual's 'revealed preferences' at points A, B and C.

Neither indifference curve analysis nor the revealed preferences approach, though, recognise the constraining role of institutions, as argued by institutional economists, in moulding preferences through customs, norms, and habits. Nor does it acknowledge the role of gendered and household norms influencing individual behaviour, as does feminist economics. These perspectives are discussed further in this chapter. The concept of 'revealed preferences' is distinct from 'stated preferences' which are used in most survey research, and indeed in this thesis. 'Stated preferences' refers to the preferences of individuals considered in reference to the responses they give to questions, for example, the

responses given regarding preferences for reductions in hours of work. These are explored in detail in Chapter 6.

The representation of the derivation of working hours presented by mainstream theory, and in Samuelson's (1948) preference determination, is limited in its uses due to over-simplification. The simple work-leisure trade-off model of an individual's labour supply neglects a number of important factors including the evolving constraint, which will be explored in the next section. However, it is important to develop an understanding of this model, and indeed the distinction between 'revealed' and 'stated' preferences. This provides a basis from which to begin the analysis of extensions and alternatives to mainstream theory in the subsequent sections of this chapter.

2.3 Working Hours under Constraint

A number of alternative arguments exist which build on the mainstream rational choice model, but place greater emphasis on the effect of a time-constraint. Böheim and Taylor (2003, 113-4) reject the standard theory of labour supply. Empirical evidence from the British Household Panel Survey (BHPS) and theoretical standpoints suggest that working hours cannot be varied continuously at the discretion of the individual. Instead they are a product of employer preference, the level of local labour demand, individual demographics and unobserved effects specific to the individual, which vary with time. These factors are likely to obstruct the individual in attaining their preferred equilibrium between hours worked and leisure. Tummers and Woittiez (1991, 409-10) also argue that the mainstream view of working hours is deficient, as they look at the effect of restricted hours caused by job availability. They find that where there are restricted hours, there exists a non-linear budget constraint, as wages decrease with hours worked. This, it is suggested, provides a better estimation of the distribution of working hours. For example, women work fewer hours per week than their male counterparts as their hours are under greater constraint (McDowell et al, 2005). This reflects their greater household responsibilities. In contrast, many male workers are subject to greater financial compunction, influencing their preferences for work. This is evident among workers who state they cannot afford to work fewer hours (Hewitt, 1993, 70).

Modelling Constrained Hours of Work

Constrained hours of work are represented in Figure 2.2 (Bosworth et al, 1996, 24). The budget constraint for the individual is represented by abd. Given this budget constraint the individual's preference may lie on indifference curve I_2 . However, HH is the hours the individual is constrained to work, for example eight hours per day. The individual must therefore either work the constrained hours (at point f on indifference curve I_1) or not work at all. The individual will participate in the labour market if they can achieve a higher level of utility at the wage rate by working these constrained hours, than not working at all. Some employees will therefore work fewer or more hours than would be preferable with a conventionally drawn constraint. However, there may be a number of hours. These include, for example, holding more than one job, working overtime, or undertaking part-time employment.



Figure 2.2: Constrained working hours (Source: Bosworth et al, 1996, 24)

There are a range of other examples of working hour determination under various constraints. Firstly, workers who receive fixed salaried pay. This includes many managerial and professional workers (as discussed by Schor, 1993, 68-72). This renders their budget constraint flat, as represented in Figure 2.3.



Figure 2.3: Income-work trade-off for salaried workers

The individual receives fixed salaried pay, which is equal to R_s . This does not alter regardless of the number of hours they may work. In this case the constraint H_L represents the minimum number of hours an individual needs to work in order to complete the tasks required by their employment. An individual may gain some utility from work up to a point (H₁). So, they may actually work over the hours required to complete their tasks, i.e. they may want to do a 'good' job. This resonates with Spencer's (2009) suggestion that work may create some level of utility, or satisfaction. Given the minimum hour constraint (H_L), an individual must work at least this number of hours or forgo work entirely. However, workers may equally be forced into working longer hours (H₁ or above). Both H_L and H₁ represent important constraints, resulting in some workers having to work long hours for their employer.

It is possible that salaried workers may also be restricted in their hours of employment (this is represented in Figure 2.4). This results in the individual working H_s hours on indifference curve I_1 , for a salary of R_s . Salaried workers may, however, have the opportunity to work a number of hours (H_s48) at a higher rate of pay as paid overtime, up to the maximum 48 hour working week legislated by the WTR. The individuals' budget constraint will therefore take on a 'kinked' shape, denoting the higher rate of pay for any overtime worked. These working patterns are regularly found in call centres. However, most managerial

and professional workers, who are the principle focus in this thesis, do not receive overtime payments. For these workers overtime is likely to be unpaid.



Figure 2.4: Income-work trade-off for salaried workers offered paid overtime

Work-related Activity

The mainstream income-work model of working hour determination can be criticised as it does not consider time spent on work-related activity. Instead they simplify the individual's choice of how much labour to supply into a trade-off between leisure and income. There is reason to contest this simplified representation of an individual's allocation of time. The labour-leisure dichotomy employed in the standard account of labour supply neglects time spent in work-related activity, and that spent commuting.⁶ An alternative measure of productivity offered by Harvie et al (2009), which is a more appropriate indicator of well-being, is *social productivity*. This measure considers productivity, but unlike traditional measures, takes account of the 'toil and trouble' of producing goods and services. Importantly, measures of productivity should include time forgone. However, social productivity is excluded from government measures of productivity, as they consider it irrelevant from the market perspective. McQuaid

⁶ Note that although the commute is considered as a form of unpaid work-related activity in this thesis, it is separated from other work-related activity as there is greater choice over the (length of the) commute. However, the extent to which the commute may represent a compromise or constraint is considered later in this chapter and in Chapter 4.

et al (2001) suggest the mainstream work-leisure trade-off should include time lost to work-related activity, such as commuting. A more appropriate representation of an individual's time would account for unpaid work-related activity, the commute, and the tasks of social reproduction (TSR). A simplified representation of this is shown in Figure 2.5. Work-related activities may have clear constraining effects, limiting or influencing individuals' preferences for hours of work. Time allocation theories founded on choice are therefore unsatisfactory.



Figure 2.5: An individual's allocation of time

The analysis of alternative working patterns and constraints, in this section, underlines the adaptability of mainstream labour supply theory. The model has been used in a range of scenarios such as the case of salaried workers, representative of many managerial and professional occupations. Nonetheless, the concentration of the neoclassical analysis on the choices of rational individuals, the gender blind nature of its analysis, and the questionable assumptions upon which it is founded, leave it open to criticism from a number of other theoretical standpoints.

2.4 Becker's Theory of the Allocation of Time

An extension to mainstream theory, in the context of the allocation of time, is offered by Becker (1976). He argues that for individuals who work it is improper to focus on work-time in isolation from non-work-time. If there is a period of time when one is not engaged in work there are foregone earnings associated with this decision. Hence work-time can be expressed in terms of wages, and non-work-time can, in principle, be expressed in terms of wages foregone. Becker (1976, 91-98) therefore proposes a 'full income' approach to an individual's time-use, using an equilibrium solution concept.
If full income is denoted by *S*, and total earnings forgone by the interest in utility, *L*, then (Becker, 1976, 93),

$$\sum p_i b_i Z_i + L(Z_1, \dots, Z_m) = S$$

L is a function of the commodities (Z_i) as how much is earned or forgone is dependent on the consumption set (e.g. Z_i) chosen. If average earnings, represented by \hat{w} , are interpreted as being constant and independent of Z_i , the equation can be can be written as (Becker, 1976, 93),

$$\sum (p_i b_i + t_i \hat{w}) Z_i = V + T \hat{w}$$

With,

$$\pi_i = p_i b_i + t_i \hat{w}$$
$$S' = V + T \hat{w}$$

The full price of a unit of Z_i (π_i) is the sum of the prices of the goods and of the time used per unit of Z_i . \dot{S} is a resource constraint which gives the money income achieved if all time is devoted to work, if \hat{w} is interpreted as being constant and independent of Z_i . V represents other income, $T\hat{w}$ is time at work, and $t_i\hat{w}$ is time at consumption. Achievable income is spent directly on goods, $\sum p_i b_i Z_i$, and indirectly through the income forgone, $\sum t_i \hat{w} Z_i$, by using time at consumption rather than at work.

This provides the equilibrium, utility maximising, condition,

$$U_{i} = T(p_{i}b_{i} + L_{i})i = l,...,m$$

 $p_i b_i$ is the direct, and L_i the indirect component of the total marginal price, $p_i b_i + L_i$.

In Becker's analysis the level of income earned is dependent on the consumption set chosen. Achievable income is spent on goods or, if foregone, on non-work activities such as consumption time (with the latter being viewed as a commodity). The results of Becker's analysis, when applied to hours of work, indicate that 'pure rise' in income will result in a reduction in working hours.

According to Becker some activities, such as child care, do have relatively large forgone earnings associated with them. However, child care is not considered leisure as such. Thus Becker maintains that the concept of forgone earnings is of greater importance than any concept of leisure, rendering the investigation of leisure unnecessary. Indeed the "economist can reach all his traditional results as well as many more without introducing it (leisure) at all" (Becker, 1976, 100). While this may be formally correct, it is not clear why monetary equivalents should conceptually take logical precedence over expressing commodities and incomes in terms of the time required to produce them.

Mackie et al (2001, 92-3) criticise Becker for not acknowledging that activities such as work can generate positive as well as negative utility. In addition Mackie et al suggest that one of the key limitations of Becker's approach is that constraints result in some activities taking more time than would be preferable, while some activities come with a minimum time constraint, for example working hours for salaried employees. This conflicts with the concept of indifference between activities, and highlights the importance of time as a unit of analysis. Given these limitations the currently accepted micro-founded mainstream position is that individuals derive utility from consumption of goods and the time spent in different activities (Hess et al, 2005, 228). Under this framework individuals are assumed to allocate their time and consumption of goods between activities, including work, leisure and travel, in order to maximise utility. Their utility is, however, subject to certain constraints, notably the total amount of time available, wealth, and the minimum amount of time required for activities to take place. The mainstream approach, though, remains limited by its focus on choice, and by the assumptions upon which it is founded.

There are a number of further objections which may be made to Becker's analysis, for example at a behavioural level. Human beings may wake-up in the morning and consider what they might earn, or what they can buy. Alternatively, they may consider how they are going to pass their time, and economic concerns might be secondary to other motivations which are social, relational or altruistic. This is not acknowledged by Becker (1976) and he consistently reduces one form of relationship — marriage — to a contract-based institution broadly similar to a capitalist firm. Time and relationships are thus simply extensions of market processes. As Hodgson observes:

"Although modern neoclassical economists widely recognise the need to analyse the household in terms of the individuals composing it, the result is to treat all the relations between the individuals along purely contractarian lines. Symptomatically, in this approach there is no conceptual dividing line between the family and the marketplace ... Accordingly, neoclassical economics is unable to conceptualise the specific institutional features of the household and the special human relations within that sphere." (1999, 112)

Criticism of Becker is offered from a range of perspectives, including radical, institutional, and feminist. For example, Spencer (2004a) argues that although Becker's analysis incorporates some of the earlier understanding of the disutility of labour into the analysis of labour supply, its focus remains too narrow. Becker suggests that work-time contributes to the creation of non-market 'goods' and 'bads', and that these commodities affect the decisions as to the allocation of time. However, the focus remains between wages and working hours, solely from the perspective of the opportunity cost of work-time. The 'disutility of labour' in Becker's analysis only alters the willingness of workers to accept the wages offered in a particular role. It has no causal effect on worker effort or motivation. Becker does not consider the possibility of workers resisting work and of managers extracting effort from employees (Spencer 2003: 2004).

Radical theorists criticise mainstream approaches, such as Becker's, for ignoring capitalist exploitation, and importantly, power (Spencer, 2000, 547). For example, work by Philp (2001) and Philp et al (2005) has argued that the power of respective classes is important in generating outcomes in contemporary conflict over the length of the working day. In this sense management and hierarchies may have an important role in imposing work on employees, and thus in determining working hours at the organisation level, as discussed in Chapter 1.

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Mainstream models, and their extensions, which are based on choice may therefore be severely limited.

Institutional economists, for example Hodgson (1988, 14), suggest that Becker's theory is limited by the assumption that preferences do not change through time. For Becker there is no social formation of preferences. This assumption not only leaves preferences outside the economic system, but incorrectly results in them being considered as constant or fixed. It is conceded, however, that Becker does acknowledge that preferences do 'change' through time, and that these changing preferences are included in the stable or fixed preferences assumed in his system (Hodgson, 1976, 111). Becker argues that notions of irrational behaviour and ignorance, explained by social scientists through customs and traditions, are "ad hoc and useless explanations of behaviour" (Becker, 1976, 13). Hodgson labels Becker's assumptions of permanent preferences to be similarly 'ad hoc'. Utility analysis is therefore of questionable worth and operational value in this context (Hodgson, 1988, 117).

Feminists criticise Becker for disregarding caring and the household (Nelson, 1995, 142). Becker did address a key critique from feminist economists. In a later work he included caring and housework in definitions of work (Becker, 1985). However, one of the key limitations of Becker's approach is that it remains grounded in rational choice theory, considering self-interested individuals. It does not adequately account for the household. Nor does it acknowledge the heterogeneity of individuals. In this sense it is limited and remains somewhat 'gender blind'. Given this limitation the next section extends the discussion of mainstream theory, considering Hakim's gender sensitive approach.

2.5 Hakim's Preference Theory

Hakim's (2000) approach attempts to provide a gender sensitive analysis, focusing on the employment preferences of women, and how they differ from their male counterparts. However, this approach has been subject to much criticism, especially from feminist theorists, who consider it limited by its mainstream basis in self-interested rational individuals.

Female Employment Preferences

Hakim argues that female employment preferences represent a distinct case to that of males. In her model, males are treated as a homogenous group with strong preferences for full-time paid work (Hakim, 2000, 158).⁷ Women are modelled as heterogeneous, displaying a range of preferences for work and family life. Hakim splits women into three broad groups in relation to their preferences; (1) home centred preferences, mainly found among those preferring not to undertake paid work; (2) work centred preferences, which represent mainly childless women committed to work and equivalent activities; and finally (3) adaptive (a combination of work and home) preferences. The latter comprise those who want to work, but are not committed to it. Mainstream theory is criticised for assuming that all individuals are homogenous, and for being grounded solely on male behaviour (Hakim, 2000, 30-1). Hakim argues that women should be included explicitly in labour market analysis as they undertake the majority of part-time and non-standard jobs. They require acknowledgement in theoretical and policy analyses. In common with Becker, Hakim maintains that most women in wealthy countries have relatively unconstrained choices.

Hakim suggests that the diverse preferences of women result in a conflict between the aforementioned groups. This conflict in the preferences of females leaves them disadvantaged in the labour market in comparison to the more homogenous case of males (Hakim, 2000, 5). However, a key critique of Hakim is that her analysis begins with clearly defined preferences. As with the critique of Becker, institutional and radical perspectives argue that preferences are shaped in the process of social interaction.

Hakim has been challenged for her lack of acknowledgement of constraint, and the gendered constraints resulting from the household dynamic. These are prevalent in feminist economic theory (see Folbre, 1994; Nelson, 1995; Bell, 1974). Women may not simply have preferences for or against paid work, but may be forced into undertaking paid labour, or into providing full-time care for

⁷ This itself can be criticised. Males may simply be constrained to work full-time, just as females are constrained to work fewer hours, or care.

children or elderly relatives. Even where paid work is found, the uneven division of labour within the household is likely to leave females under greater constraint than their male counterparts (McDowell et al, 2005).

Further criticism is provided by Crompton and Harris (1998, 119) who comment on earlier versions of Hakim's work. They argue that the orientations to work, which Hakim describes as the main driver of women's working behaviours, are of relatively little significance in comparison to the work-life biographies that women construct based on their historically available opportunities and constraints. The reasons for women's choices are explained better, not by their preferences, but by structural constraints. Hakim's embrace of mainstream explanations of women's behaviour does not adequately acknowledge constraint. As Crompton and Harris (1998, 120) point out, "women — and men — can choose but are also constrained".

Harris et al's (2007, 501) exploration of part-time workers highlights that female patterns of work are dominated, not by personal preference, but instead by family and household responsibilities, limiting them more than men. These women are more appropriately described as "aspirational but constrained" in comparison to either of Hakim's categories of adaptive preferences, "career orientated" or "not career orientated". Women may simply be constrained into adapting their preferences as a response to the continuing gender inequity they face at work and in the home (Leahy and Doughey, 2006). Women may not pursue certain careers as they may consider them out of reach. Out of adaptation their preferences change so that they feel they do not want to work towards a career.

Hakim's approach is controversial and has received much criticism. Her extension of mainstream theory attempts to provide a gender sensitive approach, but succeeds only in categorising women by their 'preferences'. This, as with other mainstream approaches, is founded on the assumption of choice. Hakim's approach ignores the compromises and constraints faced by women as they combine paid employment with household obligations. In contrast this is a key component of feminist theory explored later in this chapter. Mainstream approaches are also limited as they do not recognise that preferences are influenced and formed. This is a principal focus of institutional economic theory.

2.6 Institutional Economic Theory

Institutional economics offers an alternative perspective to mainstream economic theory. Historically there have been three meanings to institutionalism (Samuels, 1988, 1-2). First, the term has been used to refer to a movement against the dominant mainstream approach to economics. Second, it has been used to refer to problem solving: seeking to work out solutions to the problems of advanced industrial economics, largely in areas relating to welfare and labour. Third, institutionalist economics has attempted to create a body of knowledge which differs from mainstream economics, as it seeks to explore the organisation and control of the economic system, especially in terms of power relations.

Institutional theory is widely regarded to be an American phenomenon. Leading early institutional theorists included Veblen, Commons, Mitchell and Ayres (Rutherford, 2001, 173). A strong European branch has developed in recent decades, particularly through the work of Hodgson (1988), which forms a significant element of the discussion in this section. The key argument of institutional theory is that social institutions form a central and essential role in moulding the preferences and guiding actions of individuals and firms (Hodgson, 1988). The important elements of institutionalism, in the context of this thesis, are the concept of customs, norms, and habits, influencing and forming individual behaviours. As a precursor to this, however, this section begins by defining the term 'institution'. The term covers a variety of notions and concepts. An institution is defined by Commons (1931) as,

"Collective action in control, liberation and expansion of individual action. Its forms are unorganized custom and organized going concerns. The individual action is participation in bargaining, managing and rationing transactions, which are the ultimate units of economic activity. The control by customs or concerns consists in working rules which govern more or less what the individual can, must, or may or may not do. These are choices resolved into performance, forbearance or avoidance while participating in transactions." (1931, 648). Institutional theory follows the perspectives of behaviourism. This approach locates human action within institutional structures — norms, customs, habits as an alternative to the mainstream approach which is focused on individual preferences (Dugger, 1979, 903). Veblen, another of the founders of institutional economics, defines institutions as, "settled on the habits of thought common to the generality of men" (1909, 239). Institutions are described by Veblen (1909) as the primary form of social structure — a set of norms and customs which are imperfectly reproduced through habituation — thus habits are the primary form of human practice (Lawson, 2003, 213). Customs form a primary focus as it is argued that collective action is more universal in the unorganised form of custom than it is in the organised form of concerns (Commons, 1931, 651). For example, in addition to the employment contract, customs and norms at work may determine acceptable dress, workplace etiquette, and indeed working hours, such as arriving at work at 9am, and finishing at 5pm. As such the preferences of an individual develop out of norms, customs and habits. Norms are reproduced through the development of habits in each generation of individuals (Dugger, 1979, 902). Customs and habits may change with shifts in economic conditions. Present institutions consist of the 'residue' of ancient institutions, influenced by changes in technology. Technology has shaped modern society, increasing the significance of mobility and the fluidity of modern institutions (Ayres, 1951, 51).

Institutions mould the preferences of individuals (Veblen, 1899). This is a departure from mainstream theory which regards institutions simply as tacit or given constraints, which restrict otherwise free behaviour. For institutionalists the individual is 'free' to make choices within the constraints they face in the present. These choices, although 'free', are a product of routine and habit, and are influenced by the structure and culture of the system. Mainstream theory, in contrast, does not view 'free' behaviour in the present as a 'reproducer of routine', which may develop into constraint in the future (Hodgson, 1988, 134).

Critiquing Mainstream Theory

Institutional economics rejects mainstream economic theory. It argues the economy is inseparable from a host of social and political institutions. In contrast mainstream theory, such as labour supply, offers detached understanding and is founded on a number of assumptions, for example the questionable axioms of rational choice (Ayres, 1951, 49). Becker and Hakim's extensions to mainstream theory similarly suffer on the basis of these assumptions. Institutionalists maintain that social and economic change cannot be explained by human wants or scarcity — both of which are determined by institutions and technology — but can only be explained in reference to social forces (Ayres, 1951, 50). Institutional theory replaces *homo economicus* — 'economic man' — with what is termed 'institutional man'. The former offers a methodologically individualistic account of human behaviour. Institutional theory instead derives of behaviours and norms in different societies (Kapp, 1968, 2). The importance of institutions is that they create the consistencies found in the mass behaviours of individuals which empirical quantitative studies analyse (Mitchell, 1925). Institutions influence behaviours and create societal norms.

Mainstream theory supposes a closed-system, where a variable environment denotes equilibrium which may or may not be reached. This assumes that the environment consists of fixed functions which govern the preferences of individuals, and productive techniques (Hodgson, 1988, 19). Economists regularly use the term '*ceteris paribus*', and it is the factors held constant which institutionalists' suggests limits the arguments of mainstream economists (Hodgson, 1988, 53-71). Institutionalists suggest the socio-economic system evolves. As Veblen states, "by one method or another, institutions change and develop ... the development of these institutions is the development of society" (1899, 190). Social patterns are not the outcome of individual acts, but instead individuals and their actions are the outcomes of social patterns.

In contrast, the mainstream approach results in social phenomenon being explained through the summation of individual parts to social wholes, ignoring the importance of social processes in shaping individual preferences and habits. The continuing influences of social institutions — the household, the employer, social culture or roles — are not recognised by mainstream theory (Hodgson, 1988, 68). But, as Dugger argues, institutional structure determines the range of alternatives available to the individual (1979, 902). The preferences of a

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household are thus not simply decided by the individuals within it, but are continuously influenced by social institutions and culture (Hodgson, 1988, 68-9).

Institutional economics has itself faced a number of criticisms, not least from mainstream economists. For example, Mirowski (1981, 593) reports that institutionalism has been labelled as empiricist, and lacking any coherent theory. Relatedly, institutional economics has been labelled descriptive rather than analytical (Witte, 1954, 135). However, as Ayres (1951, 55) among others have argued, this view is mistaken. While empirical work comprises a significant portion of institutionalist studies, empiricism does not produce the body of theory found in institutional economics. In addition, many of the major advances made in economic theory are the by-product of empirical study (Witte, 1954, 135). This highlights its importance in the generation and evaluation of theory.

Mainstream theory has attempted to explain institutions in the neoclassical framework, often referred to as neo-institutionalism. However, Mirowski (1981) criticises these attempts for empowering the individual with 'natural powers' so that the individual embodies market organisations and optimisation. The preferences of the individual are expanded to include a range of hypothetical situations. Constraints are re-defined from those acknowledged and accepted in institutionalist theory. Mirowski (1981, 610) argues that mainstream theorists change the definition of 'individual' until the logic of their argument works.

Institutions and Working Hour Determination

Mainstream theory considers the number of hours worked by an individual to be determined by their exogenously given preferences for income and leisure, subject to a budget constraint. This relationship is also reliant on the axioms of rational choice theory detailed in section 2.2. However, these axioms have come under criticism. For example, labour should not be considered homogenous. Among other things, this neglects the impact of work on human welfare (Spencer, 2009, 95). Schor also reported that individuals tend to 'adapt' to their environments. Their preferences, as such, adjust over time (1993, 129). Contrasting the mainstream view that work is associated with disutility, Veblen suggested that any resistance or aversion to work will be culturally determined

(Spencer, 2009, 99). Moreover, Hodgson (1999, 101–116) contends that empirical evidence casts doubt over the nonsatiation axiom, and that the accumulation of skills and habits, rather than rational deliberation, causes social change. The indifference curves which form the foundations of mainstream approaches to labour supply are problematic. Mainstream analyses of labour supply can thus be considered flawed (Philp et al, 2005, 80).

As a response to these problems Philp et al (2005) have developed an institutional perspective on working hour determination, drawing on Commons and Marx. The issue is, if forty hours per week is the work-time norm for a particular historical period, why have the accepted hours become forty hours? Commons (1921) and Marx (1976) both recognise the importance of the legal framework, social norms, and struggle between capital and labour. Conflict over working hours may well involve individual decision-making, but irreducible social forces have a considerable part to play as well (Philp et al, 2005). Mainstream theory can therefore be criticised for reducing the hourdetermination process to a simple individual optimisation programme. Philp et al argue that even if individuals have some control over their working hours, it is likely that this 'choice' is less significant than the institutional and evolutionary forces which determine the constraints they face (2005, 81). Thus an institutional approach to working hour determination is more complete than the partial account offered by mainstream economics.

Interestingly, a number of parallels have been drawn between institutionalist and feminist theory. Institutionalist theory maintains that no part of human behaviour is private, or remains untouched by cultural and social norms. The preferences of households are not decided by individuals, but are influenced by social structures and norms. This has congruence with feminist theorists. They argue that the mainstream treatment of some parts of life as private, or disconnected from society, forms a key driver in the subordination of women in Western culture (Waller and Jennings, 1990, 619). However, one of the key differences between these approaches is that feminist theory views the household as central in decision-making. Gendered norms, too, influence individual and household

behaviours. Given the focus of this thesis, on dual career households, it is essential therefore to explore such feminist perspectives.

2.7 Feminist Economic Theory

Feminist economic theory is critical of mainstream economic theory for its focus on a self-interested rational individual. Institutional perspectives deliver a more appropriate view of decisions over work-time and Hodgson's work, for example, includes some discussion of the household. Feminist theory considers the centrality of the household. This section outlines feminist economic theory. It explores women's roles in paid and unpaid work, and how they differ from their male counterparts. Feminist critiques of mainstream approaches to labour supply are discussed. Applications of feminism to some of the key themes of this PhD are also explored, including notions of the division of labour within the household, gendered decision-making, constraints regarding paid and unpaid work, and time-constraints.

In economics, feminism has developed in three key stages or waves. First wave feminism occurred between the mid-nineteenth and early twentieth century and focused on gaining equal rights of contract and property, and opposing the ownership of married women (and their children) by their husbands (Folbre, 1994, 147).⁸ Second wave feminism developed in the period from the 1960s to 1990. The focus of second wave feminism was highlighting gendered economic differences and the role of women in economics. During the 1970s and 1980s a number of mainstream economic theories were criticised by feminists, including the microeconomics of the household and labour markets, macroeconomics and international trade (Peterson and Lewis, 1999). However, some have argued that it was during the third wave of feminism, in the 1990s, that feminist economic theory found its voice. It should be noted this was later than in other social science disciplines (Ferber and Nelson, 2003). Meagher and Nelson (2004, 102-3) suggest that the slow adoption of feminist thought in economics was led by two factors. First, economics, unlike many other disciplines, is dominated by a

⁸ Early feminist thought included Wolstonecraft's *Declaration of the Rights of Women*, published in 1792, and the work of the economist Bentham in 1800 (Folbre, 1994, 147).

single paradigm — neoclassical theory — and a single methodology that puts a heavy emphasis on mathematical analysis. Secondly, the assumptions found in economics — in its models, methodology, findings and policy prescriptions — are male-centred. Economics consistently reflects only the 'masculine' argument.

Critiquing Rational Choice Theory

Feminist analysis of the mainstream approach to labour supply reflects on its disregard for social and emotional dimensions of human behaviour. Feminists, including Nelson, argue this should be considered a serious limitation, rather than a sign of rigour as it is often perceived by mainstream economists (1995, 137). The model of individual choice in markets is considered the distinguishing characteristic of economics by Becker (1976, 5). Similarly, Lucas (1987, 108) stated that the assumptions of the mainstream model provide "the only 'engine of truth" in economics. In contrast, feminists contend that both of these approaches do not reflect demand for robustness, but instead promote the continuation of gendered bias in economic modelling and analysis (Nelson, 1995, 137).

Although families are considered by many mainstream economists, including Becker, they are only 'economic' if they can be modelled in terms of choices and markets. Feminist theorists contend that for females the family has, historically, been more directly 'economic'. The family, in this context, provides economic security for women. This remains the case for some as their fortunes are tightly associated with the economic and social status of their partner. Arguments have been conducted between economists, and indeed *Census* takers, over whether to classify unpaid household tasks in the home as work or leisure (Folbre, 1991).⁹

⁹ The Industrial Revolution played an important role in the development of feminism due to its impact on the location and structure of work. The resulting division arose between 'home life' (including unpaid work, such as childcare) and 'work' (paid work). The domains of work and the home became separated in both spatial and gendered contexts (Horrell and Humphries 1995). This led to an increasingly narrow perception of work. Eventually housework was removed from the *Census* during the early twentieth century. The responsibilities of females, including caring for children, and the elderly, have since been neglected in economic analysis (Folbre, 1994, 95), giving rise to the male 'bread-winner' female 'homemaker' model.

Feminists argue that individuals are embedded in a household context and that individual choice is constrained by others. A person's ability to participate in the labour market, undertaking paid work, is dependent upon the amount of unpaid work they undertake, and their responsibilities within the household. The labour market participation of men and women is therefore very distinct. Women still undertake the bulk of unpaid work in most households (Sirianni and Negrey, 2000, 62; McDowell et al, 2005). Unpaid housework is now recognised by some economists, including Becker, as an important variable in rational choice models of labour supply. There is also an admission that housework is not a subcategory of leisure which had previously been the assertion of mainstream theory (Faulkner, 1986, 56). Definitions of unpaid work have been broadened by feminist theory to include housework and, importantly, caring (Himmelweit, 1995). However, the idea of ubiquitous 'choice' for many is still questioned. Women, particularly those that are married/co-habiting and/or have dependent children, can only 'choose' between paid work outside the home and unpaid work inside the home (Bell, 1974, 621). Increasing pressure is felt by households for both partners to remain in some form of paid employment. Many women's choice may thus be limited to unpaid work in the home plus either full-time or part-time paid work outside the home.

Many economists do not consider humans to be 'homo economicus'. However, human behaviour is modelled in this way, as it appears the most useful and rigorous starting point for objective economic analysis. But, this results in significant gendered biases (Nelson, 1995, 136). The 'economic man' of mainstream economic theory is rational, independent, property owning, and self-interested with no regard for others. Faulkner argues that this describes white male opportunity only, and has little relation to the experiences of women (1986, 60). The dominance of mainstream theory limits the exploration of any behaviour other than that of the self-interested individual. Analysis should acknowledge that we are born, and require a significant input from our parents (or others) in terms of caring, not to mention the role they play in moulding preferences. Family provides social contact early in life, before colleagues and friends. The home also provides sustenance. These facts are frequently disregarded by mainstream economic analysis. They are considered unimportant, intellectually

uninteresting, or natural. These areas of life are those thought of as 'women's work'. Nelson argues that modelling human behaviour requires greater acknowledgement of all the above factors (1995, 136). They are characteristics of all economic agents, whether they be male or female.

Feminist theorists further contend that the mainstream approach is inadequate for exploring female decisions to work or care, for example, for women when they become mothers (Himmelweit and Sigala, 2002). It assumes individuals will choose the option which gives them the greatest utility, based on two assumptions. The first assumption is that there is a clear separation between the external constraints that determine which options are feasible. The second is that the decision maker takes account of all factors that could affect their utility. Himmelweit and Sigala argue, however, that mothers may not simply make their choice whether to continue in paid work in this manner. Himmelweit (2002) argues that any decision could be inputted into the rational choice model. However, it ignores the real processes involved in decision-making (Himmelweit, 2002). In particular the decision over whether to offer full-time care to another (whether a child or relative) will not simply be made solely taking account of the individual's own preferences.

Mainstream economic theory does provide conditions under which this non selfcentred approach to decision-making can be modelled using the concept of the family or household. The household is seen as a single decision-making entity. While this allows analysis into decision-making, it only fits the model of the male-breadwinner, female-homemaker, severely limiting its application to contemporary analysis. Regarding their labour market participation and worktime, females should be considered as decision makers (Himmelweit and Sigala, 2002, 3). Indeed, with the increasing fluidity of work and rising household working hours the male-breadwinner, female-carer model, may no longer offer an appropriate reflection of social reality (Esping-Anderson, 1999).

Gender and Constraint

A major constraint faced by women is whether it is financially worthwhile for them to remain in the labour market. This choice must be given significant consideration with a number of factors affecting the decision, including costs of caring, cost and time associated with travelling to work, loss of time with their child, and loss of time to perform household tasks (Himmelweit and Sigala, 2002, 12). Where females are in dual earning households only those in paid employment with high earnings (including managerial and professional occupations) are likely to remain in full-time employment. Even then, females often compromise their careers as the household and personal relationships are central influences on their preferences and decisions (Harris et al, 2007). Females, as a result, may reduce their working hours, while some leave the labour market entirely to care for their children (Sirianni and Negrey, 2000, 62). However, increasingly women display a greater commitment to the labour market, remaining in full-time employment for the duration of their careers.

Commitment to the labour market does not, though, substantially alter the number of household tasks females perform. Nor does it result in a significant redistribution of household labour between men and women commensurate with their paid labour (Sirianni and Negrey, 2000, 62). The availability of new household technology has also failed in causing a substantial shift in household labour. As Schor argues, this is because technology creates new tasks (while reducing the burden of others), and may create higher standards within the household environment (1993, 86-8). In this sense the household can be considered a site of conflict and inequality, as gendered norms influence the allocation of the tasks of social reproduction.

Many women who undertake paid work perform a 'second shift' of unpaid work within their home. Research by the Institute of Management suggests that over 50 per cent of women managers perform all household tasks, including ironing, shopping, cleaning and cooking (Fieldman, 1999). A study of female domestic time-use explored the division of labour within the household, and the time taken to complete tasks (Sullivan, 1997). This highlighted that females were under greater constraint within the household, undertaking more tasks than males. In addition, free time experienced by females was likely to be more fragmented. Add to this the additional pressures of paid work and the picture of female time allocation is particularly complex and demanding. For women who are employed outside the home, this results in a "double day" becoming the norm. Women are subject to a paid work day *and* an unpaid work day at home. This results in greater time inequalities between men and women. Married/cohabiting women employed outside the home have the longest working weeks of all. MacDonald et al (2005) use Canadian data to show that this results in greater levels of stress among women as they combine paid work with lengthy hours of unpaid work. Women also considered hours spent on household responsibilities, and caring for elderly relatives, to be more stressful than engaging in paid work. Paid work and household work combine to create a significant 'time squeeze' (Sirianni and Negrey, 2000, 62). Women's time is thus subject to much greater constraint.

The analysis of feminist theory presented in this section has highlighted a number of weaknesses and concerns regarding the use of mainstream economic theory in modelling the behaviour of workers. The lack of consideration for the differences in the habits, behaviours and constraints of males and females, renders the mainstream model inappropriate. This is particularly notable for the analysis of mothers. Feminist theory extends the perspectives on work and the household, introducing the broader notion of constraint defined at the beginning of the chapter. This section has highlighted how gendered norms within the household can result in women feeling a greater 'time-squeeze' (Schor, 1993; Southerton, 2003) as they perform a 'double day' (Sirianni and Negrey, 2000, 62). This may result in high levels of stress for females (MacDonald et al, 2005), particularly among those with greater responsibilities in the labour market such as managerial and professional workers. This may also have significant impacts on their careers should they attempt to utilise flexible working arrangements to offset their constraints within the household.

2.8 The Feminist Ethic of Care

The previous section presented a number of problems with mainstream approaches to work-time, especially the lack of adequate acknowledgment of care, as outlined by feminist economic theory. This section seeks to present a potential solution to these problems, with reference to the feminist ethic of care. Care is a key component of many people's lives. It influences (paid) work and household decisions, and importantly may have significant impacts on the allocation of time, constraining individuals, especially women. This section focuses on care, specifically exploring the feminist debates over an 'ethic of care'. Care may take place in the market sphere, as paid work. However most caring takes place within the non-market sphere by friends and family members.

"Care may assume duty and responsibility, it may involve love and commitment, but the focus upon carers and the notion of care as unvalued labour carried out by oppressed women obscures the fact that caring is a relationship which may involve unequal relations of power between the carer and the cared-for person" (Williams, 2002, 508).

Feminist debates for an ethic of care began in the 1960s and 1970s. At this time women's demands focused on attempting to gain improved child-care support facilities for women to enable them to work. These were followed by attempts to gain recognition of women's caring for older, sick, and/or disabled family members (Williams, 2002, 508). Highlighting and gaining acknowledgment of these issues was significant in that they posed a major challenge to the post-war welfare settlement, which was characterised by the invisibility of informal care (Land and Rose 1985). During the 1980s, political and feminist theorists began to develop an explicitly gender-sensitive approach to moral inquiry, overcoming previous uneasiness about engaging in debates of morality and ethics (Meagher and Parton, 2004). By the late 1990s the ethic of care was established and used to add weight to debates around 'work-life balance', an issue that has gained prominence in a number of countries within Europe.

Williams suggests that policy and practice in Britain is relatively less developed than in much of Europe (2002, 509). Moreover, the focus of modern political theory, on independence, may be representative of men's moral frameworks, founded on the notion of rights, subject to public and rational assessment. However, women's moral frameworks are founded on a notion of responsibility, which is related to individual circumstances (Gilligan, 1982). The promotion of greater equality therefore requires a system of social support which encourages and facilitates social interaction, not individual competitiveness (McDowell, 2004, 156). This forms the concept of the ethic of care.

The inequity of care between genders is at the centre of the argument of the ethic of care. In addition, the ethic of care seeks adequate acknowledgment of care as a valid activity for both men and women, which requires time, financial input, and practical support (Williams, 2002, 510). There is a need for both care of the self, and care of others, to be seen as meaningful activities in their own right. These activities must be acknowledged as involving not just women, but men and women, old and young, able-bodied and disabled. Williams argues that at different stages of life, individuals may be care givers, or care receivers. Indeed, care is an activity which binds everyone (2002, 509).

The ethic of care is based upon a series of assumptions (Meagher and Parton, 2004). First, the ethic of care highlights the interdependence of individuals and their responsibilities to each other, rather than solely focussing on rights. Second, it recognises the equal moral worth of all people, and highlights the importance of informal relationships. Third, emphasis is given to caring as moral posture or disposition. People *should* be compassionate and empathetic to one another, responding to each new person as a unique and irreplaceable individual, recognising that decisions are made within a specific context. Fourth, caring is a process which influences and nurtures those involved in caring relationships, and their willingness to take on responsibilities of this nature. Significantly, these assumptions reject traditional moral theory, whose foundations are 'masculinised' and centred on rights (Tronto, 1993, 9). Also central to these assumptions are normative statements and value judgements. These contrast with the positive scientific approach favoured by mainstream economics.

With increases in female labour market participation, and the decline of the male bread-winner model, both old and new issues of gender equality must be engaged with at a policy level. The ethic of paid work does not meet the needs of people with regards to the use of their time and the quality of their relationships. A more adequate balance is needed between paid work and time for the household. Welfare policy, for example (which often focuses on the rational independent individual), is limited in the number of empirical situations that it can adequately explain. While some women may concentrate their time and efforts on personal projects (their careers) for some of their life-time, many still do not (Duncan et al, 2003, 327). The emphasis of current policy models are therefore limited by the processes they consider central. They neglect the importance of social links and moral responsibilities and obligations. These shape the division of labour and the working behaviours of men and women giving care. Mothers for example make socially and morally founded decisions about correct and incorrect behaviours (Duncan et al, 2003, 327). However, these decisions may vary between different social and spatial environments.

Work based policies relating to care have been influenced by the increased political status attached to time. There has been a change in the valuing of 'goods'. Male employees can no longer request a 'family wage'. Instead, it has become more acceptable for men to press for 'family time' (Williams, 2002, 511). Time is the key variable in the consideration of employees and employers alike, as is care which may drive the needs and requirements of many workers for flexibility. Care requires reflection when exploring issues of time allocation. It forms a significant element of contemporary time-use; one which has constraining effects for dual career households, who combine multiple demanding work schedules with the tasks of social reproduction.

2.9 Conclusion

The purpose of this chapter was to apply a range of theoretical perspectives to the allocation of time. This chapter has sought to address the first research question, and has been used to develop a theoretical framework for this PhD. Specific acknowledgement has been given not only to the individual, but also the household, and household tasks of care; this is central to the analysis in the latter stages of this thesis. Central issues affecting time-use, including gendered divisions, and the impact of care, have also been considered, as these form significant elements in the discussions in subsequent Chapters.

In summary, this chapter has argued that mainstream economists' approach to time allocation, extended by Becker, are unsatisfactory with regards to examining household and workplace activities. The mainstream approach to labour supply simplifies individual time-use to a trade-off between work (income) and leisure. Extensions to this theory were explored, including the impact of constraints, before the focus turned to Becker's theory of the allocation Becker's (1976) rational of time. choice approach suffers from oversimplification and over-use of assumptions. Becker's analysis does not adequately acknowledge that preferences change through time, and are influenced by a range of factors. Employers, for example, may have a significant influencing effect on the preferences of employees. Moreover, Becker's analysis is 'gender blind'. Hakim offers an extension of mainstream theory, which attempts to provide a gender sensitive analysis. She criticises mainstream theory for assuming all individuals are homogenous, and for being grounded solely on male behaviour (Hakim, 2000). Hakim suggests females are heterogeneous, displaying a range of preferences for work and family life (2000, 158). However, Hakim's approach is severely limited as it assumes women make free choices which reflect their preferences. This ignores key issues of constraint and inequality. Mainstream approaches are also criticised from a radical economic perspective for ignoring key issues of power in determining behaviours and constraining choice (Philp, 2001; Philp et al, 2005).

Institutional theory offers a critique of mainstream theories, and of Becker in particular for ignoring the continuing influences of social institutions. These mould the preferences of the individual, whether originating from the household or the firm, or as a result of social culture or roles. Mainstream theory is inadequate because it is based on a number of problematic assumptions. Thus, it does not view 'free' behaviour in the present as a 'reproducer of routine', which may become constraints in the future (Hodgson, 1988, 134). Institutionalist approaches suggest that the preferences of a household are not simply decided by the individuals within it, but are continuously influenced by social institutions and social culture. Institutional approaches take account of the constraints faced by households, and additionally connect different elements of time-use including consumption time and household labour time. However, little explanation is given to the complexities of the household, including the household division of labour and caring responsibilities.

The household is in contrast a primary focus of feminist theory (Folbre, 1994; Nelson, 1995; Bell, 1974). Feminist theory critiques rational choice approaches

for their persistent focus on 'homo-economicus'. Mainstream economic theory has traditionally ignored the household, and unpaid household labour, termed 'women's work'. Feminists also consider the home to be a site of conflict and inequality. Many women (and some men) are constrained to perform two jobs — paid employment and household work — leaving them under significant time constraints. This is particularly acute among 'career' women who may undertake significantly greater responsibilities within the household. Women, more so than men, therefore make decisions in the context of the household, with consideration for managing paid work alongside domestic responsibilities and care. The act of care requires greater acknowledgment at a policy level, with many proposing an ethic of care (Williams, 2002). The ethic of care would seek to address the inequalities involved in care giving, including impacts on the careers of care providers.

Acknowledging the limits of mainstream theory, the contributions from two heterodox traditions have been explored in this chapter. These provide more appropriate theoretical foundations for explaining complex contemporary patterns of work-time, care and commuting. The approaches are complementary. Institutional theory reflects that research must adequately acknowledge influences on individual and household decision-making in regards to habits, customs and norms, such as normalised hours of work. Meanwhile feminist theory considers the role of gender and the household and accounts centrally for constraint. This mix of heterodox theory therefore provides the theoretical framework for the remainder of this PhD. The subsequent chapters review a range of academic and policy literature. First, work-time and care are considered, in Chapter 3, and then mobility and commuting, in Chapter 4.

3

Work-time, Work-life Balance, and Care in the UK

3.1 Introduction

This chapter draws on published academic and policy literature taken from economics, human geography, sociology and social policy, and business and management, to provide context for the empirical investigation in this thesis, supporting the theoretical foundations developed in the last chapter. This chapter seeks to address the second and third research questions, and focuses on worktime, issues surrounding work-life balance, and provides discussion of specific gender related concerns and the impacts of caring.

As defined in Chapter 1, work includes both paid and unpaid work. It is increasingly difficult to distinguish the boundaries between paid and unpaid work, as paid work increasingly encroaches into the home. The concept of total social organisation of labour (TSOL), developed by Glucksmann (1995), suggests that work should be regarded as many forms of labour that may be paid or unpaid, including household activities such as caring. She further argues that work cannot be separated from the social and cultural relationships within which it is conducted.

When unpaid work is considered, the home can be included as an important location of work. Unpaid work in the home is primarily associated with homemakers, especially women. The working hours of homemakers (paid and unpaid) are among the longest in society. Hours worked among this group vary between 48 and 105 hours per week, and include activities such as cleaning, shopping, and caring (Oakley, 1974, 92-95). However, the role of housework also affects employed women, but may not be evident in their reported working hours. Employed women undertake contracted paid working hours for an employer, but may be burdened with further unpaid work in the home.

Recent years have witnessed a decline in the male-breadwinner, female homemaker model of the household (Esping-Anderson, 1999). Significant increases have been recorded in female labour force participation, led by changes in the nature of work, and growth in 'gender neutral' occupations (Hakim, 2000, 67). This has led to increases in the number of dual earner households, and those that undertake dual careers as described in Chapter 1. However, combining dual schedules of paid work, along with household tasks, may be particularly problematic, especially for employed women (McDowell et al, 2005). This makes the lives of partners within these households highly complex.

In addition, there is an increasing blurring of work across boundaries. Glucksmann (1995) suggests that the distribution of labour cannot simply be referred to in the context of a single sphere, but must instead refer to the organisation of labour across and between spheres. In the last two decades paid work has become much more flexible and mobile with work leaking out of organisations, taking place on the move and in the home (Felstead et al, 2004). This further complicates the allocation of time.

Considering the changes that have occurred surrounding work and work-time this chapter begins by providing a brief discussion of the development and standardisation of work-time. This is followed by discussion of deindustrialisation and the development of a new service economy, and the impacts this has had on the working lives of those resident in the UK. Subsequently the chapter focuses on policy and empirical evidence which deals with the growing flexibility of work: work-life balance; flexible working arrangements; and working within the home. This is followed by a discussion of long working hours, highlighting policy regulating work-time. This chapter considers specific gender related issues, and includes discussion of the impact of caring on working patterns and the preferences of dual career households.

3.2 A Brief History of Work-time

The development and standardisation of work-time within the UK can be traced back as far as the sixteenth century. During this period, there was large-scale scarcity of labour. This period witnessed an increase in real wages at the same time as there was unmistakable evidence of reductions in the hours spent at work (Bienefeld, 1972).¹⁰ As the sixteenth century proceeded, trends of reductions in working hours began to be reversed. In the seventeenth century this continued with the abolition of holidays by the Puritans. Increased annual working hours were associated with the emergence of the Protestant work ethic.¹¹ By the eighteenth century real wages recommenced their upward trend and hours once more declined, such that a working day of ten hours, from 6.00am to 6.00pm (with two hours of breaks) came to be the accepted norm. In other words there developed 'usual and acknowledged hours of daily labour' (1972, 40).

With the Industrial Revolution came an important change in work. Specifically, the spatial separation of home and work, as factories developed to house large machinery. This also led to the development of the commute which is discussed in the next Chapter. Weber (1976) suggests a positive link between the emergence of the Protestant work ethic and the Industrial Revolution. One problem encountered early in the Industrial Revolution was enforcing work discipline. The practice of Saint Monday — workers taking time off work to engage in leisure activities — persisted from the seventeenth to the twentieth century (Reid, 1996). Capitalists, and managers and supervisors, were drawn into conflict with workers, who exhibited strong preferences for leisure. The 'leading-sector' in the Industrial Revolution in the UK was the cotton textile industry. By the end of the eighteenth century some cotton mills operated for 13 hours or

¹⁰ Bienefeld (1972) sought to interpret the movement and development of working hours in a neoclassical framework. However, Philp et al (2005, 88) argue that such models do not offer comprehensive explanation of Bienefeld's historical account. This historical evidence is better interpreted in terms of absolute surplus-value production, class conflict, and the processes of economic development (using Marxist economic theories). Mainstream labour economists have produced clear empirical evidence showing discrimination on the basis of a number of demographics. It can therefore be argued that while the underlying mainstream assumptions are problematic, empirical work has value when reinterpreted using radical economic theory.

¹¹ This term was first coined by Weber in his *The Protestant Ethic and the Spirit of Capitalism* (1976), which was originally published in German in a series of essays between 1904 and 1905.

more per day, resulting in conflicts over working hours and practices (Bienefeld, 1972).¹²

Legislation targeting reductions in hours, enacted in 1802 and 1819, was ineffective, largely as a result of employer interests controlling the 'legislative and repressive apparatus of the state' (Bienefeld, 1972, 34). Further legislation restricting hours was passed in the period 1820-1850 and as a result, from the middle of the eighteenth century, employers began to focus on productivity increase (Hobsbawm, 1968). Early legislation though, such as the Factory Act of 1833, was limited as it restricted hours for women and children only, although this may have had a side effect of reducing hours for males too (Figart and Golden, 1998, 412). In 1872-4 there was a comprehensive reduction of normal working hours driven, in part, by the strength of organised trades and craft unions.¹³ Further reductions in hours came with the development of new unionism in the 1880s; this largely affected unskilled or low-skilled workers.

The growth of large firms, seeking to maintain their position in industry, resulted in further standardisation of hours. This reflected the realisation that long hours were not of great benefit to the employer, and as such a restriction on hours was deemed an adequate barrier against entry into the industry (Bienefeld, 1972, 210-11). Reductions in hours through gender neutral legislation, and from collective bargaining (1972, 162-78), became standard practice by the middle of the twentieth century (Figart and Golden, 1998, 412).

Production and working practises in the twentieth century were revolutionised with the advent of Fordism. This analytical concept, based in both name and content on the production techniques of the Ford motor company, between 1913

¹² In contrast a number of firms and industries did not experience conflict of this nature. Instead they opted for reductions in hours, seeing the potential gains in terms of increased productivity. Reductions in hours were realised through the introduction of shifts, and were administered in a number of industries including the machine lace workers of Nottingham (Bienefeld, 1972, 210).

¹³ The motivation of a union for reductions in hours is likely to be a result of the desire to reduce unemployment. This idea is based on the premise that if each worker does less, there will be employment for more individuals (Bienefeld, 1972, 194-5).

and 1914, was characterised by the notion of the 'five-dollar day'. High-wage workers were seen as beneficial as they sustained high levels of consumption and aggregate demand. As productivity increased, wages charted a parallel growth in order to maintain consistent consumption levels. This consequently maintained profitability (see Figart, 2001, 406-8). It extended the division of labour and displaced skilled craft-based workers for low-skilled employees working on an assembly line. Automation through mass production was the most important technical feature of Fordism, however equally important was control of labour. The sub-divided tasks of Fordism were specified in detail by management and significant mechanisation was adopted, thereby allowing greater control over the pace and regularity of production. The power of managers to control and regulate the conditions of work was heightened.

The new production and working methods which emerged in the twentieth century were theorised, initially in 1911, by Taylor (1967). Taylor adopted a scientific approach to management, coined 'Taylorism'. This led to changes in working conditions as scientific management aimed to increase productivity through reductions in inefficiency caused, for example, by malfeasance. Taylor believed that by eliminating malfeasance, higher wages, shorter working hours, and better working conditions would be possible (1967, 15). Scientific management made use of a number of innovations including time and motion studies, plus the adoption of standardised tools and time saving devices. Task allocation was fundamental to scientific management, and the sub-division of carefully specified tasks was thorough. Under Taylorism there was a movement of responsibility from the individual worker to the manager. This resulted in the development of modern managerial practice, where knowledge is used to generate rules, laws and formulae for workers to adhere to, with each manager having 'initiative' over their workers (1967, 33-34).

Figart and Golden (1998, 412) suggest that the institutional arrangements of the twentieth century aided a division of labour between home and work, and between genders. This extended the separation of home and work which began in the Industrial Revolution. It facilitated males working full-time, to support female homemakers. Average weekly hours remained fairly constant throughout

this period, particularly for white men in their prime earning years. Average annual hours decreased from the growth of paid holidays and time off. Average annual hours experienced reductions from 2,984 hours in 1870, to 1,489 hours by 1998. Meanwhile weekly hours displayed similar declines with the hours of manual workers falling from 53 hours in 1943, to 43.5 hours by 1987 (Lindsay, 2003, 140). Hewitt (1993) highlights the decline in basic working hours during the twentieth century. But, she suggests that while basic hours have declined, hours inclusive of overtime may have increased. While the post-war era in the UK has been characterised by relative stability in hours of work (Boulin, 1993), the synchronisation of work and leisure which existed during the twentieth century is collapsing, with the emergence of the 24/7 economy.

3.3 A New Economy and the Feminisation of the Labour Market

Large scale deindustrialisation in the UK during the latter part of the twentieth century resulted in sections of manufacturing industry declining, while some industries disappeared completely. However, during the same period a 'new' service economy has developed. This section begins with a brief discussion of industrial decline, before detailing the new economy, and the impacts of the feminisation of certain sections of the UK labour market.

Deindustrialisation in the UK

One of the key changes in the UK during the latter part of the twentieth century was the decline of industrial activity, termed deindustrialisation (Martin and Rowthorn 1986). Explanations of deindustrialisation vary as the reasons behind this phenomenon are complex. Singh (1977, 134) argued exports failed in the manufacturing sector due to a loss of competitiveness, and this was responsible. Other factors highlighted by Townsend (1997, 80-1) include the recessions of the 1970s and early 1980s, which resulted in the loss of manufacturing jobs, devastating many industrial towns. Further explanations have been offered which implicate loss of competitiveness, poor management, and poor labour relations (Hardill et al, 2001).

During the 1970s a range of factors acted as drivers for poor economic performance in the UK. High marginal tax rates made the UK system less

conducive to investment and growth (Kilpatrick and Lawson, 1980). Kilpatrick and Lawson also argue that lack of efficiency was a major source of problems in the UK, and that poor industrial relations and the strength of unions may have exacerbated this. An alternative explanation is that of the UK economy reaching 'maturity'. A high income elasticity of demand for services, coupled with increased competition from low-cost competition from abroad, reduced demand for indigenous industrial output (Kitson and Wilkinson, 2007, 812). The Conservative governments of the 1980s viewed deregulation, privatisation and reductions in direct taxation and union power as highly desirable (Crafts, 1996, 176). However, by the 1980s UK industry was in widespread decline. Whatever the cause, the decline of manufacturing industry in the UK led to the loss of millions of jobs in 'blue-collar' occupations. Nearly 1.9 million manufacturing jobs were lost between 1966 and 1977 (Bazen and Thirlwall, 1989, 11). Jobs in manufacturing declined a further 9.24% between 1981 and 1991 (Hardill et al, 2001, 20). The share of the world's manufacturing trade generated by the UK fell from 20.9% in 1973, to just 9.1% by 1979 (Crafts, 1993, 20). The impact this had on the economy is illustrated by the reduction in relative per capita incomes. The UK, ranked ninth in the world during the first half of the 1960s, dropped to fifteen by the beginning of the 1990s (Quah, 2000).

Some jobs were lost abroad where lower labour costs were attractive to organisations. However many were lost due to improvements in technologies, and the drive to decrease costs to improve profits. The restructuring of the UK economy also resulted in an increase in the North-South divide, broadening inequalities between regions (Hardill et al, 2006). The decline of industries such as ship building impacted greatly on the North East and Scotland, and the decline of coal mining during the 1980s had devastating effects on large areas of the UK, including the Midlands (Hardill et al, 2006, 174). This loss of industry resulted in a significant shift in the structure of the UK economy.¹⁴

¹⁴ Despite the decline new areas of manufacturing have developed, including high-technology industries (biotechnology, information technology). These industries employ skilled workers, but are often smaller scale, with many located in the South East and East Anglia. Employment in these industries is increasingly insecure as employers seek to minimise costs, by downsizing or increasing automation (Daniels 1999).

The Emergence of a 'New' Economy

The contemporary economy of the UK is perhaps characterised most by the growth of the service sector (tertiarisation). The service sector is responsible for the majority of employment within the UK, having increased from 34 per cent of all workers in 1901 to 70 per cent in 1991 (Lindsay, 2003, 137), and 77.3% in 2008 (LFS, 2008). Expansion has occurred in part-time working, led not only by the increase in female participation, but by a movement from standard (full-time) to non-standard (part-time, self-employed, temporary) employment. These changes have increased insecurity among many occupations resulting in the loss of a 'job for life' or 'stable career'. The growth of insecurity in the labour market has affected many groups including professionals and, especially, management (Rifkin, 1995, 101). Sennett (1998, 120) therefore suggests that a career can no longer be regarded as a 'well made road'. Factors other than tertiarisation are included in definitions of the 'new economy'. These offer a more comprehensive view of the key characteristics of the new economy.

The term 'new economy' encapsulates (or at least attempts to) a large number of changes to the economy and labour market in the UK during the last two decades. However, there exists no formal definition for the 'new economy'. It has diverse meanings to different individuals. Quah (2001, 16) defines the 'new economy' as being composed of (a) information and communications technology (ICT), including the internet; (b) intellectual assets; (c) electronic libraries and databases; and (d) biotechnology, i.e. carbon-based libraries and databases. For Quah, the distinguishing characteristic of these categories is that they represent goods and services which hold the same properties as knowledge, which growing numbers of consumers are experiencing direct contact with. Other broad definitions of the 'new economy' describe it as comprising or containing elements of: (1) the emergence of ICT; (2) the growth of the service sector; and (3) the effect of globalisation and de-industrialisation on the economy (Nolan and Slater, 2003, 58-60). It has also been considered as the impact of new technology and systems on the entire economic landscape of Britain (DTI, 1998).

Two distinct perspectives exist in relation to defining the new economy. First, there are those that see the new economy as driven by ICT and the sectoral

consequences of its advances. Second, some view the new economy as the postindustrial form taken on by the entire economy (Coyle and Quah, 2002, 6). Changes to the labour market, resulting from the overall structural change in the UK, are also emphasised. The labour market increasingly favours polarised skill levels. Those with advanced cognitive skills, such as programmers and management consultants are located at one end, and those who are 'unskilled', such as carers and cleaners are at the other (2002, 8). Coyle and Quah (2002, 8) also refer to the changes in working patterns resulting from sectoral change in the composition of the UK, including longer hours for professionals, increases in part-time work, and increases in mobile working.

Beyers argued that the changes in the structure of the economy should be considered to be characteristic of the emergence of "a service economy supported by goods and service producing sectors" (2002, 28) rather than as a 'new economy'. Indeed, it has been suggested that the changes in the structure of employment in the UK, are better encapsulated in the term 'service economy' than 'new economy' (Nolan and Slater, 2003, 77). This is because approximately 80 per cent of individuals are now employed in the service sector.

In contrast, Castells and Aoyama (1994, 6-8) describe the UK economy in the context of a movement to an 'informational' society, through structural change in the last quarter of the twentieth century. This is characterised by the movement from goods to services, the demise of manufacturing and agricultural industries, and the growth in the information content of jobs. There has been an accompanied increase in the value of education, with greater skills demanded by employers. However, past instances of economic change, including the advent of the motor vehicle, resulted in fundamental change in the structure of the economy. With this in mind "the 'new' in new economy should not be taken to mean that there have never been new economies in the past" (Visco, 2000).

Quah (2001) suggests two main differences in the 'new economy' which may truly make it 'new'. Firstly, the productivity improvements associated with ICT have rippled strongly throughout the entire economy, "affecting everything from mergers and acquisitions in corporate finance, to factory-floor rewiring of inventory management mechanisms" (Quah, 2001, 10). Secondly, ICT products behave like knowledge. They hold all the relevant economic properties of knowledge, characterised by near-infinite expansibility and a disrespect of geography. This suggests something distinctly new in the 'new economy'. Goods and services that behave like knowledge are becoming more important in two respects: as a fraction of total consumption; and, in their increasingly direct contact with a growing number of consumers.

The 'new economy' has also been termed the 'knowledge driven economy' and the 'new knowledge based economy' (Nolan and Slater, 2003). Leadbeater (1999) argues that the application of 'smart' technologies, and globalisation, are triggering the emergence of a knowledge driven economy which is centred on the exploitation of intangible assets. These intangible assets, including knowledge, ideas, and information, are used to generate intangible outputs in the form of knowledge and services. Knowledge is spread through the process of transferral between explicit and tacit forms, and is also generated, resulting in a dynamic and evolving process (Leadbeater, 1999, 28-9). Tacit knowledge is characterised as unwritten and hard to articulate. This is transferred into explicit knowledge, which can be articulated in both written and numerical forms. ICT and the internet allow information to be spread at great speeds, without understanding of the creation of knowledge. Knowledge itself is not transferred. Knowledge is generated through understanding information, which is transferred (Leadbeater, 1999, 29). The movement of knowledge, through the process of transferral between explicit and tacit forms, is rapid and is the foundation of innovation, fuelling the 'knowledge-based' economy.

Use of stylized terms such as the 'new economy' may not encapsulate the true complexity and unevenness of the contemporary labour market. Walby, for example has argued that empirical evidence is found for a new economy, but only in a weak, evolving form (2002, 25). Dynamic growth is found in employment in the ICT sector, teleworking, and creative and cultural industries. However, these industries are not yet large enough to consider them as the 'drivers' of a new economy.

Beck (2000) criticises the new or knowledge-based economy for changing the nature of work. This has resulted in reductions in job security and increases in inequality. The modern workplace requires families to be well informed, highly organised, and stable, allowing support for both working individuals and their children. The new work environment requires increased flexibility, and is characterised by instability (Carnoy, 2000, 109). In addition, advances in technology and ICT have played a central role in the increased intensity, duration and participation of paid work (Perrons et al, 2005). ICT is credited with adding to work-related stress, not reducing it. Doyle and Reeves contend that ICT should be used to replace the standard working day, rather than simply extending it (2001, 30). ICT may also increase the economic hold which paid work has on our lives (Jones, 1990, 254). The boundaries around work have dissolved as individuals are never off-line (Perrons et al, 2006, 3). There is, however, appreciation for the revolutionary nature of ICT (Castells and Aoyama, 1994, 26). It links jobs and allows 'direct on-line contact'.

Further criticism of the 'new economy' is offered by Perrons (2003, 68). She argues that the new economy may be characterised by a "digital duality or divide". This is generated by low level jobs created by high level managers and professionals. It may result in increased divisions and inequalities in social class, ethnicity, and between regions. Regional variations associated with the manufacturing economy have dissolved, but have been replaced with growing regional disparities in incomes generated by the growth of high status professional occupations in finance in London and the South East (McDowell, 2004, 149). Perrons (2003, 68) also reasons that the working environments of the new economy may exacerbate divisions between genders.

Feminisation of the Labour Market

The share of paid employment in the UK undertaken by women has increased in almost all industries and occupations. This is most notable in certain professions, clerical and service occupations (McDowell et al, 2006). Whereas figures from the UK *Census of Population* report less than 50% of women engaged in waged employed in 1971, this had risen to almost 70% by 2001 (2006, 144). The service sector employed 60% of men and 82% of women participating in the labour

market in 2004. By 2008 this had increased to around 66% of men and 90% of women (LFS, 2008). Interestingly, women outnumber men in terms of numbers employed within this sector (McDowell, 2004, 148). Subsequently, females now account for approximately half of the labour force in the UK (Nolan and Slater, 2003, 60), and command an 'increased political voice' (Walby, 2002, 25). Women are demanding, and winning, greater equity, enabling access to paid work, although this does not always result in equal wages (Carnoy, 2000, 108).

The growth in women's labour market participation is attributed to changes in women's expectations and aspirations. Women are able to take advantage of greater educational opportunities, while the rising cost of living renders many households dependent on two incomes. There has also been a shift in employment and welfare policies under the New Labour government in the UK (McDowell et al, 2006, 144). Mothers — including single parents — are now expected to either be in employment or looking for work, rather than relying on welfare (Lewis, 2002). New measures have also been put in place to improve 'work-family' policies. These have been made to ensure women are able to manage work alongside the home and especially childcare (McDowell et al, 2006). This is returned to later in this chapter.

The increase in the size of the service sector, which as was noted above is a sector in which women are significantly represented, has occurred during the same period as traditionally male dominated sectors, such as manufacturing, have declined. The long term decline in blue-collar work and the increase in white-collar occupations has reduced the need for a workforce consisting of physically strong workers, who tend to be male. Historically male manual workers could expect up to double the pay of females. This resulted from differentials in strength, and the principle of a 'family wage' being paid to men, but not women (Hakim, 2000, 63). In contrast white-collar occupations do not require physical strength, and as such allow women the same opportunities as men. A new division of labour has arisen between 'masculinised' labour in possession of high skill levels and career positions offering prosperity. This contrasts with 'feminised' labour of both sexes which is low-skilled with minimal levels of job security and low incomes (Castells, 2000, 11-12).

Gendered divisions are still apparent in both vertical and horizontal forms, resulting in segregation between industries and occupations (Hakim, 2000, 65). This is increasingly predominant in a vertical rather than a horizontal manner as men are still employed in the majority of senior roles. Male dominance is found at the highest levels of many industries, particularly in government, management, and professional occupations. Men occupy more than 60% of the legislative and managerial occupations, and account for more than 70% of corporate managers and senior government officials (Fagan and Burchell, 2002, 17). There remains a 'glass ceiling' within the workplaces of the 'new economy', sustained by workplace cultures and informal procedures that render women at a disadvantage when attempting to reach higher levels of management (Fagan and Burchell, 2002, 20). Women who reach higher levels of management are likely to manage other women. Indeed, only 10% of employed males are supervised by a female manager (Fagan and Burchell, 2002). Horizontal segregation — in which certain industries experience dominance by a single gender — remains evident as women are employed mainly in service activities, while men undertake managerial, manual, and technical jobs (Fagan and Burchell, 2002, 17). Much larger proportions of female managers' work in human resources, finance and accounting, while male dominance is still found in marketing and sales, IT, and general management roles (Wajcman, 1996, 266-7). Among the professions large numbers of women are found in education.

Perrons (2003) has argued that the advent of ICT, especially the internet, has extended the opportunities for those with caring responsibilities, guiding a reduction in gender inequality. This is driving increases in the numbers of dual earning and dual career households. In addition, a number of employers now offer a range of 'concierge services' to their employees, including catering, shopping services, and the provision of care through crèche services (Perrons, 2004, 103-4). Much of the flexibility on the part of the employer is put in place to ensure retention of highly skilled female workers, employed in senior positions, as these workers are 'time-starved' resulting in demand for low-paid, low-skilled, services. However, there may be limits to this, as many managers are averse to allowing greater levels of flexibility among employees, something particularly favoured by women with caring responsibilities.

Perrons (2004) also argues that gender divisions within the household continue to constrain females with housework and caring responsibilities. This leads to an increase in low-skilled, low-paid, female workers undertaking caring and domestic work for highly skilled, well-paid, female workers. There exists a divide between 'career' women who are highly educated, and command well paid employment, and those who are in less secure, lower paid work, many of whom exit the labour market as they cannot afford care. 'Career' women although income rich, it can be argued, are time poor (McDowell et al, 2005).

An example of the demanding nature of highly skilled female employment is provided by Woodward (2007). Research conducted at a number of post-1992 UK Universities suggests that female professionals in these institutions are likely to report high workloads, requiring long working hours. Long hours of work, both at the workplace and at home, require considerable inputs of time which would otherwise be available for relationships, commitments within the household, and leisure. According to Woodward a number of strategies were adopted by the women surveyed including establishing rigid temporal, spatial, and symbolic boundaries between work and non-work. However, these boundaries can be shifted in favour of work when necessary.

Schor suggests there may have been a reduction in female household labour, due to increases in female employment. Using evidence from the US, Schor suggests men now perform a larger proportion of household work than they have previously (1993, 103). However, employed women's lives remain dominated by the household. Women still perform the majority of household tasks (Harris et al, 2007). Those women who perform two tasks, paid employment and household work, endure a 'double-shift'.

The success of flexible working arrangements is currently limited by enduring links between full-time work and perceived professional and labour market commitment. The issue remains that the productivity levels of workers are often deemed less significant than the concept of commitment linked directly to hours of work (Harris et al, 2007, 501). This requires not only full-time hours, but long hours associated with 'time-devouring male employment' cultures (Sirianni and
Negrey, 2000, 72). Career progression suffers for those who do not, or are unable to, adhere to this culture. Opportunities for promotion are only offered to individuals who consistently work full-time throughout their careers, contrasting starkly with the lived reality of many women's careers. Women may therefore experience the 'double shift', but may not be adequately remunerated for this either in their careers or within the home.

3.4 Work-Life Balance Policy: Flexibility, Home-Work and Care

Legislation targeting greater equality in paid work began with the abolition of the 'marriage bar' from 1945 in the UK.¹⁵ This was replaced by equal opportunities and sex discrimination legislation in the 1970s. By the 1990s equal pay and comparable worth policies had made notable inroads into eliminating sex discrimination in pay (Hakim, 2000, 60-1). Since the late 1990s the New Labour government have promoted greater movement of women into paid employment. This has been done through linking welfare payments and tax credits to labour market participation, and by providing better educational opportunities (McDowell et al, 2005, 446). Until recently coping with the interface between work and home, and equality within the home, have largely been considered private matters. During the last decade, however, work-life balance and equality between genders have been pushed to the forefront of public policy. A series of measures have been promoted, many under the banner of 'Work-Life Balance', to ease the conflicts for individuals who find their work demands encroaching into other areas of family life. The Work-Life Balance Campaign, which was launched in spring 2000, aimed to raise employers' awareness of the benefits to business of introducing policies and practices which help employees obtain a better balance between work and home. For Clutterbuck (2003) the key aspect of work-life balance is 'choice' since work-life balance involves:

- being aware of different demands on time and energy and;
- having the ability to choose how to allocate time and energy and;
- knowing what values to apply to choices and;
- making choices.

¹⁵ The marriage bar was a prohibition on married women's employment put in place to ensure jobs, especially 'white-collar' jobs, were the exclusive domain of men (Hakim, 2000, 59).

The UK government has developed and implemented a number of legislative acts to aid this process. The Department for Business Enterprise and Regulatory Reform (BERR, 2008) details recent legislation including the *Flexible Working Regulations* (2007)¹⁶ which enables parents with a child under six, or a disabled child under eighteen, to make a request for flexible working. The law further places a duty on employers to consider such requests seriously and only reject them on grounds of 'business need'. The right to request flexible working was first introduced in 2003, for parents of young and disabled children. In 2007 the law was extended to include carers of certain adults and parents of older children.

Policies targeting improvements in work-life balance have potentially significant impacts for workers. Data from the *Second Work-life Balance Survey* (DTI, 2003) reports that 78% of workers feel it is important to balance their work and home life. Arulappan (2003, 6) argues that a number of key benefits are possible for employer and employee, shown in Figure 3.1. Notably a significant number of benefits may be realised by employers in addition to those of their employees. The degree to which flexibility is driven by employers seeking these benefits, rather than embracing the concept of work-life balance for the benefit of their employees, is therefore a key concern. This debate is returned to in Chapter 7.

Employer	Employee
Improved productivity from employees.	Better quality of life.
Enhanced corporate image.	A more enjoyable work-life and career progression.
Improved recruitment and retention.	Better health and peace of mind.
Reductions in absenteeism.	More income and the benefits that come with it.
Lower overheads and other costs (through hot- desking, home-working).	More time at one's disposal.
More satisfied customers.	
Increased employee morale and commitment.	
More equally distributed workforce.	

Figure 3.1: Employer and Employee benefits of Work-life balance (Source: Arulappan, 2003).

A range of potential schemes can help employees achieve improved work-life balance. Arulappan (2003, 7) divides these schemes, aimed at providing greater flexibility and opportunity for workers, into three broad categories: (1) work

¹⁶ This is an amendment to the *Employment Rights Act* (1996).

options; (2) leave options; and (3) employee support options. Work options include reduced and compressed hours of work, home-working, and flexi-time. Flexi-time refers to flexible starting and finishing hours of work, sometimes around a core set of hours (e.g. 10am-3pm). These measures aim to increase the flexibility of work with benefits for employer and employee. Leave options include maternity and paternity leave, career breaks, and phased return after illness or maternity leave. Finally, employee support options include child support, and health services.

The Increased Flexibility of Work

The varied tools employed to improve work-life balance provide *flexibility for the employee*. Many workers experience new opportunities, enabling them to better mould their patterns of work to their own preferences or constraints. However, in turn *flexibility for the employer* requires workers to be increasingly flexible in their approach to work. Workers are now required to be more skilled, knowledgeable, and adaptable. Coyle and Quah (2002, 36) echo an uncertainty over flexibility, as they suggest it delivers both positive and negative outcomes. Flexible working brings with it a decline of the traditional 'job-for-life', and an increase in low skilled peripheral work. The effects of flexible working are therefore likely to be felt strongest at either end of the labour force.

Employers often do not mirror the flexibility of their employees with similar flexibility on their part. Employers need to be adaptable and knowledgeable in their policy on flexible working. Fagan et al (2006, 48-50) propose a more prominent regulatory framework for the implementation of flexible working, and work-life balance policy. They suggest that current legislation concentrates too specifically on minority groups (such as carers), and does not offer strong enough regulation over the take-up of work-life balance guidelines by employers. This results in the majority of workers not being offered the right to request more flexible working arrangements, or a reduction in hours.

Empirical evidence from the UK indicates that a gap is often found between the principles of work-life balance, and employer and managerial practice (Kodz et al, 2002). Both formal and informal restrictions are found on employees who

apply for flexible working options. Some managers do not adhere to policies which, if properly implemented, would improve working conditions. Further evidence supports this argument as Perrons suggests that while some forms of flexibility are found in workplaces, especially working during antisocial hours or at weekends, only a small minority of employers offer other forms of flexibility associated with the work-life balance campaign e.g. job shares and assistance with childcare (2003, 69). Even where they are found, these schemes are heavily influenced by 'business need'. Interestingly, while some workplaces do not offer a full range of flexible working arrangements, a significant number of employers do provide workplace counselling and stress management (Perrons, 2003, 69). Perhaps if employers offered their employees greater flexibility, driven by their needs, demand for these types of services would diminish.

Arulappan (2003, 17-18) reflects on the present failures of policy, criticising its narrow focus. A number of groups including unmarried and older employees do not benefit greatly from policies which are strongly focussed on working parents. There are also groups of employees whose needs go beyond parenting. Employers need to ensure they understand the changing social and working environment before developing flexible working policies for their employees. A 'one-size fits all' approach does not provide the option of greater flexibility in work for all employees, especially those with complex household arrangements.

For flexible working to be a success the enduring link between full-time work and perceived professional and labour market commitment must be broken. There needs to be acknowledgment that long hours associated with timedevouring male employment cultures do not equate with commitment (Sirianni and Negrey, 2000, 72). High-performance and high-commitment managerial practices, put in place to increase levels of discretionary work effort, can form barriers to the successful adoption of work-life balance (White et al, 2003). Career progression should not be affected by the use of flexible working arrangements, and opportunities for promotion should not be limited to those who work full-time all the time (Sirianni and Negrey, 2000, 72). These issues must be at the forefront of policy debates if improvements are to be made.

Paid Work within the Home

A significant outcome from increases in the flexibility of work is the opportunity to work at home. Increases in home-working, a variety of 'teleworking',¹⁷ have been led by advances in ICT and the internet. It has been estimated that more than half of the working population will have the option to spend at least one day per week working from home by 2010 (Green et al, 2000, 305). Data from the UK LFS estimates the numbers of home-based teleworkers to be 2.2 million in spring 2001, accounting for 7.4% of the total labour force (Harris, 2003, 422-3).

Teleworking provides greater flexibility for individuals in both the location and timing of paid work. It may offer the most appropriate solution for employees particularly those in dual earner and dual career households — if they are to achieve a constructive balance between work and the rest of their lives (Hill et al, 1996). Many workplaces do not currently offer their employees the opportunity to use mobile technologies which would enable them to regularly work from their home while remaining in contact with their workplace. Where home-based teleworking is found it is largely 'employer led' (Harris, 2003, 425). Employers are able to benefit from greater productivity, reduced accommodation costs, lower absenteeism and improved customer services (Jackson and van der Wielen, 1998). Benefits for employees may include avoiding the stress of the commute, greater autonomy over the structure of the working day, and fewer distractions. Research conducted into 25 home-based teleworkers in the UK by Tietze and Musson (2005) suggests that workers can benefit from greater elasticity in regards to the temporality of tasks. Workers, in some cases, can mould their time to their own preferences. Workers may work intensively to complete tasks to enable them and their families to enjoy the 'gift' of time (2005, 1346).

A range of complications and difficulties are faced by individuals in the successful adoption of home-working. These issues include the division of space for work in the home, and a lack of space to expand the home to include a home

¹⁷ Teleworking is usually used to describe home-working, but is broader in definition. It refers to paid workers working outside of their normal place of work, at home, but also at client sites, on the move, and communicating using ICT (Bailey and Kurland, 2002).

office area (Green et al, 2000, 305). Even with adequate space and technology available, further issues remain around the use of the home for work. Dividing not only space but also time for home-working can be challenging. Workers may feel they achieve greater autonomy in their work, but may be constrained by family and household responsibilities and client deadlines (José de Freitas Armstrong, 1999, 54). There is a tendency for individuals to "work at all hours, interrupting meals, sleep, leisure and romance, in order to make time for their work" (José de Freitas Armstrong, 1999, 52). Research has indicated that while some households may benefit from the greater flexibility offered by homeworking, others struggle with the blurring of the boundary between work and the home (Hill et al, 1996). Tietze and Musson (2005) reported problems from the blurring of physical space between work and home. The use of spaces, such as the dining room or spare bedroom, was met with some resentment by household members (2005, 1341). Symbolic behaviours were also reported as ways to differentiate home and work, including wearing different clothes, or avoiding certain rooms. Moreover, conflicts arising from the blurring of boundaries can result in home-workers and household members actively defending such boundaries, but may be accompanied by emotions of guilt and irritation (Tietze and Musson, 2002). Home-based teleworking may also result in the loss of social networks, resulting in feelings of isolation when working alone at home (Sparrowe et al, 2001). Some of the benefits for business, including improved productivity and customer services may therefore be eroded.

Research into the experiences of workers embarking on home-working has highlighted a number of issues. For example, in Harris (2003) a lack of communication with the employer, and a lack of concern for the complexity of redefining work and home space was found. Feelings of desertion were also reported from workers. Many described themselves as having been 'just forgotten'. Moreover, 76% of workers reported longer hours in the "home office" than they had undertaken in the "work office" (Harris, 2003, 427). The issue of dividing space and time for work and home was of greatest concern. Workers reported feeling as if they were always at work. A large proportion of this difficulty, though, related to specific family situations; those with dependent children were more likely to have difficulties combining work and home life.

Johnson et al (2007) claim, from the results of their study of female teleworkers in Canada, that many women find it difficult to negotiate the "leakage of work" between paid employment and their caring responsibilities within the household. The data collected from interviews with 18 women in professional employment indicated that in response to these difficulties, many had developed ways to construct boundaries between work and home. For these female workers problems clearly arose in dividing time and space for paid work within the home.

Home-based teleworking on a regular basis may also have significant career implications for workers. This builds upon the premise of long hours and presenteeism being equated with commitment by managers (Erikson and Goldthorpe, 1992, 42). Home-based teleworkers face difficulties in ensuring their hours and work intensity are visible to management. Technology is available which allows the monitoring of these employees (Fairweather, 1999), but there remains a question over the extent to which workers' careers may be compromised by a lack of face-to-face interaction and loss of social networks.

Working in the home raises further issues related to health and safety. Employers have a responsibility to ensure the health and safety of their workers in the UK under the Health and Safety at Work Act (1974). Employers must make a risk assessment of all work carried out by their employees whether at the workplace or at home, under the Management of Health and Safety at Work Regulations (1992) (DTI, 2000, 26). Subsequently there may be issues of invasion of privacy for employees, as their employer must inspect the working environment and assess any risk (Fairweather, 1999). In addition, Vassie suggests that homeworkers do not receive the health and safety protection commensurate with their employment (2000, 541). Senior management may avoid dealing with their employees' issues as they do not want to get involved in employees' personal lives, in case this is viewed as an invasion of privacy (Kossek et al, 1994). However, Harris (2003) argues that home-working creates major intrusions into workers home lives. Employers should therefore bear the responsibility to provide adequate support to their employees. These factors form significant barriers to the success of teleworking as an instrument for increasingly flexibility, opportunity, and the balance between work and life.

The impact of Care

Many of the measures targeting improvements in work-life balance, through flexibility, have been driven by 'care'. Care can take the form of market activity: paid caring including au pairs, for example. However, this thesis is concerned with the time spent providing unpaid care which takes place within the household i.e. parents caring for children or adults caring for elderly or ill relatives (McDowell et al, 2006). Care has become a point of debate at national policy level, in particular since the national childcare strategy was launched in 1998, and subsequently extended in 2004.

Current policy, however, remains limited. It does not offer adequate financial help (to pay for market-based care) to those with caring commitments (Perrons et al, 2005). State-provided childcare remains limited in its provision, leaving many carers in low-security, low-paid, part-time employment (McDowell et al, 2006, 145). McDowell (2004, 151) argues that current policy does not adequately challenge the gendered role of women as primary care givers, a role which remains after centuries of reinforcement by social institutions. Households may renegotiate their working hours. Partners may reduce their working hours or work more flexibly to accommodate their caring responsibilities. In contrast, managerial and professional households will often use market-based care provision. This may require them to move to part-time or reduced hours, making use of the flexibility offered by employers. Commenting on the findings of the 1998 Social and Community Planning Research (SCPR) survey into women's feelings surrounding paid work and care, Duncan et al (2003, 317) report that qualified, middle-class mothers were more likely to value paid work and therefore engaged in employment. However, employment for these women usually meant part-time work fitted around school hours.

Many women believe that the use of flexible arrangements may impede their careers as their employer sees them as "less committed" (Jones, 2003, 31). This leaves many women constrained into continuing with full-time employment, leaving most women doing the "double shift" (2003, 7). Moreover, it is a frequently accepted social norm that the secondary earner, usually the female partner in heterosexual relationships, performs the majority of household tasks

and childcare. Personal leisure time, either willingly or under constraint, is therefore given up by many working mothers (Hochschild and Machung, 1990). Current policy ignores important moral questions of gender equity and the impacts of gendered roles. Social and gender divides are likely to endure until these factors are appropriately recognised in policy.

Where mothers with dependent children are able to continue with their career, this is often linked to the existence of a strong support network. For example, in Harris et al's (2007) research into women employed part-time in the retail sector, a female manager in the retail sector had reduced her hours from full-time to part-time as a result of having children. She was able to continue with her career due to the help from her partner, and the close proximity of her mother who was able to help with caring responsibilities (Harris et al, 2007, 498).



Figure 3.2: An individual's division of time (Source: Yeandle, 2001, 42)

Yeandle (2001, 43-45) emphasises the importance of the household and caring, suggesting they should be included in measures of work-time. Figure 3.2 details her division of time for an individual. The Figure indicates the measures required

for work to become 'family friendly'. Yeandle suggests that costs are faced by individuals unable to engage in family friendly employment. These include stress, depression, and poor relationships. Subsequently, there is a need for flexibility in hours of work. Movements between part-time and full-time employment, and periods of leave, should also be acknowledged and accepted by employers. Moreover, excessive hours of work require attention (this is also discussed by the *Institute for Employment Research* and *International Finance Facility* (IER/IFF, 2001)). This requires a shift away from current long hours cultures to ensure that those with caring commitments are able to fulfil them.

Those with significant household responsibilities, especially child care, are often those found to report the highest levels of workplace stress. This is linked to the dilemmas facing these individuals (Green, 2001, 75-6). For women in the UK privatised care in the home — nannies or au pairs — may actually be the most effective way of combining paid employment with caring (McDowell et al, 2006, 144-5). This eliminates issues of travel, and potentially frees up time for both parents usually spent performing the 'school run'. However, the costs of this type of care are substantial and therefore only available to those in highly paid occupations. Use of market-based care may also create feelings of guilt as parents become detached from their children. Almost 90% of those surveyed in the SCPR reported feelings of guilt over engaging in paid work when they had caring responsibilities (Duncan et al, 2003, 317). Employed parents who do continue to work, and work long hours, may exacerbate the 'time-squeeze' they face as a result of combining demanding work with family schedules (Brown and Booth, 2002, 908). The added complexities of caring may make life for dual career households particularly complex and difficult to manage.

Flexible working offers employees substantial benefits. However, the realisation of these benefits is not as straightforward. Employers may be driving flexibility, limiting employees' choices. Flexibility may improve work-life balance for carers, especially in households where partners engage in dual careers. However, barriers to flexibility, coupled with enduring links between long hours and commitment result in real time scarcity for workers who combine demanding paid work with caring and other tasks of social reproduction.

3.5 Long Hours and Working Time Regulation

Working long hours may have significant implications for individuals and their households, causing dissatisfaction, reducing productivity, and resulting in health problems. Where long hours cultures are not embraced workers may face significant career implications, as management equate long hours with commitment (Erikson and Goldthorpe, 1992). Earlier in this chapter discussion was made of the standardisation of working hours, and of the downward trend in average hours in the UK since the latter part of the twentieth century. However, long hours remain evident, especially among those in managerial and professional occupations (Kodz et al, 2003, 12). This section therefore begins by defining the term 'long working hours'.

Long working hours are defined by the IER/IFF (2001, 20). The definition splits working hours into 'long hours' and 'very long hours'. 'Long hours' are defined as working 49 hours or more per week, following the maximum European Working Time Directive (1993) 48 hour working week. 'Very long hours' are defined as working over 60 hours per week. The sources of longer working hours can be summarised as follows: work pressure (including increased workloads, greater competition, fewer staff, smaller budgets, and increasingly demanding customers); individuals feeling a genuine strong commitment towards their work, colleagues, customers and clients (Kodz et al, 1998); managements' demand for commitment to the firm (White et al, 2003); and, the pressure to complete tasks, equal the long hours worked by management, and improve take-home pay (through overtime payments, commission and performance related pay) (Kodz et al, 1998). It is generally accepted that long working hours are also an economic 'bad' which have a negative social impact and adversely affect the health of working individuals (Philp et al, 2005). Long hours are particularly evident in highly skilled occupations. Over half of those in managerial and supervisory positions (a sub-group of managers and professionals) work long hours compared to 40% of the overall workforce in the UK (DTI, 2004, 6). Many workplaces also operate on a 24/7 schedule. Around 11% of employees of these 24/7 firms work over 60 hours per week. Gender is also important as White et al (2003, 191) suggest that many of those working 'very long hours' are males (and fathers)

often constrained by their primary earner status. Evidently, long hours remain an issue, and one that has not escaped policy makers.

Working Time Regulation

Since 1973 the UK has been subject to EU policy. One such EU policy, the *European Working Time Directive* (EWTD) was adopted in the European Union (except the UK) in 1993. It imposes a maximum 48 hour working week for employees. This protects against the possible negative effects which long working hours may have on the health of individuals (*European Comission*, 2005). The UK adopted the Directive in the form of the *Working Time Regulations* (WTR), implemented in 1998, and amended in 2002 and 2007. However, in contrast to the legislation of the EWTD, there is an opt-out clause in the UK WTR. Many employers, both in the public and private sector, have heavily promoted this to employees, through waivers. The main characteristics of the WTR are:

- A limit of 48 hours a week which the worker can be required to work, averaged over a period of 17 weeks (although workers can choose to work more using the 'opt out' agreements);
- 2. A maximum average of 8 hours work in 24 for night workers;
- 3. Free health assessments for night workers;
- 4. An entitlement to 11 hours rest each day;
- 5. An entitlement to a day off each week;
- 6. An entitlement to an in-work rest break if the working day is longer than six hours;
- 7. An entitlement to four weeks paid leave per year (*pro rata* for part-time employees); and
- 8. Entitlements for adolescent workers (BERR, 2008a; DTI, 2004, 11).

The WTR also defines work-time, with some notable exclusions. Interestingly, commuting and work-related activities are not included in this definition of working hours. This reflects the fact that these activities are hours forgone to work, not working hours. An element of choice is involved in the commute, as will be discussed in Chapter 4. However, while the commute may ultimately be a choice, increasingly one or more partner in dual career households may be

undertaking lengthier commutes as a compromise, or even as a result of constraint (financial or other). Less choice is also likely to be found in work-related travel which often requires movements outside of normal working hours, such as travelling for meetings or conferences. This thesis argues that greater acknowledgment should be made by employers of the impact of work-travel, in increasing dissatisfaction in work, and reducing productivity through tiredness, which could also impact on employee health.

Despite the introduction of the WTR, the UK labour market is still characterised by the liberal flexibility identified by Lipietz (1997). Recent developments in the UK have seen stricter restrictions on businesses who encourage employees to opt-out of the *Working Time Regulations*. Quick (2005) makes an interesting point, suggesting that many employers would face a 'challenge' if they were no longer allowed to offer an opt-out option to their employees, especially in finance industries such as accountancy. However, it has also been stated, for example by the then Trade and Industry Secretary Alan Johnson, that there is 'no way' the UK would remove the opt-out (*Personnel Today*, 2005). Pressure from the EU is focused on removal of the UK opt-out, something that would have significant implications for many employers, and would require major changes in managerial practice within many firms. Commitment could no longer be equated with long hours and presenteeism.

Bielenski et al (2002, 62-73) report longer hours of work among those with managerial or executive duties. Interestingly, they speculate that there is greater resistance to work-time reduction among those in managerial employment (2002, 13). This is something that will be considered in Chapter 6. Bielenski et al are noteworthy, too, because they do not adopt a rational choice approach to working-hour determination. Thus they recognise that 'employees' working time preferences are not static; rather, they evolve over time in accordance with personal and family circumstances' (2002, 114).

The majority of managerial and professional workers are salaried. Salaried workers are likely to work longer hours. These longer hours are, in many cases, not rewarded with additional pay. The emphasis is instead on the completion of

tasks with less regard for the time this may take (Kodz et al, 1998, 32). However, Schor has suggested that some workers may feel the desire to work, termed 'workaholism' (1993, 70). Others may simply feel they must spend extra time at work to get the job done (Kodz et al, 1998, 21-23). This itself represents a constraint. Additionally, this excessive working may result in increased levels of stress (Green, 2001; Burchell and Fagan, 2004, 634).¹⁸ Interestingly, among 'white collar' occupations Green (2001) suggests greater proportions of women, around 45%, reported working at 'high speed' than did men in 2000 (around 42.5%). Work intensity, then, may be greatest among females.

Green (2004a, 622) suggests that increased work effort has resulted in increases in work strain. In addition the intensification of work may have decreased levels of job satisfaction among workers. Green further links the decreases in job satisfaction to decreases in task discretion. Levels of autonomy are clearly linked to satisfaction. Reductions in autonomy in the professions may have thus adversely affected levels of satisfaction in these occupations.

Research in the UK suggests that directors and senior managers are the least likely to feel they have time to complete their tasks within normal working hours. This may result in a trickle-down effect. Managers, themselves working long hours, expect the same of their staff (Kodz et al, 1998, 32). Controversially, arguing against working hour reductions for managers and professionals, Roberts suggests little gain would be had in productivity per hour following a shortening of the work schedules of present-day managerial and professional staff (2007, 347). Roberts suggests that managers and professionals will become more effective as they spend time reading or networking. While this may be the case, this additional time use is more questionable. How can workers network or read when this extra time in work is spent completing the tasks they have been set?

¹⁸ Ogbonna and Harris (2004, 1198) explore levels of work intensification among UK University lecturers. They find increased levels of stress, and reduced interaction between colleagues. This is led by time constraints and increased levels of competition between workers, driven by performance-related remunerations systems, which diminish team work.

D L Wheatley

Evidence from the UK shows significant proportions of managers and professionals report regularly working over 48 hours per week (Kodz et al, 2003, 49-50). Perhaps of greater concern is the claim made by Kodz et al that 15% of managers and 14% of professionals report working over 60 hours per week. Similar proportions of both men and women report working these long hours in the professional (Kodz et al, 2003). Meanwhile other research suggests that women in professional occupations work an average of ten hours unpaid overtime per week (Harkness, 1999). Full-time managerial and professional workers stated the greatest preferences for shorter hours than those they were regularly working (Fagan, 2001). This is rather unsurprising considering the lengthy hours they work.

Long hours (and variable, unsocial hours in particular) may make it difficult for individuals to perform activities together. Friendships, even marriages, may be constrained into operating without the frequency and regularity possible for those who work shorter and more regular hours. Married/cohabiting couples may only spend two or three hours together per day in shared activities. These activities tend to be eating, housework and watching television (Gatenby, 2004). Interestingly, it has been suggested that inequalities between males and females remain in the home, and at work, despite increasing numbers of women participating in the labour force, and the changes in the nature and occupational structures of work (Perrons et al, 2005). These inequalities at work and within the home are explored in the empirical chapters of this thesis.

Further evidence indicates an increasing divide between those who enjoy their work. Those who do, see work as an integral part of their life and identity. Those who don't simply work to earn and leave all thoughts of work there when at home (Doyle, 2000, 9-13). Employees in some occupations may trade-off lengthy hours of work in return for the greater job satisfaction available in these roles (Taylor, 2002). There is also indication of a growing polarisation between those with secure jobs and those in more insecure employment. Insecurity may be a key driver of long hours as workers wish to ensure they are seen as committed to the firm. Satisfaction levels for workers may also be closely related to social networks and work identity (Sparrowe et al, 2001). This is likely to be

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more notable among females, who are heavily constrained by household responsibilities (McDowell et al, 2005). For many, work offers an identity and appreciation which may not be rewarded in the home.

Employment, even among managers and professionals, is increasingly insecure. Employers are demanding commitment from their employees. However, they often measure this commitment in reference to long working hours. As this section has shown long hours are especially prevalent among managers and professionals. This is a key issue in the UK as work-time legislation allows workers to opt-out of the 48 hour maximum working week. The extent to which this choice is made free of constraint, or may be influenced by social norms of long hours, is of key concern and will be returned to later in the thesis.

3.6 Conclusion

This chapter has outlined the literature on the standardisation of work-time, the impacts of deindustrialisation, and the development of the new economy during the last two decades. Controversy exists over definitions of the new economy, and indeed whether it exists at all. However, the nature of paid work has undoubtedly undergone significant change during this period, driven by a series of changes including economic restructuring, the increasing use of ICT, and the growth of the service sector (Lindsay, 2003, 137). In addition there has been a gradual feminisation of the labour market, led by legislatory and social change. The rise in female participation has been driven by the changing structure of employment, including increases in clerical and service occupations. There have also been increases in the numbers of dual career households.

The work-life balance campaign seeks to raise employers' awareness of the benefits to business and employees from introducing policies and practices which help employees balance their work and home lives. Tools employed to improve work-life balance include flexible working arrangements, which may offer significant benefits for both employer and employee alike. The home can also now be included as an important location of work, as developments in ICT and mobile technologies have made paid work possible within the home, providing much needed flexibility for workers, especially those who also provide care. It has been noted in this chapter that the gap between the work-life balance principle, and employment and management practice, is large in some cases, with *flexibility for the employer* often the focus of organisations whose policy is dictated by 'business need' (Kodz et al, 2002). There are formal and informal restrictions on employees, who can notionally apply for flexible working options. For particular groups, including women with caring responsibilities, taking-up these schemes may actually hinder career progression.

Long hours associated with male employment cultures remain evident in many occupations. This is a particular concern given that the WTR are voluntary in nature. The longest working hours are faced by those in managerial and professional occupations, where greater effort is expected, and where long hours are often seen as representative of commitment in the eyes of the employer. Time is increasingly at a premium, as long hours persist. Work encroaches into the home, as the increased flexibility of work creates new opportunities and demands for employees. The apparent scarcity of time which emerges will be further examined in the next chapter in reference to the increasingly mobile nature of work. The role which the commute plays in constraining and influencing individual and household working behaviours will be central to this discussion.

4

Mobility and Commuting in Contemporary Employment

4.1 Introduction

This chapter seeks to address the second and third research questions by exploring the increasingly mobile nature of contemporary paid work. As detailed in the previous chapter, changes in the economic structure of the UK economy have had significant impacts on the working environment. These changes include the growth in the flexible nature of paid work, the intensification of work-time, and the feminisation of the labour market. Economic restructuring has further transformed the lives of many through new geographic movements and mobilities, blurring the boundaries between home and work, movement and migration (Green, 1997). Paid work is 'leaking' out of organisations, being carried out on the move (using mobile technologies) and in public spaces such as cafés, hotel lobbies, and airports (Felstead et al, 2004). Moreover, paid work is increasingly taking place within the home.

After this brief introduction, this chapter begins by exploring the changes to the economy since the 1990s that have impacted on the mobility of paid work, with reference to the work of Cresswell (2006), Castells (1989; 2000a) and Quah (1996; 2000). Sheller and Urry's (2006) new mobilities paradigm is then explored. The second major section focuses on the commute, a key element of daily time-use, and one that lies in the blurred middle ground between work and personal time. Discussion begins with a brief account of the development of the commute to the present day, detailing current policy trends and agendas. Rational choice theory is then applied to the commute and factors that determine commuting behaviours are explored. Finally, reflection is made on the use of the commute as an alternative to migration (see Hardill et al, 2006; Green, 1995), and the impacts this may have for workers and their households.

4.2 The Mobile Nature of Contemporary Employment

Movement is described as the spatialisation of time and the temporalisation of space (Cresswell, 2006, 4). Time and space are both the context for movement and the product of it. Movements (and mobility) have increased in speed with advances in transport and in technology. The term 'mobility' refers to both human and non-human movements (Sheller and Urry, 2006, 215-16). Mobility includes movements of goods, and the dynamic movement of information aided by advances in mobile technology.¹⁹ It extends to geographical movements, including those made everyday such as travel to work. As Sheller and Urry note, it involves complex movements enabled by technologies such as the car.

Technological change has resulted in what has been termed 'space-time compression'. The World is 'shrinking' as our movements become increasingly frequent, with locations such as airports being viewed as symbols of flow, dynamism, and mobility (Harvey, 1989). Space-time compression is conceptualised by Cresswell (2006, 6), through the example of the development of rail travel. By increasing the speed of travel over long distances rail travel opened up new markets for labour, and for the pursuit of leisure. The mechanised nature of the train is mirrored by the need for regular mechanical efficiency in the behaviour of the human traveller, buying a ticket, standing on a platform, and sitting on the train. Indeed, Castells (2000a, 465) argues that the nature of time has changed in modern society. For example, he argues the concept of space-time compression is best represented by real-time global capital markets, where finances are moved around in an instant. As Castells describes, "time is compressed and ultimately denied in culture as a primitive replica of the fast turnover of production, consumption, ideology and politics on which our society is based" (2000a, 493). This speed is driven by developments in communication technologies, leading Castells (2000a, 494) to describe time as "timeless time" in the information, or network, society. Activities and phenomena are compressed,

¹⁹ The growing dependency on technology and machines for movement has resulted in increasingly inactive lifestyles among many, even where individuals consider themselves mobile (Sheller and Urry, 2006, 221). The more mobile the environment is in which someone lives, the greater the levels of obesity that are likely to be found (Marvin and Medd, 2006).

with increasing presence of instantaneity resulting in significant speeding up of contemporary lifestyles.

Quah (1996) suggests the developments in ICT, particularly the internet, have led to the development of a 'weightless economy' led by the mobility of information. The global and technological changes characterising the new economy have ever-increasing disrespect for distance (and thus space), and time. Reductions in the costs of telephone usage, coupled with the extensive use of electronic mail, have removed geographical boundaries. This has increased the importance of communication to paid work (Quah, 2001). The mobility of information develops into the mobility of both capital and resources; information has become a key resource. This 'weightless economy' has further removed the barriers between the producers of new technology and consumers (Quah, 2000). Transaction costs are reduced, as the internet can directly deliver 'weightless' goods and services. As Quah (2000, 6) suggests it is "knowledge and information that we now value; their carriers are inessential and immaterial". This rise in virtual mobility, also termed informational mobility, is described by Castells in a rather solemn tone where, "social meaning evaporates from places, and therefore from society, and becomes diluted and diffused in the reconstructed logic of a space of flows whose profile, origin, and ultimate purpose are unknown" (1989, 349).

The new mobilities paradigm, recently developed by Sheller and Urry (2006, 209), challenges the relevance of scales of mobility: local, global etc. The new paradigm focuses on the growing liquidity of certain realms, led by advances in communication technologies. However, the paradigm also engages with the growing disparities in mobility where connectivity, centrality, and empowerment found among many is contrasted by disconnection, social exclusion and inaudibility for some (Graham and Marvin 2001). This new paradigm focuses on the analysis of mobility suggesting that mobility and control over it reflects and reinforces power. Mobility is a potential source of inequality (Skeggs, 2004, 49; Morley, 2000). Technologies which enhance mobility for some, may reinforce the immobility of others including children (Pooley et al, 2006). Divisions in mobility may also be evident between genders. The extent of this inequality is explored empirically in Chapter 8.

While much of the discussion in this thesis centres on daily mobility, involving the journey to work, it is important to consider the range of movements which individuals and households may experience. Pooley et al (2005, 2-3) argue that human movements cannot simply be divided into different categories. Instead concepts of mobility are better understood when part of a 'mobility continuum'. The mobility continuum, shown in Figure 4.1, details all major components of mobility. These range from simple everyday movements, including commuting, to virtual mobility at the opposite end of the scale. This, however, is somewhat problematic in its representation of mobility in a linear format, as this does not take account of the complexities and interactions of these movements.



Figure 4.1: The mobility continuum (Source: Pooley et al, 2005, 3)

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Mobility and Paid Work

Work is becoming more time and effort intensive. Employees are travelling further to and from paid work. In addition work, travel and home are becoming increasingly blurred. This is particularly impacting those in managerial and professional occupations who, on average, travel about twice the distance of manual workers (Doyle and Nathan, 2001, 4). The lives of managers and professionals and their households are being transformed by new movements and mobilities. Specifically:

- Commuting flows have become more diffuse. To capture their complexity it is important to focus on the daily, weekly and monthly movements. Also these movements must be reflected on in reference to other types of movements (such as combining shopping and childcare journeys with work-related journeys) (Hardill, 2002).
- There appears to be a blurring of business travel with commuting, residential mobility and migration. There is also a notable minority who use hotels/rented apartments for business assignments, sometimes provided by an employer (Hardill, 2002).
- Managerial and professional mobility impacts on residential mobility with 'place' flexibility an increasing feature of life for managers and professionals (Green, 1997). This is illustrated by 'commuter' couples (Hardill, 2002). This poses a challenge to the idea of housing as a united space. For some partners weekends involve movements to be together.

A range of drivers are considered responsible for increases in the mobility of paid work. These include globalisation, ICT, the restructuring of work which has increased its intensity, and social forces, including increases in female labour force participation, the emergence of work-life balance, and pressure from workers to make work more flexible and favourable to family life (Doyle and Nathan, 2001, 7-13). Globalisation has increased the demand for global workers. ICT allows virtual mobility and has resulted in the expansion of projects, with wider reaching clients and teams to meet and manage. Rationalisation, and a growth in lean organisation practices, has increased the working areas of many workers. However, this necessitates more travel for the individual. The change in

female labour force participation has changed the nature of migration decisions for many households. Companies increasingly offer workers virtual and commuter assignments, in opposition to the traditional long term worker relocation. Although enabling dual household schedules to be managed, this also results in more intense travel.

Employees are increasingly able to conduct business within the home using the internet and telephone networks. In addition they are able to do work on the move using mobile phones and PDAs, or combination devices. ICT is linking workplace locations and allowing 'direct on-line contact' with the office when on the move (Castells and Aoyama, 1994, 26). Employees are now able to keep in touch with their workplace while visiting clients or undertaking work travel. This may offer significant benefits to employers and employees alike in relation to multi-tasking where work would previously have been impossible.

The execution of paid work increasingly requires travel, with employees likely to undertake travel not only to other locations close to their main workplace, but also inter-regional and overseas travel. This has resulted in the growth of 'instant offices' and airport hotels. Mobile workers use these locations when meeting with clients or colleagues from other workplace locations (Doyle and Nathan, 2001, 18). Workers are therefore able to travel, stay, and work, in a single 'one stop shop'. Lloyd (2003, 94) suggests that time once spent waiting may now, with the use of technologies, be used for leisure and work.

Evidence from a study of 26,000 rail passengers in the UK suggests that 13% of commuters work or study during most of their journey, and that nearly 30% undertake some form of work some of the time (Lyons et al, 2007). The working day for such individuals has clearly been blurred. Work is now performed beyond the boundary of the traditional working day. While the costs of this travel will almost certainly be paid by the employer, employers are unlikely to appreciate the negative affects of a demanding travel schedule.

Increases in the use of the home as a location for paid work may have important consequences in relation to transport and planning. It results in reductions in physical mobility, this being exchanged for informational mobility, i.e. ICT and the internet. However, Breheny (1999) acknowledges that the majority of highly skilled workers in the UK remain resident in suburbs and rural areas, and commute to their workplaces in offices. Despite changes in the working practices of both firms and individuals resulting from continuing investment in ICT, there is still an inherent need for formal and informal face-to-face interaction. This generates cohesion and trust, and helps firms to maintain competitiveness. For this reason businesses are likely to locate in, or close to, the city centre. This need for physical interaction therefore inhibits any dramatic increases in homeworking (Britton et al, 2004, 810-811). This leaves those that *do* home-work at a potential disadvantage, often impacting their career as discussed in Chapter 3.

Undertaking higher education may increase mobility. Educational qualifications form the foundations of many managerial and professional careers, and are a key element of upward social mobility (Hardill, 2002, 79-80). Universities may play an institutional role in facilitating and developing social and spatial mobility. Individuals may travel and/or migrate as part of their education, often to acquire extra qualifications or specialised training. Educational qualifications are portable, that is they are recognised in a range of locations, and the premium associated with prestigious institutions may offer improved life chances, but at the cost of greater spatial mobility. Many individuals return to their 'home' region after university, which gives them support from family and friends, whether financial or emotional. Devine et al (2003, 506-7) noted that the majority of young professionals working in Manchester were mobile in their career. These workers also stated a strong identification with their home region. Work in the North West was preferable to migration to London or the South East. However, Deitch and Sanderson (1987, 629) found that geographical mobility impacts on careers. Family responsibilities, especially for females, reduce the likelihood of gaining preferred employment.

Career progression may require high levels of spatial mobility. Savage (1988) explored the link between spatial mobility and social mobility. He reported an, albeit diminishing, link between these two forms of mobility. Workers with greater geographical mobility are also able to achieve greater upward social

mobility (career advancement) during their working lives. Opportunities for promotion often require workers to move location. This movement enables upward career progression (Savage, 1988, 554). The impacts of technology, enabling faster physical and virtual mobility, have led to major reductions in the link between spatial and social mobility for some workers. This is especially the case for those with highly specialised skills (Lindsay, 2003, 141), as movements for work are likely to be required during the course of their career. This may include movements abroad, as organisations themselves become more global (Hardill, 2002, 89). Employees therefore increasingly have to be 'mobile'.

Females may, however, be less spatially mobile than their male counterparts. Career trajectories for women in the UK have tended to be non-linear, complex and dynamic. Many females suffer from access to fewer choices, both spatial and temporal, and fewer material resources in their personal lives compared with men (Epstein et al, 1999). Women are more likely to be the 'trailing spouse', even within dual career households and among those that are childless. Women have the 'follower' or secondary career, which is unplanned and erratic (Bruegel, 1996; Hardill et al, 1997). They are often considered the secondary earner (Hochschild and Machung, 1990). For example Harris et al (2007) explore female part-time workers in the retail sector and suggest that female workers who consider their partners to be the main wage earner are likely to be loyal to a single workplace location close to their home (Harris et al, 2007, 498). This implies these women will not seek promotion opportunities elsewhere. Opportunities for career progression may therefore be limited as many employers require increasing levels of mobility and flexibility from their employees (Carnoy, 2000, 109). This is something that will be explored further in this thesis in the context of highly skilled workers.

4.3 The Journey to Work: Past and Present Trends

The journey to work forms a key link between home and work. The Industrial Revolution brought about a separation between home and work, as small scale operations were replaced by large factories and housing, requiring travel (often over short distances) to work. Work and home consequently became separated spatially and deeply gendered, with 'home' a female domain and 'work' a male domain. This in part led to the formation of the male 'breadwinner', female 'homemaker' model of the household (Horrell and Humphries 1995).

Important changes in the journey to work continued throughout the twentieth century. Pooley and Turnbull (1999, 281-285) use historical data on the UK to suggest journey-to-work distances have more than trebled since the end of the nineteenth century, meanwhile time spent on the commute has only doubled. Over the period from the 1960s to the 1990s average distance to work increased from 10.2km to 14.6km. However, average commuting time increased by just one minute per journey between the 1960s (33.5 minutes) and 1990s (34.5 minutes) (Pooley et al, 2005, 114).²⁰ Increases in average distances to work are confirmed by Lindsay (2003, 141) who claims that between 1976 and 1999-2001 the average distance of the journey to work increased by over 60 per cent. These changes reflect developments in technology and increases in affluence. Workers can afford to live away from employment centres, and bear the costs of transport, increasing car ownership. This represents a major shift in modes of transport.

Two major shifts in modes of transport have occurred, led by improvements in both public and private transport networks, as well as changes in the infrastructure in the UK. These began, in the nineteenth century, with the development of rail and bus services to serve those with sufficient income. By the 1930s the previous trend of walking to work had been largely replaced by the use of buses and the bicycle. While in the 1890s 59% of all journeys to work were undertaken on foot, this had decreased to just 8% by the 1990s (Pooley et al, 2004, 2). Train use during this period remained relatively constant, and also aided easier commuting, as Lindsay suggests (2003, 141). Then in the 1960s the use of the private motor car became the most prominent method of transport to work. More than 40% of individuals used this method of travel by the 1970s

²⁰ London is an exceptional case. Commuting times, as well as distances, for those working in this region have increased. In addition trends in car use differ from other regions in the UK. This is noted in the empirical analysis conducted in Chapter 6. The remaining regions of the UK, including the East Midlands, follow fairly consistent patterns in terms of the commute.

(Pooley and Turnbull, 1999, 287). The twentieth century witnessed a major shift towards use of the car.

The dominance and availability of the car for commuting is confirmed by Lindsay (2003, 141), reflected by the number of households with two or more cars. This has increased from 7 per cent in 1970, to 28 per cent by the year 2000. The choice of mode of transport is related to cost and availability. Individuals prefer individualised, independent travel, which provides personal space (Pooley et al, 2004, 2). Additionally, company cars and car-user allowances have resulted in increased use of the car for the journey to work since the 1950s, especially in the provinces. Individuals, who had previously chosen not to use their own car for home to work travel, were encouraged to travel by car as they gained access to a company car. The attitudes of certain groups or demographics may also differ in terms of the methods of transport used for the commute. Pooley and Turnbull (1999, 281) suggest that men are more likely to use cars and they tend to travel further to and from work than women. This may reflect the constraining effect of household decision-making in terms of mobility. This offers further evidence of the prioritisation of the 'lead' career, often the male career. They get priority access to the car (where the household has a single car). Males are likely to undertake the lengthiest journeys, while females must remain close to home. The latter are likely to be burdened with the majority of household responsibilities as discussed in Chapters 2 and 3.

Changes in the nature of employment further increased the frequency and complexity of travel for many workers during the latter part of the twentieth century (Bannister and Gallent, 1998). Bannister (1998, 1-7) suggests that the number of journeys, including both personal transport and that involving goods, has doubled since 1970. The journey to work accounts for around 50% of all journeys made by rail, 18% of all car travel, 38% of all cycling, and around 9% of all travel on foot (ONS, 1998a). Using the BHPS, Oswald and Benito (2000, 21) report that average commuting times during the 1990s were found to be greatest in London. Full-time workers in London, for example, enjoy 70 minutes less leisure time per week due to the impact of the commute. Differences are found in commuting patterns of workers between and within regions. For

example in any city centre there will be a wealth of employment opportunities. However, those who live in the city may not make up the active labour force. Instead it is individuals who are located externally, commuting into urban areas to reach their place of work (Harvie et al, 2009). O'Connor (1973, 125-6) describes this process historically. He suggests that as cities developed their emerged a suburban elite who could afford more space and control their environment away from the city. The city provides central location and focal point for economic activity. New industries operate on the outskirts of the city since land values are lower there. Thus, apart from retailing, finance and the corporate sector, the city provides a reservoir of cheap labour. With the exception of the wealthiest, most of the income generated by city business flows to the suburbs. But locating away from urban areas results in lengthier commutes.

Increases are found in the number of workers who are long distance weekly commuters. They are found to be predominantly in the middle-age range and male (Hogarth and Daniel, 1988, 61-8; Green et al, 1999, 55-9). A notable trend is reported in the movement of these workers from the North and the Midlands, to London and the South East for the working week. There is, however, some reluctance reported among workers who perform this weekly ritual. They continue to do so as they see no alternative in maintaining their preferred standard of living. Growth in the size of labour markets, in some occupations (e.g. some professions), requires workers to travel further-a-field in order to find paid employment. This results in long distance travel, especially in households where partners are combining demanding dual careers. The result is that for some, dual location becomes a reality, often comprising spending the working week at a rental property close to the workplace, returning to the family home at the weekend (Green et al, 1999, 56). However, it should be noted that for many people the commute still takes place over shorter distances on a fairly regular basis (Green and Owen, 2006). This latter use of the commute is that which is focused on in this thesis.

The commute is also used for the completion of tasks for paid work, with the travel time spent productively as 'activity time' to complete tasks, including

contacting clients using mobile technologies. Many workers may view this positively (Lyons and Urry, 2005). However, the commute remains invisible in the eyes of work-time policy. Commuting is not included in WTR definition of work-time. The commute is specifically listed as 'not included in work-time'. While the commute is ultimately a choice, there has been a blurring of this activity with work as noted above, meanwhile more and more workers are undertaking lengthier commutes through compromise, or in some cases constraint (financial or otherwise). The commute is thus a particular concern, as it results in workers facing increasing pressure with regards to their time allocation. In addition, given the time used on the commute, this may have potential health and safety implications. Tired workers, working long hours, and faced with a lengthy drive home, may be less safe on the roads.

In the case of dual career households both partners commute to their place of work, often to workplaces in separate locations, increasing the number of cars used for the commute (Pooley and Turnbull, 2000, 22). As a compromise dual career households may choose to locate around transport nodes, offering access to a range of labour markets, but potentially requiring more extensive travel to reach them (Doyle and Nathan, 2001, 11; Kloosterman and Musterd, 2001, 625; Green, 1997). Lindsay (2003, 141) suggests further that greater specialisation in the job market has led to more distant opportunities and more frequent job moves, a factor perhaps most greatly affecting those in the professions.

The commute is complex in nature, with workers regularly travelling to different workplace locations, or undertaking multi-part journeys between home and work. This may have significant effects on individuals in terms of stress, impacting on the working day and happiness levels (Williams and Hill, 2007; see also Koslowsky et al, 1995). Interruptions to the commute are a significant cause of stress, as a direct journey on public transport is considerably less stressful than having to change station or mode of transport (Wener et al., 2003). However, with increasing numbers of workers building secondary activities into their commute, such as the school run, direct journeys may be increasingly infrequent.

The increased length of the journey to work caused, in general, by larger distances between the home and workplace, has deterred many from using alternative methods of transport, for reasons including the extra journey time, unreliability, and lack of direct transport routes (Pooley et al, 2005, 135). Commuting is a major cause of urban traffic congestion which, in turn, has significant implications for the environment in urban centres. This impacts the individual too in the form of extended time devoted to travel (Whitelegg, 1992: 1997). To combat issues such as these there have been moves to promote use of public transport, while at the same time placing restrictions on the use of the car.

4.4 Reducing Reliance on the Car

International protocols are driving UK policy at central, regional and local government levels, toward reducing car use. This has become a policy concern following the publication of the independent Stern Review on the Economics of Climate Change (H.M. Treasury, 2006), the Eddington Transport Study (DfT, 2006), and 'Towards a Sustainable Transport System' (DfT, 2007). These reports highlight key concerns over transport, requiring targeted policy to ameliorate traffic congestion in urban areas. This forms part of the current Government policy agenda targeting CO₂ reductions, including the carbon 'footprint' of individuals. Improving the reliability and quality of public transport is a major goal of policy, as is addressing climate change through helping businesses and individuals to make better choices in terms of transport, and improving the image of public transport systems (DfT, 2007). In addition to reductions in car use, current policy targets reductions in air travel, implicated as a major environmental polluter (Pooley et al, 2005). This has important implications for those employed by multinational organisations, who may journey to offices in a range of destinations.

A range of schemes specifically target reductions in car use (Pooley et al, 2005, 226-7). For certain groups targeting car use is appropriate. Schemes include congestion charges such as that found in the City of London. Furthermore a planned charge in Manchester has since been abandoned following a public

referendum (Greater Manchester Public Transport Executive, 2008).²¹ The term 'congestion charge' describes the levying of fees for the use of particular road sections. "Congestion charging in Central London is the most radical transport policy to have been proposed in the last 20 years and it represents a watershed in policy action" (Bannister, 2003, 259). Since February 2003 (between 7:30am and 6:30pm on week-days) vehicles entering the congestion charge zone were charged £5 pounds per day, with some reductions and exceptions (note that this charge has since risen to £8 per day). Prud'homme and Bocarejo (2005) suggest that the scheme has been a success in reducing congestion, and has increased the availability and use of public transport. However, while substantial revenues are generated from the scheme, high costs render it less of a success financially.

Reducing congestion by charging for road use may also have negative impacts on the employer, perhaps reducing their competitiveness vis-à-vis businesses located outside the congestion charge zone (Knorr and Eisenkopf, 2006). This must be considered in the context of other schemes aimed at reducing car use and dependency, such as the workplace parking levy (WPL), proposed in the City of Nottingham (Nottingham City Council, 2009). A parking levy imposes a charge on parking spaces provided by employers for their employees.²² Liable spaces will be charged £185 per annum, with planned increases. The scheme aims to reduce the current dependency on the car, and promote the use of alternative forms of transport. The funds generated by the WPL will be used to fund substantial public transport improvements in the City, including an extension of the tram system (NET Phase 2). The Government confirmed the Order for the proposed scheme in Nottingham on 31^{st} July 2009 (Nottingham City Council, 2009). Implementation of the WPL will not, however, begin until 2011. The proposed Workplace Parking Levy is given some consideration in Chapter 7.

²¹ Cambridge and Bristol have also developed proposals for congestion charges (DfT, 2007).

²² The proposed scheme in Nottingham includes a number of exemptions. Employers in the City with up to 10 car parking spaces will be exempt, in addition to emergency services and staff at NHS premises. Also proposed to be exempt are spaces designated for disabled people, business customers, motorbikes, display or fleet vehicles, vehicles loading/unloading and employees who live at their place of work (Nottingham City Council, 2009).

Empirical research by Rye (1999, 194) acknowledges that employee parking is a delicate political issue and that reducing the number of spaces, or access to them, can cause significant disharmony. This may impact particularly strongly on low paid workers, potentially exacerbating existing problems of high staff turnover. This is an important issue as the journey to work can cause high stress levels amongst employees, caused by traffic and the length of the commute. Difficulties with parking when arriving at the workplace will only exacerbate this.

Many workers use their car to travel to work for convenience. Many individuals prefer independent travel which provides personal space (Pooley et al, 2004, 2). Regulation of car use, combined with efficient public transport, stimulates the use of public transport, therefore reducing congestion (Verhoef et al, 1996). Public transport improvements are likely to be made using the income generated from schemes such as congestion charging and the WPL. Incomes will be used to improve the availability and quality of public transport, and potentially allow subsidised transport methods. However, there will be a time-lag between implementation of the schemes and the improved public transport. Difficulties arise in 'getting people out of their car' (Pooley et al, 2005, 226). Measures such as the congestion charge and the WPL are put in place to persuade individuals that the correct and most convenient choice is to use alternative methods for their journey to work. However, for some workers use of the car is essential so that they can combine the commute with household tasks, including the school run.

The car remains dominant, while the perceived lack of reliability and inconvenience of using alternative methods of transport has hindered any great increase in the use of public transport (Pooley et al, 2005, 135). The image of public transport is poor in the UK. Most individuals view services as an inadequate alternative to the car due to lack of frequency and reliability (Rye, 1999, 193-4). Journeys made on public transport are front-loaded, unlike the car, requiring significant planning. While a journey in a car allows for some mistakes, a wrong turn for example, similar errors on public transport are complex and may take up valuable time to correct (Stradling et al, 2000, 208). This turns individuals away from these modes of transport.

While many individuals may appreciate the benefits of reducing their car use — e.g. the environmental and social benefits from reduced congestion — evidence suggests that many workers do not feel safe using public transport (e.g. waiting at bus stops), especially at night (Pooley et al, 2005, 140). Use of public transport is also hindered by the fact that in many cases it requires multi-part journeys, e.g. two bus journeys. This may increase stress levels as workers face regular worry about making connections (Williams and Hill, 2007). Public transport is also less suited to dealing with emergencies as it offers less flexibility. Individuals can drive to an emergency, while they would otherwise be waiting for a train or bus.

In many cases the increasingly complex schedules of individuals do not allow for methods of transport, which are better suited to dealing with medium to high density flows on fixed routes. Pooley and Turnbull (2005, 136) present a number of cases in which household responsibilities, for example taking a child to school, or day care, had prevented use of alternatives to the car. However, some success is recorded in the use of car sharing schemes, although this has been limited as a result of difficulties in combining a number of individuals' routines. Those with more rural residential locations may choose the car because no suitable public transport is available. For these groups the reductions in availability of car parking, and increasing cost of such transport, may simply result in essential travel becoming increasingly stressful and difficult to manage. Difficulties remain in distinguishing these groups from those that choose to travel by car for personal reasons, and those who are subject to constraint.

Current policy initiatives target the reduction of congestion through schemes such as congestion charging and car parking levies. Part of the focus of this PhD is to explore the possible impacts of such schemes from the perspective of the employer, the individual worker, and the household. The clear focus of current policy suggests significant benefits are to be had from the introduction of these schemes, and the reinvestment of funds generated by them into public transport. However, the time-lag between implementation and reinvestment may result in significant short term inconveniences. Certain groups may also suffer far greater from constraints and costs imposed on them by transport policy. This will especially impact those constrained by household responsibilities. The extent to which travel is made through 'choice' is therefore of key concern.

4.5 The Commute as a Temporal or Spatial Concern?

So far this chapter has explored how the changing economic structure in the UK economy has brought with it increased mobility among many workers, especially those in managerial and professional occupations. Moreover, the commute has become increasingly complex. With this in mind it is important to develop an understanding of the decision-making process involving the commute.

Commuting has considerable impacts on time allocation. Those who spend more time commuting report a lower level of 'life' satisfaction, as they are not being compensated for the burden of commuting with either a higher salary, lower rent costs, or a better living environment (Frey and Stutzer, 2004). Moreover, Cameron and Muellbauer (1998) suggest that the cost of the commute increases dramatically with increases in both distance and time. This not only relates to the obvious financial cost of travelling e.g. the cost of fuel or a rail ticket, but also in terms of the impact it has on time allocation. There is acknowledgement of the reluctance of many commuters, especially in terms of those making long distance weekly commutes, to perform their weekly ritual. However, in many cases this travel is performed through financial compunction to maintain preferred standards of living (Green et al, 1999). Importantly many of the individuals involved in this movement of labour also must do so to gain access to labour markets, especially those with highly specialised skills (Lindsay, 2003). Lengthy commutes reduce time available for leisure. In addition, if the commute is included in measures of work-time, it follows that lengthier commutes reduce the net income gain per hour of 'work' for an individual (Schubert et al, 1987, 76-78). Given this evidence the commute could be considered an economic 'bad'. Considered in this way it can be argued that there will be a limit beyond which individuals are unwilling to commute. This is defined as a 'commuting tolerance' (Clark et al, 2003; Pooley and Turnbull, 1999). However, the question remains whether this limit is a physical limitation relative to time or monetary cost, or whether this 'tolerance' represents something altogether more complex?

As a physical limit, the concept of commuting tolerance has been used to observe the point at which individuals become resistant to further increases in the time spent commuting. Empirical observations suggest a 'tolerance zone' in the range of about 30 to 45 minutes (Clark et al, 2003, 200). Tolerance will vary dependent on region of residence (and work), occupation, and a number of demographic factors (Lever, 1987, 264). This determines the size of the labour market area available to workers, and is likely to be lower for those who have recently changed residence and for females (Clark et al, 2003).

Females will likely undertake shorter commutes as a result of gendered roles. This leaves them with the majority of household responsibilities, and effectively limits the time and distance they are able to travel to work (McDowell et al, 2005). Females suffer from greater spatial constraints in relation to the journey to work as they are, 'more closely tied to home responsibilities' (Lever, 1987, 264). Indeed as Hanson and Pratt (1995, 10-13) suggested when reporting on the US, "the spatial constraints experienced by many women suggest that many women are extremely dependent upon local employment opportunities". They argue women typically travel short distances to work. This resonates with the discussion earlier which highlighted gendered divisions founded on perceived primary and secondary careers within the household.

There are a number of implications of a time tolerance. The geographical distance that an individual can travel in their 'tolerance zone' will depend on a number of factors. These include variations between urban and rural areas, and times of day. These will affect the geographical distance that can be covered within a given period of time. Oswald and Benito (2000, 21) find that average commuting times are greatest in London, perhaps indicating a higher tolerance among workers in this region. The use of the 'tolerance' concept here suggests that individuals working in London are psychologically more adept at dealing with longer commutes. But does this mean Londoners have a greater commuting tolerance? Or are they simply constrained by the physical time it takes to travel between home and work in which case the concept of a tolerance becomes mute? Longer commuting times may reflect the state of public transport in the capital. Households may also wish to avoid entering local housing markets due to high

costs in this region. Individuals working in the London region may make a conscious decision to trade-off reduced leisure hours in exchange for higher earnings. Alternatively, individuals may 'adapt' to their situation. This viewpoint, discussed by Schor (1993) in reference to hours of work, rejects choice-based explanations such as that offered above and emphasises that under constraint many individuals will simply make the most of a (bad) situation.

Mode of transport forms a key factor in determining available labour market areas. Workers who travel by train or car are able to travel further, affording them a larger labour market area. Pooley and Turnbull (1999), upon investigating historical trends in commuting behaviour in the UK, arrive at the conclusion:

"We suggest that most people appear to have a threshold of time up until which they are prepared to travel, that this threshold has remained relatively constant over a long period of time, but that the distance travelled in this time has increased as transport modes have changed and more people have gained access to faster forms of transport" (1999, 285).

Developments in transport have allowed workers to travel greater distances while remaining within their time 'tolerance zone'. However as roads are becoming increasingly congested, the success of technology in creating access to new, more distant, labour markets may well diminish. Increases in home-working may offer a solution as individuals demand to travel less. It would appear then that the focus of this limitation, or tolerance, is grounded in time. It is temporal rather than spatial factors which determine an individual's threshold beyond which they are unwilling or unable to travel.

The Income-Commuting Trade-off

The mainstream income-leisure trade-off model can be applied to an individual's decision-making process over the commute. However, it remains limited by its concentration on the individual, lack of awareness of gender and of external influences. Figure 4.2 represents the trade-off between income and commuting time for a given number of working hours. This model begins with the same axioms and assumptions outlined for the labour supply model in Chapter 2. C_t represents the individual's commuting tolerance, or maximum time the
individual is willing to commute. Similarly to the mainstream labour supply analysis, as the wage rate increases from R_1 to R_2 , the individual is initially willing to commute a greater time-distance (movement from C_1 on curve I_1 to C_2 on curve I_2), in order to receive greater income. Income, considered a 'good', will initially act as compensation for greater levels of commuting, a 'bad'. However, the individual will reach a point (C_t) beyond which they will not be willing to commute any further, generating a vertical upward slope in their indifference curves (I_2 and I_3); this is their maximum commuting tolerance.



Figure 4.2: Income-commuting time trade-off

Additional increases in wages will not persuade the individual to perform a longer commute. The model developed here suggests that the commute in the context of time-distance is of great importance in determining the labour markets accessible to workers. However, this model does not consider a number of factors which may affect and alter an individual's commute. These include occupation specific labour market areas, which will be greater for certain occupations (Lindsay, 2003, 141). The model abstracts the complexities of the household which impact on the decision-making process, often requiring compromise from both partners, especially in dual career households. Moreover, gendered norms within the household may impact on commuting patterns. Thus rational choice theory, as presented here, is limited by over-simplification, but does provide a suitable foundation for analysis.

Mainstream economic theory can be criticised for the assumption that an individual, in some form, chooses how they use their time, in this case time spent commuting. Even if they do have some control over their time, it is likely that 'choice' is secondary to constraints determined by institutional and evolutionary forces, as Philp et al (2005, 81) argued in reference to working hours. This closely follows the argument of institutional economists, discussed in Chapter 2. They see social institutions as enabling 'free' choice, but that these choices develop into future constraints. Individual commuting 'tolerances' may, therefore, adapt over time. Demands from employers for greater mobility may influence workers tolerances for travel. As time passes this may mould the preferences of workers, as they accept increased travel in exchange for increased income.

Becker's Theory and the Commute

Becker's (1976) theory, discussed in Chapter 2, can also be applied to commuting behaviour. Becker uses the assumption that direct commuting costs, such as a train fare or purchasing petrol, vary positively, and indirect costs, such as space, vary negatively with distance commuted. If an individual experiences a rise in income this would increase the opportunity cost of commuting a given distance because the forgone value of the time involved would increase. The increase in commuting costs would discourage commuting. Against this, the increase in income may result in an increase in the demand for space, which would encourage more commuting. The outcome of an individual's choice over commuting and housing is dependent on the relative strengths of the two conflicting forces, something which is considered in the next section with reference to the commuting-migration trade-off.

Using a rational choice approach, Becker suggests that the distance commuted will only increase following an increase in income, if space has an income elasticity greater than unity. This is derived by looking at the effect of a change in full income on the time spent commuting, given by the equation (Becker, 1976, 106-8),

$$\frac{\delta t}{\delta S} = \frac{k(E_x - 1)}{p'' x}$$

Time spent commuting is represented by *t*, *S* is full income, *k* is a constant, *p*'' is the cost per unit of space, and *x* is the quantity of space used. The cost per unit of space, *p*'', is assumed to be greater than 0, as space is considered desirable. Where E_x is the income elasticity of demand for space, an increase in income will increase the time spent commuting if, and only if $E_x > 1$.

The result of Becker's analysis indicates that individuals' consider outdoor space a 'luxury', and the demand for outdoor space increases with increases in income. If we assume the majority of workplaces are located in urban areas, then it follows that as income increases workers will locate further from their workplace in suburban and rural areas, as per O'Connor's perspective discussed earlier, but will face lengthier commutes.

Further theoretical discussion on the nature of the commute is offered in terms of the concept of predictions and mispredictions of utility. Frey and Stutzer view the individual as a decision-making entity that will choose the combination of activities which provide them with the highest level of utility (2004, 5-8). In the context of commuting the individual may incorrectly predict levels of utility and disutility, resulting in longer commutes than would be preferable. Frey and Stutzer continue by proposing four main sources of misprediction of utility: (1) adaptation is underestimated (mistakes in estimations of future utility); (2) distorted memory of past experiences; (3) rationalisation of decisions (the individual feels a strong urge to justify their decisions); and, (4) intuitive theories about the sources of future utility (individuals have diverse theories about what makes them happy). Notably, while extending Becker's utility-based approach, this perspective remains limited by its focus on the individual and lack of acknowledgement of the influence of the household.

Mainstream analyses focus on the cost of commuting, in relation to both time cost, and monetary cost which reduces the individual's level of income. Johansson et al (2003) instead focus on the commute in the context of time. In

this model, the individual is regarded as decision-making, and utility maximising. Johansson et al's analysis, which uses data from Sweden, suggests that commuting tolerances are non-linear with time-distances. They are more sensitive for medium length commutes in comparison to very short or very long commutes. This indicates that individuals who perform medium length commutes have a lower commuting tolerance for changes in their commutes than those who experience commutes at either end of the time spectrum. Figure 4.3 summarises the proposed relationship between willingness to commute and the time travelled. The reluctance to change commuting patterns in the middle range (shown by the steeper gradient of the curve), may relate to types of employment or to gendered norms. In the case of occupations, low paid or low skilled workers would be less willing to travel further as this would have a greater relative financial impact. These workers would also be relatively more able to find employment offering similar remuneration within the same locale. In the context of gender, female workers' household constraints limit their movements. As a result women are more committed to local labour markets and employers (Hanson and Pratt, 1995, 13; Harris et al, 2007).



Figure 4.3: Willingness to commute (Source: adapted from Johansson et al, 2003)

The application of rational choice theory to the commute, and Becker's (1976) extension to this, suggest that an individual, while under some constraint, will

have some choice over their commute. This may be subject to limitations in terms of the size of the labour market causing potentially lengthier commutes than would be preferable. However, these mainstream approaches, as well as much of the literature presented in this section, focus on the *individual* as the decision-making entity. When the household is considered, managing dual schedules, and compromise, gain precedence in decision-making criteria. This impacts on the commuting behaviours of partners, especially where dual careers and subsequent dual travel schedules are found.

4.6 The Commuting-Migration Trade-off

Traditional theories analyse migration and commuting decisions in terms of the male bread-winner, female homemaker model.²³ In this model the male career takes precedence, and the prioritisation of 'his' career would have a significant influence over household decision-making (Green et al, 1999, 50; Hochschild and Machung, 1990). Females, in the past, often took career breaks to have children; however, this trend has decreased in recent years as more women remain committed to their careers. They do so by making use of both market and non-market (family based) care (Harris et al, 2007). These increases in female participation and uptake of paid employment have occurred concurrently with the growth in dual career households.

Few families in the past made mobility decisions to accommodate the secondary earner. Decisions over household movements were made to further the career of the primary earner, often males, and the secondary earner would simply follow (McDowell, 2004, 151; Bruegel, 1996; Hardill *et al*, 1997). Women's careers therefore remained likely to be disproportionately limited in comparison to their male counterparts as they were burdened with the majority of household responsibilities (McDowell et al, 2005; Deitch and Sanderson, 1987, 619). It appears, though, that changes in attitudes towards women's employment accompanied by increases in female incomes are causing families to consider both employments when making mobility decisions. If both partners are career

²³ More detailed exploration of the literature on housing markets is not included here. The key focus in this thesis is, instead, on the use of the commute as a substitute to migration.

oriented they are more likely to share household responsibilities, including caring for children (Green, 2004, 636). However, increases in the number of professionally qualified workers have resulted in reductions in the likelihood of couples being able to find two jobs in a preferred locale (Deitch and Sanderson, 1987, 618). Partners must therefore make compromises.

For households where both partners are employed this may pose particular difficulties as movements cannot simply be made with only one partner in mind. Some partners, often females, may specifically choose work that is relatively easy to transfer between locations, such as teaching (Green, 2004, 636). However, for some households engaged in dual careers moving to accommodate the male career may simply not be an option. Here compromise becomes the main method of managing changes in workplace (Green et al, 1999, 51).

As contemporary labour market areas cover a range of locations, many couples' residential location becomes a compromise between two distinct workplace locations (Kloosterman and Musterd, 2001, 625). Households therefore increasingly locate close to transport nodes or hubs (Doyle and Nathan, 2001, 11). Dual career households, especially with children, display preferences for semi-rural locations close to good transport links, and will often factor in the inclusion of a number of labour markets to limit the need for future residential movements (Green, 1997). This is referred to in this thesis as 'nodal living'. However, this results in both partners travelling further and more frequently (Doyle and Nathan, 2001, 11). As Gibbons and Machin report, "the transport needs amongst this group [dual career households] are complex, with overall higher demand for commuting because residential decisions must be a compromise between both workers" (2006, 22-3). This creates considerable pressures for these workers as they combine dual schedules of paid work, household responsibilities and lengthy travel for work.

Hardill (2002), and Green and Canny (2003), propose that worker mobility impacts on residential mobility. Flexibility in location has become an increasing feature of life, as illustrated by the generation of 'commuter' couples. In order to capture the complexity of individuals' movements it is important to focus on the

daily, weekly and monthly movements undertaken for paid work, as well as other types of movements. In consequence there appears to be a blurring between business travel and commuting, residential mobility and even migration (Kodz et al, 1998). Changes driven by the 'new economy' have altered the pattern of traditional relocation. Workplace change no longer necessitates traditional permanent relocation. Instead some variety of non-permanent movement may be made, encompassed in the term 'circulation' (Green and Canny, 2003). Figure 4.4 details the trade-offs between migration and circulation. Notably, permanent relocation is divided between movements made between workplace locations, and housing or amenity led migration. Among dual career households the former is likely to result in greater movements included under circulation i.e. commuting.

Duration			Reason for Move	
			Production-related	Consumption related
	Permanent relocation		Labour migration (inter- and intra-	Housing Adjustment
Time			organisational moves)	Amenity-led migration
	Circulation	At least one (usually several) overnight stay(s)	Short-term assignments	Holidays
			Long-distance (weekly) commuting	
		Daily	Commuting	Shopping

Figure 4.4: Migration and circulation trade-off (Source: Hardill and Green, 2003, 213)

Employers also play a significant role in determining movements for paid work (Green et al, 1999, 51). Employers may view willingness to move location positively, as this shows flexibility on the part of the worker. This may offer the workers greater opportunity for career progression than remaining in one location (Green, 2004, 635). However, flexibility needn't require permanent movements. Organisations increasingly give their employees short-term assignments, or semi permanent moves, that require circulation as apposed to migration (Green, 2004,

634-5). Flexibility from the employee may therefore simply require lengthier and more complex commuting patterns, and occasional working from home.

To counteract the need for future movements, and as a result of the pressures of local housing markets close to their workplace, households undertake lengthier commutes rather than making permanent residential movements (Hardill et al, 2006, 180; Green, 1995). This choice is often made out of compromise, so that households remain located between partners' workplace locations. It may be made to avoid uprooting the family, especially where children are found. Indeed, most moves occur during the earlier stages of careers, where couples are either childless, or just starting a family (Deitch and Sanderson, 1987, 630). One might assume that families may be averse to moving at later stages, so that they avoid taking children out of schools, and moving away from friends and family.

There are further difficulties faced by households who wish to enjoy housing of a similar quality or nature when relocating to, for example, London and the South East. The housing market moves cyclically, and is subject to uncertainty, meaning there is potential for losses as well as gains (Hardill and Green, 2003, 220). For Rouwendal and Nijkamp (2004) spatial aspects such as urban housing markets have a more important role in the determination of actual commuting behaviour than the direct costs related to commuting (both financial and time). Muellbauer and Murphy (1991, 246-7) argue that the low level of labour mobility and large owner-occupier sector in England and Wales may aggravate regional variations, and the poor performance of some regional markets. This results in partial segmentation of labour markets. Some regions experience high unemployment, while others have plentiful employment opportunities.

Movements to the South East and London may be preferable as earnings are higher for those who work in urban areas, especially in these regions. However, house prices follow this trend in metropolitan areas, leading to net decreases in migration. Individuals will therefore likely choose to commute from semi-rural and rural areas, to work in urban and metropolitan areas. However, costs of commuting are incurred, both in the financial sense (So et al, 2001), and also in lost leisure time. It is notable that a number of regions, including the East Midlands, have relatively high out-commuting rates, thanks to their proximity to the South East (Cameron and Muellbauer, 1998). A significant proportion of workers residing in the East Midlands may not actually work within this region.

As individuals combine the constraints of labour and housing markets this may create complex living arrangements, especially as a result of inter-regional house price differentials. The trend of long distance weekly commuting, reported earlier in this chapter, is likely to be accompanied by some form of property rental, or ownership, close to the workplace location. One partner will 'live' at this location during the week, before returning to the family home for the weekend (Green et al, 1999, 55). Renting accommodation close to their workplace, to avoid local housing markets, results in workers experiencing less frequent commutes than owner-occupiers (Oswald and Benito, 2000, 18). Consequently couples may live both together and apart (Hardill and Green, 2003).



Figure 4.5: The emergence of dual location households (Source: Green et al, 1999, 56)

Figure 4.5 illustrates this development of dual location households. Rises in female participation, resulting in increases in dual career households, create difficulties for these households as they attempt to obtain work in the same

location. Given this problem, and the aforementioned insecurities of housing and labour markets, many couples find their jobs in different locations. As a result couples have to live apart during the week, perhaps with one partner staying in rented accommodation away from the 'family home'.

Rouwendal and Meijer (2001) use Dutch data in their investigation of the commuting-migration trade-off. They suggest households dislike commuting, and that the relative cost of commuting measured by time is high in comparison to the wage rate. However, preferences for certain characteristics in housing type and location result in workers accepting substantially longer commuting times.

Households trade-off wages, house prices and commuting costs when deciding where to live and work (So et al, 2001, 1042). Using US data, van Ommerman et al (2000), suggest that transport improvements would result in more individuals living in non-urban areas, as commuting costs would decrease. Wages attract commuters and residents to an area, while high house prices will reduce incentives to reside in the area. Longer commutes require higher wages to make the worker better off than working in their area of residence. Areas with higher housing costs will need to offer higher wages to attract residential movements of workers to the area (van Ommerman et al, 2000). The decision to move job may be closely related to residential movement.

The commute is increasingly used as an alternative to residential movements, even when movements are made between jobs. Use of the commute in this manner is especially prevalent among dual career households as they attempt to combine two schedules of paid employment. Difficulties in gaining two jobs in one location causes these households to either locate close to transport nodes, or substitute the commute for permanent migration. Both of these solutions, however, lengthen the total time spent commuting in these households.

4.7 Conclusion

This chapter has focused on the increasingly mobile nature of paid work. The rise of mobility in both physical and knowledge forms is found to have both positive and negative effects on individuals and their households. Technology has played a significant role in this process, creating fluidity, and dissolving geographical boundaries (Sheller and Urry, 2006). The result is more travel for individuals, particularly in managerial and professional occupations. However, males and females continue to display varying levels of mobility. Women are often constrained and limited in their mobility by household responsibilities and gendered norms, making them more reliant on local labour markets.

Mainstream approaches to the commute, including Becker's, focus on the individual. They choose their commute, trading this off against desired levels of income. However, as with the mainstream approach to work-time this approach is gender-blind, and ignores the key influences of the household. The decision-making process involved in the commute is likely to be a product of compromise and some level of constraint, at least for some workers. A significant number of occupations, by their nature, require lengthy commutes and high levels of worker mobility, perhaps visiting a number of different offices each week. Current policy targets reductions in travel, especially the use of the car, to ameliorate traffic congestion and meet climate change targets. These are taking a number of forms, including road pricing and the imposition of workplace parking levies such as that proposed for the City of Nottingham. Policy must, though, acknowledge those who are under constraint in the use of their car, and ensure they do not suffer from policies targeting those who travel by car purely out of personal preference.

It is also clear that households face increasingly complex decisions over migration. Dual careers are increasingly influencing migration decisions with compromise a key factor in household location. Many households locate close to transport nodes, so that partners are able to pursue careers and manage household responsibilities. Moreover, partners are using the commute as a substitute for permanent migration, while some couples are found to be living both together and apart, as the result of a growth in dual location households.

5

Research Design and Methodology

5.1 Introduction

In this chapter the methods employed in this thesis are detailed. This includes the rationale for the methods chosen, and the limitations evident in the methodology. As was stated in Chapter 1 the purpose of this PhD is to undertake a theoretically informed empirical investigation of time allocation (working, caring, and commuting practices) among managers and professionals, resident in the UK. In this thesis the focus lies with dual career households, undertaking a gender sensitive analysis of the complex daily routines of this sub-set of workers. This thesis seeks to answer three research questions. These are:

- Which theoretical approach(es) mainstream, institutional or feminist

 offer the most suitable explanation of individual and household choices and constraints in the allocation of time?
- 2. Do distinctions need to be made within the Professional-Managerial Class (PMC), and are these distinctions occupational and/or gender specific?
- 3. What challenges, in a policy context, do dual career households face in managing the combined demands of work-time, caring and commuting?

The mixed methods approach adopted in this PhD combines the analysis of quantitative secondary data sources with a mixed method case study. Following the discussion of the mixed methods approach in the next section, consideration is given to the choice of secondary data-sets. This is followed by a discussion of the primary quantitative-qualitative data collected through a case study of Greater Nottingham. This combined in-depth interviews and the collection and analysis of small-scale primary data. Attention then turns to the analytical techniques used, before commenting on the specific ethical issues that arise with this methodological approach.

5.2 A Mixed Methods Approach

A mixed methods approach was chosen for this thesis. As all methods have limitations, researchers have increasingly recognised that a mixed method — or multi-strategy — approach may help to avoid the biasing effects of any single approach, which could otherwise have significant impacts on the reliability and validity of the research (Cresswell, 2003, 15). Mixed methods differ from multi-methods in that a multi-method approach comprises a range of methods of data collection and/or analysis which are located within a single research paradigm i.e. either quantitative or qualitative. In contrast a mixed method approach, such as that described here, uses a complementary mix of both quantitative and qualitative research techniques.

While the use of mixed methods is in no way unique in business and management, it does differ from most economics research, where the theoretical foundation of this thesis is located. Mainstream methods in economics tend to rely exclusively on mathematical and statistical modelling (Spencer, 2009, 129). These specific methods of analysis are founded on a number of methodological assumptions, which Lawson (2003) criticises, arguing that they simply lack relevance in an open social system. This PhD explores social reality and is realist in this sense. It seeks to generate a progressive body of knowledge through explanatory strategies (Pawson and Tilley, 2006, 55-6).²⁴ The role of the researcher in investigating phenomena is also recognised. In addition, this thesis acknowledges that mainstream approaches to research are limited by their almost exclusive use of mathematical econometric analysis. Realists including Lawson (2003) suggest econometric analysis has its applications, but is not always useful in exploring social phenomenon. It is therefore beneficial to approach research, especially where individuals and households are involved, with methodological pluralism, combining a range of methodologies and techniques, contra neoclassical economics. This PhD is largely quantitative in nature. However, the

²⁴ Critical realism attempts to investigate phenomena in greater depth to enhance understanding of social structures. However, there is acknowledgement that the choice of phenomemon which is explored will be dependent on the knowledge, understanding, values, and interests of a researcher or research group (Lawson, 1997, 229).

qualitative aspects, integrated with a case study approach (including semistructured interviews), allow a more comprehensive analysis of key themes including exploring dual careers from a policy perspective. These are used to answer the third research question.

A mixed method approach can suffer from too much diversity, resulting in both quantitative and qualitative elements being compromised in order to undertake both (Pawson and Tilley, 2006). However, mixed methods, utilised appropriately, combine the best of the statistical robustness of mathematical quantitative techniques, with the detail and nuances of qualitative research (Bryman, 2004, 460). Combining research methods offers the opportunity to neutralise any biasing effects that may result from employing both quantitative and qualitative techniques. Qualitative data may also be used to facilitate the interpretation of findings from quantitative data (2004, 460).

Quantitative Methods	Qualitative Methods	Mixed Methods	
Predetermined	Emerging methods	Predetermined and emerging methods	
Instrument based questions	Open ended questions	Open ended and closed questions	
Performance data	Interview data	Multiple forms of data drawing on all possibilities	
Attitude data	Observation data	Statistical and text analysis	
Observational data	Document data		
Census data	Audiovisual data		
Statistical analysis	Text and image analysis		

Table 5.1: Quantitative, Qualitative and Mixed Methods (Source: Cresswell, 2003, 17)

A mixed method approach allows both quantitative and qualitative research practices to be employed, and integrates the data at different stages of enquiry (Cresswell, 2003, 19). When applied successfully it results in the combination of elements of both approaches as shown in Table 5.1. The mixed method approach allows the research to "generalize the findings to a population and develop a detailed view of a phenomenon or concept for individuals" (Cresswell, 2003, 22). The mixed method approach often combines quantitative and qualitative elements using large scale surveys of populations to gather general trends, followed by studies focussing on individuals to obtain specific language and voices about the topic. This method is followed in this PhD. Preliminary analysis is carried out using large scale data sources, the findings of which are compared

with, and used to inform, the subsequent case study of organisations and dual career households in Greater Nottingham. More details of the case study approach are given later in this chapter. Wajcman and Martin (2002) combine survey research and interviews in a similar manner to that adopted here in their study of gendered differences in managers. Their research, conducted in Australia, involved a survey of 470 managers, which was accompanied by 136 semi-structured interviews. Quantitative analysis showed little difference between male and female managers. However, analysis of the qualitative data suggested females found it much harder to separate managerial identities with household ones resulting in them choosing one or the other. In this case multi-strategy research was able to reveal much more than would have been found through a single approach (Bryman, 2004, 461). Kodz et al (1998), in their study of long hours, also use a mix of secondary and primary data, including the LFS, together with a number of case studies conducted in UK organisations.

The classification of mixed method or multi-strategy approaches has been attempted in a number of ways. Mixed methods have been grouped into three alternative classifications, triangulation; facilitation; and complementarity (Hammersley, 1996). In economics the use of triangulation is limited, "beyond the weakest form of the interaction of modeller and model" (Downward and Mearman, 2007, 80). In contrast this research combines methods in a number of ways, thereby triangulating at a methodological level.

Triangulation is used in this PhD so that the research is able to provide a holistic view of national, and regional, trends in time allocation and also the lived experiences of dual career households at the organisation/household level. The interviews with HR managers additionally provided a platform for negotiating access to employees at each organisation during the case study, facilitating the next stage of the research involving a survey of managers and professionals. Sequencing of this variety reflects the need for triangulated research to remain focussed, where a survey can follow qualitative enquiry, or secondary analysis follows a review of literature (Kanbur, 2002). This sequencing is used here to ensure focus and provide the most suitable combination of methods to answer the research questions. The mixed methods used in this thesis are complementary as

the quantitative elements provide statistical robustness and reliability to the research. Meanwhile the quantitative-qualitative case study offers greater depth and nuanced understanding of the lived experiences of dual career households, providing greater validity to the findings made in the secondary data analysis.

5.3 Secondary Data Rationale

The secondary data used in this thesis was chosen to provide both an individual and household perspective on contemporary time allocation as per the key focuses of this thesis. Individual data is taken from the *Labour Force Survey* (LFS). The household perspective is provided by the *Census Special Licence Household Sample of Anonymised Records* (SL-HSAR). Both of these surveys are conducted by the Office for National Statistics (further information on these data-sets is included in Appendix 1). These published data-sets offer a large sample size, and in the case of the LFS a frequently (quarterly) collected sample.²⁵ Sample sizes for all data-sets used in this thesis, including the primary data, are presented in Table 5.2.

Data-set	Sample Size (n)
Q4 LFS 1995	152,396
Q4 LFS 2008	120,829
Census SL-HSAR 2001	225,436 Households (525,715 Individuals)
Leverhulme Data 1994/5	136 Households (260 Individuals)
PhD Data 2006/7	81 Households (143 Individuals)

Table 5.2: Data-set sample sizes

The LFS provides data on occupations (for first two jobs), industry characteristics, usual and actual hours worked, commuting time, age and gender, job tenure, and preferences for reductions in hours. Fourth quarter data from the 1995 and 2008 LFS are used because questions related to commuting and transport are included, as well as those dealing with flexible and home-working.

The data from the 2001 Census SL-HSAR allows individual evidence to be contrasted with that of the household. The Census data provides information on occupations (for main job only), place of employment, commuting patterns

²⁵ The LFS moved from seasonal (e.g. Sept-Nov) to calendar (e.g. Oct-Dec) quarters from 2006.

(including mode of transport and distance travelled), working hours, type of residence, age and gender of individual, and household characteristics. In addition the 2001 data-set, includes variables on caring responsibilities, which is a particular concern of this research as highlighted in the review chapters. The emphasis, in this PhD, is on cross-sectional analysis of the fourth quarter LFS for 2008, and the Census SL-HSAR for 2001.²⁶ The LFS and Census SL-HSAR are chosen over other large scale data-sets for a number of reasons outlined below.

Rationale for use and choice of published data

The secondary data chosen provides suitable variables for analysis at a national perspective. The secondary data presented builds on the body of work into employment and commuting patterns. Stewart and Swaffield (1997) use the British Household Panel Survey (BHPS) to establish that male manual workers' stated preferences were for 4.3 hours per week less than actual hours worked. This data source is also used by Böheim and Taylor (2003) who suggest that around 40% of employees would prefer to change their hours, the majority of which show preference for reductions. Bryan (2004) uses the WERS98 to ascertain that individuals may not have complete control over their working hours. Harvie et al (2009) use the LFS and the Department for Transport's National Travel Survey (NTS) in examining regional disparities between levels of GDP per capita, productivity and social productivity. Here it is found that GDP per capita is limited as it does not acknowledge, among other factors, variations in the length of the working day (including time spent commuting). Cameron and Muellbauer (1998) use a combination of data-sets in their analysis of commuting and migration. The Census of Employment and the LFS are used for data on commuting, while the National Health Service Central Register provides data on migration. In their research into "working long hours", Kodz et al (2003) use a number of data-sets, including content from the WERS98; the LFS; the European Community Labour Force Survey (ECLFS); the BHPS; and, case studies of UK firms, which are compared to similar EU case studies.

²⁶ The Census SL-HSAR data cover England and Wales only. For this reason, and the questions in the LFS and Census SL-HSAR, direct analysis is not carried out between the data-sets.

A number of alternative sources of published data could have been used in this PhD. The *Time-Use Survey* (TUS) for example could have been chosen. This survey provides a sample of 11,664 individuals from approximately 6,500 households. In contrast, the 2008 LFS provides a sample of approximately 121,000 individuals, 13,029 of which report working in a full-time managerial or professional occupation. The Census SL-HSAR also provides a large sample of 525,000 individuals, who can be analysed at the level of the household (225,436 households). Although a sizeable sample, data from the TUS contains a smaller sample of full-time managers and professionals, totalling 1,591 for the UK. The result is a progressively unreliable sample at lower levels of aggregation and when a number of variables are taken into account simultaneously. In comparison, at NUTS 1 level of aggregation, the LFS provides a sample of 882 full-time managers and professionals for the East Midlands region. Finally, the TUS was conducted in 2000. The LFS, on the other hand, is collected quarterly, and is up-to-date.

Other possible sources include the *British Social Attitudes Survey* 2002, used by MacInnes (2005). This was used by MacInnes to explore work-life balance and the demand for reductions in working hours. The MacInnes study usefully explores household characteristics, but does not consider occupation group or distinguish between employees in the public or private sector. The BSA Survey is based on a sample of 2,316 respondents. Bielenski, Bosch and Wagner (2002), in contrast, explore work-time preferences across 15 EU Member States and Norway, surveying 30,557 individuals of whom 12,649 were employed. Their study identified interesting characteristics, in terms of gender, caring responsibilities and other aspects influencing preferences for hours. While their study provided a good overview of the countries considered as a whole, the small samples from individual countries prohibited more complex analysis at the occupation level. The sample for UK workers in employment was just 1308.

Other possible sources of data include the BHPS, the WERS, and the *Work-Life Balance Survey*. The decision not to use these data reflected the relatively smaller sample sizes than in the LFS and Census, and the variables included in the surveys. A combination of personal and household characteristics, working

and commuting patterns were all necessary for this PhD. Some of these alternatives also suffer from infrequent collection. This research focuses on upto-date data which is provided by the LFS and is collected quarterly. In contrast a number of alternatives are collected at less regular intervals. The WERS is collected at irregular intervals with the last in 2004, and previous surveys in 1980, 1984, 1990 and 1998. While the BHPS is collected annually it contains a sample of only 10,000 individuals from 5,000 households. Although representing a substantial sample size, if we are only interested in managerial and professional workers this sample is substantially reduced. Similarly the WERS 2004 sample comprising of 22,451 workers is substantially smaller when irrelevant respondents are omitted. The Work-Life Balance Survey, which comprises both an employee and employer survey, is perhaps the most suitable alternative source of data. However, at the time of commencement of this PhD in 2005 only the first (2000) and second (2003) surveys were available. This has since been updated with the third Work-Life Balance Survey (2006) providing a potential avenue for further research. We should note that this survey again suffers from a relatively small sample of 2,081.

While combining a number of data-sets allows for more comprehensive coverage of the research subject, it is important to acknowledge that comparing data from different data-sets is problematic. This arises from differences in methods of data collection, definitions of measures used in the data, and variations in general survey design. In this PhD inter-survey analysis is only conducted to ensure consistency in findings. This allows comprehensive coverage of the subject material, and ensures that trends are consistent between data sources.

5.4 Case Study of Organisations in Greater Nottingham

A case study involves the detailed and intensive analysis of a single case (Bryman and Bell, 2003, 53). The case study approach concentrates analysis on a particular firm, organisation or location — Greater Nottingham in this PhD. Studies of this variety can be used to collect quantitative or qualitative data or, as in this case, a combination of both. Case studies are widely used in social research, so that focus can be given to real life lived experiences (Mahoney, 2003; Yin, 2003). Moreover case studies are sensitive to context, detail, and

complexity, providing a more nuanced understanding between policy and outcomes for individuals and their households (Mahoney, 2003; Yin, 2003).

The usefulness of a single case rests on the generalisability of findings to a broader context (Rueschemeyer, 2003, 309). While specific findings may relate only to the location studied, generalisability can be found in terms of concepts and theory (Kanter, 1977). Rueschemeyer (2003, 318) suggests a single case may offer persuasive causal explanations and can be used to identify likely causal factors when combined with relevant causal narrative.

The study of Greater Nottingham contains a longitudinal element as it builds upon the collection of primary data as part of the 'location and mobility decisions of dual career households' project funded by the Leverhulme Trust and conducted in Greater Nottingham in the mid 1990s (Hardill et al 1997; 1997a; Hardill, 2002: Hardill and Watson, 2004). Performing a follow up study of this nature using consistent methods, allows comparisons to be made with previous research. But care must be taken in order to establish whether any changes found are the result of actual change or simply the different individuals involved in the case study (Bryman and Bell, 2003, 56).

Nottingham is located within the East Midlands region of central England. In contrast to some regions, the population of the East Midlands is growing, largely because of in-migration. The population was recorded as 4.2 million in the 2001 *Census of Population*. The region is perhaps best described as a Polycentric Urban Region (PUR), consisting of a number of free-standing urban centres, which are separated but strongly linked (Kloosterman and Musterd, 2001). Polycentric Urban Regions are characteristic of many modern landscapes as Anas et al (1998, 1439) suggest, "one of the most interesting features of modern urban landscapes [is] the tendency of economic activity to cluster in several centres of activity".

In the central part of the East Midlands region there are three free-standing urban centres, termed 'core cities': Nottingham, Derby and Leicester. These cities have been identified as having coherence in the East Midlands Regional Spatial Strategy, acting as major employment, administrative and cultural centres (Hardill et al, 2006, 171).

Greater Nottingham comprises Nottingham City, the Boroughs of Broxtowe, Gedling and Rushcliffe, and the Hucknall part of the district of Ashfield. It has a population of approximately 632,000, just under half of which (278,700) are located in the city of Nottingham (Nottingham City Council, 2007).²⁷ Nottingham has undergone significant changes since the latter part of the twentieth century, not least in terms of the structure of its labour market. The City has witnessed a movement from manufacturing based industries, and has embraced the new economy. The city has developed into, arguably, the capital of the East Midlands region, and a major employment centre. Traditional industries have been replaced by high-tech and service industries, requiring highly skilled workers. The highly skilled occupations, management and the professions, now account for a significant proportion of the local labour market, resulting in gradual feminisation of the workforce. Recently the city has experienced a renaissance, aided by heavy investment in city living and the generation of new forms of employment. There has been redevelopment of brownfield sites, including the relocation of HM Revenue and Customs to the City, in 1995 (Hardill et al, 2006, 177). The patterns of redevelopment and investment, the location of workplaces, and the large numbers of suburb to city commuters, have increased the strain on the transport infrastructure within Greater Nottingham. These changes in the labour market and the commute make Nottingham an instructive case, representative of other cities in the UK and Europe.

The case study of Greater Nottingham comprised in-depth interviews with human resource managers (HRMs) in ten large organisations, including four organisations ranked in the largest 15 employers in the area (Nottingham City Council, 2006). The contacts at each organisation were subsequently used as gatekeepers to obtain access to employees, to conduct a survey of managerial and professional workers.

²⁷ These estimates, which are extracted from the 2001 Census, may report a lower population than that found in both the City, and Greater Nottingham (Nottingham City Council, 2007).

A number of the organisations involved in the 2006 case study also participated in the earlier study of dual career households (Hardill 2002: Hardill and Watson, 2004). The five organisations surveyed in 1994-5 consisted of a National Health Service (NHS) hospital, a higher education institution, a major bank, and two large market-oriented private sector manufacturing companies. The 2006 case study includes a number of the organisations involved in the earlier survey, and further reflects the changes in the economic structure of the area through the choice of organisations, including some multi-site organisations with '24/7' work routines. This allows for comparison with the earlier period, while also acknowledging changes in labour market structure in Greater Nottingham. Details of the anonymised organisations involved in the study are given in Table 5.3, complete with industry sectors.

Organisation	Sector	Industry Sector
City Government	Public	Public Admin, Education and Health
Government Department	Public	Banking, Finance and Insurance
Higher Education Institution	Public	Public Admin, Education and Health
County Authority	Public	Public Admin, Education and Health
Central Government	Public	Public Admin, Education and Health
Optical Retailer	Private	Other Services
Manufacturer	Private	Manufacturing
Solicitors	Private	Banking, Finance and Insurance
Telecommunications	Private	Transport and Communications
Voluntary and Community Sector	Voluntary	Other Services

Table 5.3: Organisation profiles (Nottingham, 2006)

The selection of organisations for this study, although differing from those of the earlier study, shared a number of similar characteristics. Large employers were chosen, employing a total of 57,000 individuals. They included both public and private sector organisations, and a voluntary sector organisation, in various industries. Organisations too, shared similar geographical locations to that of the previous research, i.e. within the city of Nottingham and Greater Nottingham.

Semi-Structured Interviews

The use of small scale interviews with a sample of key informants mirrors that of other research. The work of Hogarth and Daniel (1988) and Green et al (1999,

59-60) use semi-structured interviews to extract information from a small sample of manufacturing employees in relation to their long-distance weekly commuting patterns. These methods were also used as part of the earlier study of dual career households (see Hardill and Watson, 2004; Green, 1997). This comprised indepth interviews with 30 dual career households, preceded by a questionnaire, to examine the key factors influencing both location and mobility strategies, and the resulting importance of good transport links in maximising commuting potential.

The interviews conducted as part of the 2006 case study were arranged through negotiations with the key informants at each of the organisations, contacted with initial details of the research via telephone and email. It was decided that an interview length of up to one hour would be most suitable as the individuals would be reluctant to give up too much of their time at work. Prior to the interview the HR managers were provided with the interview schedule (Appendix 2) so that they were able to prepare and research any specific topics relevant to their organisations policies or worker routines. Participants were provided with a consent form to sign (Appendix 3), which confirmed anonymity of all materials and gave brief details of the interview schedule to ensure all key themes were adequately explored in the limited time available. The interview schedule was divided up into specific themes relevant to the research including organisation policy on working hours, flexible working arrangements, and transport to work. The schedule also permitted some time to digress.

The interviews were recorded using a digital audio recorder. Each interview was then transcribed verbatim into Microsoft Word. Participants received a digital copy of their transcript by email, so that they had the opportunity to reflect on the interview and make any corrections or amendments to the transcripts, which were then finalised. The transcripts were analysed using a simplified version of the cross sectional thematic coding method (Mason, 2002; Ritchie and Spencer, 2003), in order to highlight recurring themes. The interview data was extracted using a coding table, an example of which is included in Appendix 4 (and completed for interview 1), in order to gather data on the specific themes of interest to this thesis, including evidence of presenteeism, workplace flexibility policy, transport policy etc. Using the themes identified from the coding, relevant quotations were then extracted from the transcripts. Important issues reflected on by HR managers were compared to the experiences of managers and professionals from the primary survey data, in terms of revealed (usual working patterns) and stated preferences (preferences for reductions in hours, job satisfaction). The choice to use interviews to extract information from HR managers was made for a number of reasons. Perhaps, most importantly, interviews allowed a relationship to be developed to aide in gaining access to employees at each organisation. However, interviews were also chosen as they allow more in-depth information and anecdotal evidence to be obtained.

Individual and Household Perspectives – A Small-Scale Survey of Employees

The quantitative phase of the case study required access to be obtained to managerial and professional employees at each of the organisations. This involved negotiating access through the HR contacts, and subsequently publicising the research within each organisation. The research was publicised using an advertisement, including a web-link (Appendix 5), and included an incentive, in the form of a prize draw for a luxury hamper. The incentive was incorporated to aid response rates. The advertisement was distributed around the organisations using two separate techniques, dependent on the preference of the organisation contacts. In the majority of the organisations it was distributed using the organisation intranet. In a number of other organisations distribution lists of relevant employees were issued, and the advertisement was then electronically mailed to those individuals deemed relevant to the study. Using either method, interested parties then followed the link on the advertisement which routed them to the personal details form (Appendix 6). This was created using the Autoform facility available on the Nottingham Trent University website. This method was chosen as the personal details entered into the form were automatically sent to an email account where the information was extracted into a database, and using the name and address data, the questionnaire could then be sent to each respondent.

Questionnaire Design, Testing, and Response

The primary data collection was conducted using a self completion questionnaire (Appendix 7). These were issued complete with a stamped addressed envelope

for return to those who provided their personal details using the *Autoform*. The questionnaire drew on the 1994/5 questionnaire used in the previous case study of Nottingham, and included both open and closed questions. Moreover, reference was made to the questionnaires used in the LFS, and the *Census of Population* (from which the Census SL-HSAR is derived). A number of questions used in the questionnaire mirror those of the other surveys. The decision to include like-for-like questions was made to ensure comparison was possible where appropriate.

The measures used in other surveys affected the choice of questions for the questionnaire. For example, questions on commuting behaviour are asked using different measures in the LFS and Census SL-HSAR. The LFS asks '*How long in total does it usually take you to travel from home to work?*' This question refers to time taken for travel to work. The Census differs in that the question instead refers to the distance of travel between home and work, measured in kilometres. In order to offer the best compromise, the primary data questionnaire included questions for both the time and distance.²⁸ This also allowed analysis to explore whether individuals gauge their maximum limits for the journey to work in reference to time or distance. This offers insight into the perceptions of the commute in terms of whether time, or distance, is of greater importance. These themes, which were discussed in Chapter 4, are returned to in Chapter 8.

The questionnaire was developed through a number of phases. An initial smallscale pilot of respondents within Nottingham Trent University was used in order to ensure the questionnaire was both easy to complete, contained all relevant avenues of questioning, and did not contain errors. These responses were not included in the final data-set.

The questionnaire was divided into seven brief sections. The first section, section A, concerned household characteristics, while sections, B, C, and D, contained questions on the working and commuting patterns of the respondent. The final

²⁸ In order to help the respondent a conversion between kilometres and miles was included to reduce the likelihood of incorrect values for commuting distances being given.

three sections of the questionnaire, were for the respondents partner, if present, to complete, similarly detailing their patterns of work and commuting.

The structure of the questionnaire was of great importance as errors or confusion in responses could reduce the validity and reliability of the data collected. Additionally, common errors or poor design could simply reduce the response rate, as the survey would be more challenging to complete. The afore-mentioned measures were therefore essential in ensuring satisfactory response rates, and the reliability of the data collected. The return rate from the *Autoform* to completed questionnaires was 74.3% (81 out of 109 were returned). The high response rate may have related to the use of online contact as the instantaneity of this mode of contact greatly reduced the lag-time between respondents requesting and receiving their questionnaires. Using this method of contact also allowed reminders to be sent to those slow to complete and return the survey.

	Number of Respondents		
	Male	Female	Total
Households	_	_	81
Respondents	67	76	143
Major Occupation Group			
Managers and senior officials	28	36	64
Professionals	27	23	50
Associate prof. and tech.	6	6	12
All other occupations	4	5	9
Full/part-time			
Full-time	61	57	118
Part-time	4	13	17
Sector			
Public	41	49	90
Private	21	21	42
Voluntary	3	1	4
Industry (SIC 92) Sector			
Manufacturing	2	2	4
Transport and Comms.	7	6	13
Banking, insurance, finance	0	4	4
Public admin, education, health	35	44	79
Other services	21	15	36
Demographics			
Average Age	44.2	41.8	42.9
Average Gross Income (£)	37,971	27,852	32,473

Table 5.4: Household summary data (Nottingham, 2006)

The data collected represents a 'convenience' sample, indicative of the City and surrounding suburbs.²⁹ The survey response included households in which at

²⁹ While the sample is representative of the majority of large employers in the area, the requirement to negotiate access to employees may have resulted in some degree of bias. The

least one member of the household worked in one of the organisations where interviews were conducted, and focused on dual career households. The survey received a total response of 143 individuals, of which 57 were employed in full-time managerial roles, and 43 in full-time professional occupations. Descriptive statistics for the survey sample are supplied in Table 5.4. This gives the breakdown of the sample by gender, including numbers of workers by occupation, full-time/part-time, and industry indicators. It highlights the fairly even split in terms of numbers between genders, and managerial and professional occupation groups. It also shows the majority of the sample work in the service sector. Table 5.4 also gives the average age of men (44.2) and women (41.8) sampled, as well as their average incomes.

5.5 Data Analysis and Modelling

This section provides comprehensive details of the methods of data analysis in this PhD. It begins with a discussion of the variables used in the empirical analysis in Chapters 6 to 8, performed using SPSS. This is followed by a detailed rationale and explanation of the statistical techniques used, beginning with multiple regression, before detailing the modelling techniques used, specifically loglinear logit and logistic regression. Discussion is also made of cluster analysis, which is used as an exploratory tool in Chapters 6 and 8.

Variable Definitions

The central focus of this thesis is an exploration of the allocation of time among managerial and professional workers in dual career households. The LFS and Census SL-HSAR provide a number of variables which form suitable indicators of time-use at the individual and household level. Key variables include major occupation group, which is derived from the Standard Occupational

sample suffers from under-representation among certain occupation groups, particularly private sector professionals. In addition the majority of the sample was collected in the industry sectors, 'public admin., education and health', 'transport and communications', and 'other services'. These categories cover a large portion of the highly skilled workforce in Greater Nottingham, but there are some omissions. In particular there is under-representation among 'banking, finance, and insurance', a growing sector within the city in the past two decades (Hardill et al, 2006, 177).

Classification (SOC). The SOC 90 definitions are used in the earlier data-sets (1995 LFS and the 1994/5 primary data). SOC 2000 is used in the 2008 LFS, the 2001 Census SL-HSAR, and the primary data collected in 2006. The change in the definitions of occupations and occupation groups offers us an indication of the changes in the UK brought about by the emergence of the 'new economy'. The data allows investigation at the level of individual occupations, grouped into nine categories and listed as major occupation groups. These are detailed in Table 5.5, which highlights the changes to the categories arising from the adoption of the SOC 2000 (*ONS*, 2001, 2002).

Category	Occupation Group (SOC 90)	Occupation Group (SOC 2000)
1	Managers and administrators	Managers and Senior Officials
2	Professional occupations	Professional occupations
3	Associate professional & technical	Associate Professional and Technical
4	Clerical, secretarial occupations	Administrative and Secretarial
5	Craft and related occupations	Skilled Trades Occupations
6	Personal, protective occupations	Personal Service Occupations
7	Sales occupations	Sales and Customer Service Occupations
8	Plant and machine operatives	Process, Plant and Machine Operatives
9	Other occupations	Elementary Occupations

Table 5.5: Major occupation group using SOC 90 and SOC 2000

Changes to the Standard Occupational Classification have resulted in changes to description of the nine major occupation groups, reflecting the changes to the economy (*ONS*, 2001). Due to the scale of the changes in the SOC, there is limited compatibility between the measures. Analysis of the two classifications estimates at least 73% coherence (*ONS*, 2001). However, the classifications cannot be mapped perfectly from one to the other as new job classifications and new occupations have emerged e.g. new occupation titles such as IT strategy and planning professionals (*ONS*, 2001, 2002). This limits, but does not invalidate the analysis in this PhD.

Turning attention to specific variables used to analyse time allocation, both total actual and usual hours of work are recorded in the LFS data-sets (and also in the 2006 primary data). However analysis concentrates on usual hours. Actual hours

refer to hours 'actually' worked in the previous week in the LFS, prior to the collection of the data. Usual hours refer simply to the hours the respondent 'usually' works. Average usual hours exceed average actual hours because actual hours deduct absences from work, for example if a number of individuals had taken time off work for holidays, or through sickness. Additionally, other measures of working patterns, including paid and unpaid overtime, are analysed.

Hours are given for both full-time and part-time workers. Much of the analysis in this thesis focuses on full-time employees, exploring issues of long hours. Acknowledgment is made of the flexibility of contemporary working patterns, including the variety of working arrangements available: part-time, compressed hours etc.³⁰ There is no internationally agreed definition for the number of working hours considered full-time, as noted in Chapter 1. For the UK the distinction works on self-assessment, *but* anyone working over 40 hours is classified as full-time (Bishop et al, 2004, 115). This measure is similarly used in the LFS and in this thesis. Explorations of working hours in this thesis also include key distinctions between those working under and over the UK *Working Time Regulations* (WTR) 48 hour maximum working week.

The analysis does not centre on earnings or wages directly (though reference is made to preferences for reductions in hours if this required a reduction in pay. The data-sets chosen are suitable for this use as the Census SL-HSAR contains no earnings data. Although the LFS does contain questions on earnings there is not one single earnings question which all respondents answer; they instead provide data on earnings in the form they choose, either monthly, weekly, daily, or hourly. In addition productivity is not directly examined in this thesis, as the workers being examined, in particular those in managerial occupations, do not lend themselves to studies of productivity due to the nature of their work which render productivity difficult to measure (Wajcman, 1996, 266).

³⁰ Much of the analysis in this thesis focuses on full-time workers. This is representative of the majority of workers engaged in dual careers, especially with increases in the proportions of females remaining in full-time employment for their entire careers. These workers are subsequently likely to face challenges in allocating time between work and home.

Work-travel and commuting time, are given by variables such as, 'distance between home and work (km)' in the Census SL-HSAR and 'usual home to work travel time (minutes)' in the LFS. However, commuting data of this variety does suffer from one key problem in that the data does not account for the frequency of commutes undertaken by workers. While many may work Monday to Friday and perform the same commute, workers increasingly display a range of commuting patterns. This is perhaps not adequately captured by simply asking for an average commute time, which may reflect on a journey only undertaken two or three times per week. While recognising this, the patterns of commuting outlined remain illustrative of changes in average commuting times, and in average length of journeys, and these are useful for informing the analysis conducted in the case study.

Further variables include employment, demographic, and household variables including preferences for reductions in hours, whether individuals work in the public or private sector, industry sector in main job (using Standard Industrial Classification (SIC) 92 definitions), region of place of work, gender, age, whether individuals are married or cohabiting, and number of children. The Census SL-HSAR data also provides important variables including the allocation of caring responsibilities, and the number of hours spent caring. These present an opportunity to gain a more nuanced understanding of household time allocation.

Statistical Analysis Techniques

This PhD uses a range of statistical techniques to provide robustness and greater reliability to the findings from the secondary and primary data. Statistical tests, including regression techniques, are used in the analysis of the quantitative data. These allow findings to be confirmed to a level of significance.³¹ This analysis also allows findings to be displayed in both tabular and graphical forms, reflecting clear understanding of the findings. This is particularly suitable for use in cross-sectional analysis and comparative studies, exploring data at a number of reference points. The use of statistical tests conforms to standards found in the research disciplines covered in this PhD, and also provides greater reliability and

³¹ Statistical tests of this nature are conducted to 95% and 99% confidence levels.

robustness to the research. Testing the significance of relationships found in the data allows statements to be made regarding the possible implications (in terms of the lived experiences of individuals and households) of changing patterns of work and commuting. The reliability and robustness of these relationships ensures other researchers would find the same relationships if they were to perform equivalent analysis on these or similar data. Further details of the specific regression techniques are presented below.

Regression Models

Regression techniques allow the values of a single dependent variable to be estimated in relation to a number of independent variables, and further provide summary statistics reflecting the strength and significance of the relationships between dependent and independent variables (Kinnear and Gray, 2004, 324). This is particularly useful in this thesis as it allows dependent variables, such as preferences for reductions in hours, to be tested in relation to a range of variables relating to commuting, work-time, and individual and household characteristics. Two alternative forms of regression analysis are used in this PhD: loglinear logit regression in Chapter 6, and binary logistic regression in Chapters 7 and 8. These build upon standardised regression models, but are more suited to the analysis of dichotomous dependent variables and categorical data, and are chosen over OLS estimators due to their suitability in analysing the dependent variables in this thesis (Kennedy, 2000, 234). Both forms of regression yield largely equivalent results and output. The techniques are chosen based on their suitability in modelling specific relationships and exploring data. Details are given initially for multiple regression to provide a foundation for the subsequent explanation of loglinear logit and logistic regression.

Multiple Regression

Multiple regression is used to determine how much of the variation of a dependent variable is explained by the variation in a number of independent variables (Kinnear and Gray, 2004, 325). It tests whether the relationship between the dependent variable and the independent variable is positive or negative, together with the extent changes in the independent variables impact the dependent variable. The multiple regression equation is written:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e$$
 [5.1]

Y is the dependent variable, $X_1 - X_4$ represent the independent variables, *a* is the intercept (or constant), $b_1 - b_4$ are the regression coefficients for the independent variables, and *e* is the error term (Kinnear and Gray, 2004, 325).

A number of summary statistics are generated when running multiple regression models. Important statistics for measuring the model include the adjusted R^2 , which suggests the overall explanatory power of the model. It is more insightful than the R^2 , as the former filters out the additive impact of including additional independent variables upon the explanatory power of the model (Bryman and Cramer, 2005, 305). The Sig. F statistic confirms whether the regression coefficients are statistically significant. The regression coefficients, $b_1 - b_4$, suggest the relative responsiveness of the independent variables in the model.

Multiple regression suffer does from various problems, including multicollinearity. This occurs where independent variables are highly correlated with one another. Multicollinearity is regarded as a problem as it may cause the regression coefficients generated by the model to be unstable (Bryman and Cramer, 2005, 302). For this reason it is necessary to test against multicollinearity. The regression model output includes collinearity test diagnostics, including the following measures, Pearson's r; Eigenvalues; and, condition indices. The Pearson's r between each pair of variables should not exceed 0.80, otherwise this would suggest multicollinearity. If the Eigenvalue produced in the analysis is close to zero, and condition index scores are greater than 15, then multicollinearity may also be in existence in the regression model. Additionally, the regression output includes a tolerance indicator for each independent variable which, if close to 1, reflects a high level of independence in the variable. A tolerance value of 0.2 or less suggests the variable is subject to multicollinearity (Bryman and Cramer, 2005, 302). Taking account of the outcomes of these tests increases the reliability of the regression analysis.

Loglinear Logit Regression

Log-linear logit regression is a special class of loglinear analysis. The log-linear logit model builds upon generalised linear models, such as multiple regression, but is better equipped for dealing with dichotomous and categorical variables, for example gender. These models focus on the association of grouped or categorical data, examining all levels of possible interaction effects. Logit models explain one or more dependent categorical variables relative to a number of categorical independent variables (as well as covariates) (Norušis, 2007, 25). Logit regression yields results equivalent in form to logistic regression. The logit model used in this thesis examines disparities between managerial and professional occupation groups. This is suitable due to the dichotomous nature of the dependent variable.

The model produces output including goodness-of-fit statistics, measures of dispersion and measures of association which are used to confirm the explanatory power of the model. The goodness-of-fit statistics in the logit model are used to display the overall fit of the model. The value of the likelihood ratio chi square statistics should be small values with large observed significance levels for the model to be considered a good fit (Norušis, 2007, 31). The measures of dispersion produced alongside the model are Shannon's entropy (5.2) and Gini's concentration (5.3).

$$H = -\sum p_i \log p_i \tag{5.2}$$

$$C = 1 - \sum p_j^2$$
 [5.3]

These can be used to produce the measures of association (Norušis, 2007, 34-5). The measures of association produced in the model are Entropy and Concentration. Both of the measures provide a value, for example 0.198, which can be interpreted in a similar way to the R^2 value produced in a regular regression model. However, some care should be taken when using these measures to interpret a model, as in some cases small coefficients may be produced when the variables in the model are strongly correlated (Haberman, 1982). In this thesis the parameter estimates of the variables are analysed to

describe the variations in the dependent variable. The parameter estimates for each variable along with the parentheses (e^{λ}) are also used to aid interpretation.

Logistic Regression

Logistic regression yields results of similar form to logit regression, and is an analysis technique used widely in the *Social Sciences*. This form of analysis is similarly suited to dichotomous dependent variables, and is used in this thesis to explore the variable on preferences for shorter hours of work, and whether workers live and work in the same Local Authority District (LAD). Logistic regression also allows the inclusion of qualitative predictors such as gender in the analysis (Kinnear and Gray, 2004, 387).

Similarly to the multiple regression equation, the logistic regression function, although non-linear, also involves a linear function Z of the independent variables, written:

$$Z = B_0 + B_1 X_1 + B_2 X_2 + \dots + B_p X_p$$
 [5.4]

The logistic regression function is:

$$p = \frac{e^z}{1 + e^z}$$
 [5.5]

In this equation p is the probability for example that a person will show preference for reductions in working hours, and Z is the function defined in the logistic regression equation.

As the dependent variables have only two categories binary logistic regression is used. The output of the analysis provides a number of tests (of fit) and explanatory power as well as individual parameter estimates for the independent variables. The model provides two statistics similar to R^2 , which can be interpreted in the same manner: the Cox & Snell R Square and the Nagelkerke R Square. The Cox & Snell R Square is based on the log likelihood for the model when compared with the log likelihood of a baseline model. The Nagelkerke R Squared is an adjusted version of the Cox & Snell R Square statistic (Kinnear and Gray, 2004, 394). The model additionally produces a pair of contingency tables which give the observed and predicted values of the dependent variable. When the full model is applied, these can be compared to see if the success rate of the full model is better than the non regression predictions. The output produced also includes the Hosmer and Lemeshow goodness-of-fit statistic. A small value for the chi-square, and large p-value, are desirable as these are indicative of a good fit.³² Finally, individual parameter estimates for the independent variables show their relationships with the dependent variable, and can be interpreted as for other regression models (Kinnear and Gray, 2004, 395).

Cluster Analysis

As well as forms of regression analyses, this PhD also uses of an alternative research technique, cluster analysis. Cluster analysis groups cases into homogenous groups or clusters. This form of analysis differs from many other research techniques as it does not require any assumptions to be made about the distribution of the data prior to the analysis. This means that cluster analysis is particularly suitable for exploring data, to highlight differences between variables and individuals which would otherwise not be apparent. In contrast to regression analysis which identifies a particular statistical method or model, for example loglinear logit regression, the choice of method in cluster analysis is dependent on other factors including size of data-set, and type of variables being explored (Norušis, 2007a, 362-3). Three forms of cluster analysis are available for grouping cases into homogenous clusters: Hierarchical, K-Means, and Two-Step. This PhD uses Two-Step cluster analysis. This technique is suitable for exploratory analysis of data sources. It is chosen as it can be performed using large data-sets, unlike Hierarchical cluster analysis, and it allows the analysis of both continuous and categorical variables (Norušis, 2007a, 380). The Two-Step approach is more suited to large-scale data than other forms of cluster analysis, but can be used for small data-sets, such as the primary data collected in the case study of Greater Nottingham. Instead of requiring the number of clusters to be specified as with K-Means analysis, the Two-Step approach fits the data to the most appropriate number of clusters. Furthermore, this technique only requires one pass of data, which is particularly useful for large data sets.

³² For models including continuous variables, sampling zeros render this test inaccurate.

The clustering algorithm in the Two-Step technique measures distances. It gives the best results if all variables are independent, if continuous variables follow a normal distribution and categorical variables are multinomial. However, although this is unlikely to be the case when handling real data, the technique has been shown to work reasonably well when these criteria are not met (Norušis, 2007a, 380). With a combination of continuous and categorical data the analysis uses log-likelihood distance measures, where the distance between the clusters depends on the reduction in the log-likelihood when they are combined into one cluster. The number of clusters is automatically determined during the analysis using the Schwarz Bayesian Criterion.

The output from the analysis includes a number of summary statistics. These include the number of cases in each cluster, mean values for continuous variables and percentages of cases for each response in categorical data. Two-Step cluster analysis is used, in Chapters 6 and 8, as a precursor to regression analysis.

Loglinear Logit Regression	Binary Logistic Regression	Two-Step Cluster Analysis	
Tests relationship between	Tests relationship between	Particularly suitable for	
dependent dichotomous or	binary dependent and	exploring data — no prior	
categorical variables and	number of independent	assumptions required.	
independent variables.	variables.		
Produces summary statistics	Produces summary statistics	Groups cases into	
similar to R ² : Shannon's	similar to R ² : Cox & Snell R-	homogenous groups or	
Entropy and Gini's	Square and Nagelkerke R-	clusters.	
Concentration.	Square.		
Tests for goodness-of-fit.	Tests for goodness-of-fit.	Automatically groups cases	
		using Schwarz Bayesian	
		Criterion.	
	Used widely in Social	Produces summary statistics:	
	Sciences.	no. of cases; mean values	
		(continuous variables);	
		percentages of cases	
		(categorical variables);	
		graphical output.	

Box 5.1: Statistical Analysis Techniques
D L Wheatley

5.6 Ethical Considerations

The ESRC's Research Ethics Framework (2005) was used as an overall ethical template for the thesis. In addition this PhD was given approval prior to commencement by the College of Business, Law and Social Sciences (BLSS) Research Ethics Committee at Nottingham Trent University. This committee, which is constituted in accordance with paragraph 1.5 of the Research Ethics Framework, scrutinised the proposed research carefully in respect of its potential benefits, the risk of harm (to participants and researchers) and the precautions for minimising these, the negotiation of access to participants (including the role of gatekeepers in the recruitment process), mechanisms of gaining informed consent, procedures for maintaining anonymity, privacy and confidentiality (including with regard to the potential audiences of the research findings), the suitability of research instruments (including interview schedules), the secure storage and archiving of data in hard and electronic copy (including during the analysis phase), and in addition there was further commitment not to publish material if requested by interviewees or employers.

The secondary data analysis does not present any significant concerns, due to the anonymised nature of the data. The two chosen data sources, the LFS and the Census SL-HSAR, which is derived from the *Census of Population*, are collected by the *Office for National Statistics*. They are collected at regular intervals, quarterly in the case of the LFS, and once every 10 years for the *Census of Population*. The LFS covers employment, unemployment and economic inactivity, in addition to a number of household statistics. The Census SL-HSAR, generated from the *Census of Population* provides information on households and all individuals living within households. As the data-sets are collected with no prior hypotheses in terms of results, they offer an excellent opportunity for exploratory research. Due to their large sample size and standards of collection they are reliable sources to perform analysis.

The major ethical considerations relate to the empirical work conducted as part of this PhD. The data collection was overt, and used written consent from participants. Consent forms were used throughout the data collection, written consent forms for the interviews, and an online consent form (part of the personal details form) for the questionnaire. These forms explicitly informed participants of the anonymity guaranteed by the research and of their right to withdraw.

Prior to conducting the interviews a consent form (Appendix 3) was given to the interviewee which was then signed to confirm that they were happy to take part in this element of the research. Moreover it was made clear to interviewees that the recording of the interview could be stopped at any point, and that they were under no duress to answer any or all of the questions.

The survey was conducted through 'gatekeepers' at the organisations involved in the study. The use of gatekeepers to access employees in the organisations raises some issues related to sampling. It is possible that the HR managers may have steered the research towards or away from certain groups of employees, simply by only informing certain groups of the opportunity to take part in the research. This could clearly generate problems related to reliability in the results of the survey. Resolution of this issue required strong rapport to be built with the organisations in the early stages of contact, so that they understood the nature of the research, and the aims and objectives. This ensured that suitable access was negotiated, which offered a cross section of staff. This took the form of allowing contact to be made with every employee through the organisation intranet, or advertising the research to suitable respondents using mailing lists.

Measures were taken to make clear to all participants that the information they provided would be stored in a safe environment, and would only be seen by the researcher. The data was separated from names and addresses of respondents, and the questionnaires containing this information are the property of Nottingham Trent University and will remain in a secure location within the University. A summary report (Wheatley, 2008) was sent to all of the organisations involved and direct feedback given to representatives who attended a dissemination event as part of the ESRC Festival of Social Science 2007.³³

³³ This event took place at Nottingham Trent University on 15th March 2007. The results of the case study were disseminated to the organisations involved, and to local firms and policy makers.

5.7 Conclusion

In this chapter the mixed methods approach adopted in this thesis was presented, combining both quantitative and qualitative elements, utilising published materials, secondary data, and primary data collected from a quantitativequalitative case study. The secondary data is used to give the empirical analysis an individual (*Labour Force Survey*) and household (Census SL H-SAR) perspective. The case study focuses on organisations in Greater Nottingham. This follows up — and therefore allows comparison with - an earlier study (Hardill, 2002; Hardill and Watson, 2004). The case study comprises both qualitative semi-structured interviews with HR managers, and a subsequent quantitative survey of managerial and professional employees and their households.

The next three chapters report the findings from the empirical analysis conducted in this PhD. Chapter 6 focuses on individual perspectives, using the LFS to explore preferences for work-time and commuting behaviours. Chapter 7 then moves from the individual to the household, initially reporting findings from the LFS and Census SL-HSAR for the East Midlands region. Subsequently findings from the case study of Greater Nottingham — referring to work-time, flexibility and caring — are reported. Chapter 8 then concentrates on the commute and daily mobility using all data sources, providing a gendered perspective.

6

A Professional-Managerial Class? A study of Work-time Preferences and Commuting in UK Industry

6.1 Introduction

The purpose of this chapter is to explore the working hours and commuting behaviours of various occupation categories in the UK economy and to consider the choices and roles of managers in this context. This focuses on addressing the second research question. In this chapter analysis is performed on the LFS, specifically the fourth quarter survey for 2008. This provides national patterns of working hours and commuting for highly skilled individuals in the UK. This chapter also draws on the literature review, specifically on the discussion of institutional and feminist perspectives, to explore the role of the firm in moulding the preferences of management. The role which managers have in endorsing long hours cultures and presenteeism among workers is also a key concern. This chapter critically investigates the frequent conflation of managerial and professional occupations, and the key distinctions that this ignores, while also exploring gendered distinctions between and within these broad occupation groups. Moreover, discussion is made of policy implications in the context of work-time regulation.

Regulation of work-time in Britain has been in place since the nineteenth century Factory Acts, as discussed in Chapter 3. However, in recent years a number of European governments (and the European Union) have taken an increasingly active role in regulating hours devoted to paid work. This new interest in reduced working hours is to be welcomed; however, it is important to consider how reductions in work-time are to be managed at the firm or organisation level. UK workers may "waive" their rights given the "voluntary" nature of the *Working Time Regulations* (2007). Therefore, acknowledging the fact that managers have the power to interview, appoint and dismiss workers, it is important to consider

the role of managers in determining working hours.³⁴ Managers may play a significant role in implementing organisation policies on working hours. This raises a very important question, namely: should managers be relied upon to impartially implement policies aimed at restricting hours when the average manager seems willing to work long-hours? In this chapter the hours worked by managers and professionals are analysed, thereby inferring what their attitudes might be to extensive and intensive labour extraction.

Among managers and professionals the completion of tasks often results in long hours (Kodz et al, 2003). Given the role of managers in the implementation of work-time policy, the link between full-time work and perceived commitment associated with 'time-devouring male employment' cultures (Sirianni and Negrey, 2000, 72), is therefore of significant concern. Commitment is often equated with worker effort, be that extensive or intensive labour input, or indeed both. Opportunities for promotion may only be realised by those individuals who are able to consistently show 'commitment' by working uninterrupted to this full-time model throughout their careers (Hardill, 2002, 8); hence assimilation into a managerial culture of long hours may be necessary simply to 'get on', or to avoid dismissal. The predication of this chapter therefore is that managers can generally be viewed as representing the company interests, i.e. managers' motivations are well-aligned with those of the organisation because there are significant "moulding effects".

Returning to the discussion in Chapter 2, the concept of moulding preferences further reinforces the limitations of mainstream rational-choice theory when exploring worker behaviour, especially extensive hours. Recent work has challenged the appropriateness of rational-choice models of hour determination arguing instead that norms, habits and power are more significant determinants than rational deliberation (Philp et al, 2005). Heterodox approaches, specifically

³⁴ Work by Philp (2001) and Philp et al (2005) has argued that the power of respective classes is important in generating outcomes in contemporary conflict over the length of the working day. The contribution of this chapter is in considering the role of management and hierarchies in determining working hours at the firm or organisation level, and how managerial and professional occupations differ.

institutional economics, acknowledge the effect of preference formation. Institutions have significant moulding effects, and in the context of managerial careers, these institutions take the form of the organisation. The moulding effects of the organisation, and the career progression which compliance entails, implies both a motivational effect and a social process of preference formation, especially for managers (Hodgson, 1988). The preferences of managers might therefore be systematically moulded. As Baran and Sweezy indicate, "the 'company man' is dedicated to the advancement of his company" (1966, 48).

Recent changes in the labour market participation rates of women have resulted in the gradual feminisation of many employments, including managerial and especially professional occupations. Therefore acknowledgment must be given to gender when exploring occupation groups. This, again, requires theoretical perspectives to be drawn from heterodox sources, especially feminist approaches. As was argued in Chapter 2, mainstream theory such as that offered by Becker (1976) is largely 'gender blind'. Moreover, the 'organisation man' has been replaced by growing flexibility among both genders, referred to by Castells as the development of the 'flexible woman' (Castells, 2000, 12). But, the key role of the manager in imposing work on others remains regardless of gender. Female managers may require additional flexibility in order to 'manage' the combined responsibilities of work and home (McDowell et al, 2005). The extent to which female managers are assimilated into masculine managerial cultures — mirroring their male counterparts in hours and preferences — is therefore of concern in this chapter.

The main focus of this chapter is in returning to the discussion in Chapter 1 which highlighted the conflicting categorisation of managers and professionals. The argument of this chapter is that while the notion of a Professional-Managerial Class is acknowledged (Ehrenreich and Ehrenreich, 1979; Goldthorpe, 1995), it is nevertheless important to recognise the diversity of occupation groups within that class. There is a need to differentiate between 'scientists-professionals' and 'managers-administrators' (Esping-Anderson, 1993, 13), and to distinguish between the hierarchical, routinising work of the

bureaucrat, and the autonomy and creation of knowledge associated with professional practice (Savage et al, 1992).

6.2 Work-time of Occupation Groups: Empirical Analysis

This section explores the distinctions between managerial and professional occupation groups, as outlined above. Focus is on the two occupation groups 'managers and senior officials', and 'professionals'. In addition, the relationship between managerial duties and preferences for working hours in the UK is investigated. Hierarchies are important and there are significant "moulding" effects connected to the appointment and promotion of individuals to management roles, which raises an important question, namely: can we rely on managers to impartially implement policies aimed at restricting hours when the average manager seems willing to work long-hours?

Despite the introduction of the Working Time Regulations (2007) it can be argued that the UK labour market is still characterised by the liberal flexibility identified by Lipietz (1997). The voluntary nature of the working hour "waiver" makes the UK unique among much of Europe, including the countries studied by Bielenski et al (2002). Moreover, since this analysis considers different broad occupation groups and breakdown by public/private sector at the national level, a large sample is required to facilitate the analysis. For these reasons the LFS is used, as outlined in Chapter 5. This data provides insight into the working hours, and preferences of managers and professionals, in particular, also allowing to disaggregate by gender. In addition initial analysis of commuting behaviours is conducted using the LFS data, to explore whether those under the greatest strain in terms of working hours — managers and professionals — also undertake the lengthiest commutes. This chapter therefore provides a cross-sectional national context, offering a gendered perspective on time allocation among managers and professionals at the level of the individual. This is used to inform more detailed analysis at regional and local level in the subsequent empirical Chapters, 7 and 8.

This analysis considers the hours worked by full-time employees, using broadly defined groups. As was discussed in Chapter 5, occupations are defined using the SOC 2000. The cross-sectional analysis here extracts data from the LFS which

allows the working patterns of some 38,502 UK respondents in full-time employment to be considered. The analysis investigates 'usual' basic hours and 'usual' total hours (the latter including overtime), as well as mapping patterns of paid and unpaid overtime.

Working patterns among Managers and Professionals

The conflicting views over the conflation of managers and professionals are an important focus of this chapter. These employees have been seen as constituting a class (Ehrenreich and Ehrenreich, 1979). However, there are key differences between managers and professionals, in particular, the role of managers in organisational hierarchies. The role of the manager involves the imposition of work on other employees. It is therefore important to explore patterns of work and attitudes of managers, in relation to work-time.

Major Occupation group		Basic usual hours (no overtime)		Total usual hours (incl. paid and		Percentage working over 48		n
				unpaid or	vertime)	hours		
		Public	Private	Public	Private	Public	Private	
Managers	Male	38.9	43.5	42.9	47.7	15.7	40.2	5013
and Senior	Female	37.6	39.7	41.3	43.6	10.2	22.5	2372
Officials	Total	38.3	42.3	42.1	46.5	13.1	34.9	7385
Professional	Male	39.6	40.8	44.6	44.2	28.5	23.3	3449
Occupations	Female	37.8	38.9	44.3	42.5	30.2	17.5	2195
	Total	38.6	40.4	44.4	43.8	29.5	21.9	5644
Assoc.	Male	39.6	40.7	42.8	43.2	16.1	21.1	3227
Professional	Female	37.2	38.0	39.5	40.3	5.7	11.4	2631
and Tech.	Total	38.3	39.6	41.0	42.1	10.5	17.3	5858
All other	Male	37.9	41.7	40.4	44.1	7.6	22.2	12381
occupations	Female	35.6	37.7	37.0	39.2	2.4	6.7	7234
	Total	36.5	40.4	38.3	42.5	4.4	17.3	19615
Total UK		37.7	40.7	41.1	43.5	13.8	21.6	38502

Table 6.1: Mean full-time working hours by major occupation group (LFS, 2008)

Evidence is presented in Table 6.1, which highlights differences in the hours worked by these two broad occupation groups. Mean working hours for full-time managers and professionals in both the private and the public sector are longer than that for all other broad occupation groups. This similarity aside, there are also distinct differences between managers and professionals. The view of Ehrenreich and Ehrenreich (1979) — that the nature of organisations matters, whether business or non-profit agencies — seems to be borne out when the working patterns of private and public sector employees are investigated.

Focusing on total usual hours, full-time private sector managers work the longest hours of all our categories, averaging 46.5 hours.³⁵ This is largely a result of the influence of males in these occupations who on average report working 47.7 hours per week. The data suggests a gendered split among managers, as well as a split between occupations and sectors. Full-time professionals in the public sector work long hours too, averaging 44.4 hours. High levels of unpaid overtime will be a key driver of long hours among full-time public sector professionals.

Looking more specifically at overtime, the analysis is expanded to examine both paid and unpaid overtime (among those working overtime). Here the earlier indications of high levels of overtime in professional occupations are confirmed. Unpaid overtime is high among those in managerial occupations, but is most pronounced in professional occupations (see Figure 6.1). The levels are high for managers in the private sector (9.0 hours per week), while the highest levels are reported among public sector professionals (10.8 hours). Male private sector managers, on average, report working 9.4 hours per week in unpaid overtime, while females in the same occupations report 8.0 hours. Interestingly among public sector professionals, where the highest levels of unpaid overtime are reported, males (10.5 hours) actually work fewer hours of unpaid overtime than females (11.0 hours).

The reported levels of unpaid overtime suggests that there may be some disparity between the hours allocated by employers for the completion of tasks, and the hours required for professionals to complete these tasks; it can be speculated that this would lead to such employees feeling "overworked" (to the point where they might desire fewer hours, even if it resulted in a weekly or annual pay-cut).³⁶

³⁵ F-tests confirm the significance of these findings (Sig. 0.000) for both basic and total usual hours.

³⁶ Paid overtime is especially prevalent in occupations which are hourly paid as opposed to salaried, such as (the private sector) occupational sub-groups, 'skilled trade occupations' (who average 7.4 hours of paid overtime), 'process, plant and machine operatives' (8.4 hours), and 'elementary occupations' (8.7 hours).

Working 9 to 5? Complex patterns of Time Allocation among Managers and Professionals in Dual Career Households



Figure 6.1: Mean usual paid and unpaid overtime among those working overtime (LFS, 2008)

The highest proportions of full-time individuals working over 48 hours a week — the critical point in the Working Time Regulations (2007) — are found among private sector managers and public sector professionals. Returning to Table 6.1 it can also be seen that the third highest group, in terms of the proportion working in excess of 48 hours, are full-time private sector professionals, with 23.2% of them usually working in excess of 48 hours. Worryingly 29.5% of full-time public sector professionals and 34.9% of private sector managers usually work in excess of 48 hours. Differences are found between genders in professional occupations, although these are fairly small; 28.5% of male public sector professionals reported working over 48 hours per week, compared with 30.2% of females. This may indicate the greater commitment to the labour market made by females undertaking a professional career (McDowell et al, 2006). Moreover, the high proportions working over 48 hours may reflect the nature of professional occupations, requiring employees to regularly work above contracted hours in order to complete tasks (Kodz et al, 2003). Again, a significant gendered split may be noted among managerial workers. Of those engaged in managerial occupations in the private sector, 40.2% of males reported working over 48 hours

per week, while only 22.5% of females similarly undertake these excessive hours. This may reflect 'macho' male working cultures (Sirianni and Negrey, 2000, 72; Kodz et al, 1998), or may indicate the influence of the household limiting the working commitment of females in these occupations. This will be returned to in Chapter 8.

These trends indicate (given the initial premise) that there are quite severe problems of overwork among these groups. Noteworthy, too, is the fact that private sector managers play a significant role in hiring, promoting and firing other private sector workers. These workers who work long hours themselves may also adversely influence the hours of other groups, including professional occupations, associate professional and technical, and all other occupations. There thus might be a 'trickle-down' affecting the hours of other occupation groups. Given managers work long hours this may call into question their judgement in their influence over the hours of others.

The roles of managers and professionals are distinct. The nature and requirements of these occupations are inherently different. Managers (bureaucrats) represent the organisation, whereas the professional occupation is associated with knowledge and autonomy. And career trajectories in these occupations are therefore representative of these differences. In addition, as discussed in Chapter 1, professional occupations may be more suitable to female careers, as they offer greater opportunities for flexibility and autonomy (Evetts, 1994, 106). Distinctions between these occupation groups are apparent in patterns of work. However, it is possible to further identify differences in the characteristics of these workers using the LFS data.

An initial exploratory analysis is conducted using Two-Step cluster analysis (full results in Appendix 8), which is used to inform a loglinear logit regression model later in this section. As detailed in Chapter 5 Two-Step cluster analysis is useful as it automatically groups individuals into a number of clusters based on their characteristics. This is particularly helpful in attempting to ascertain whether there are key distinctions in trends of work between occupations groups and genders. Interestingly the model clustered the individuals into two groups, with

the majority of managers (cluster 2) clustered separately to most professionals (cluster 1). The initial stage of the analysis thus already suggests distinctions between individuals in these two occupation groups.

	Cluste	Cluster (mean values)				
	1	2	Combined			
Total usual hours in main job	43.5	46.2	45.4			
No. dep. children under 19	0.7	0.8	0.8			
Age	44.2	43.4	43.7			
n	2215	4800	7015			

Table 6.2: Two-Step cluster analysis continuous variables (LFS, 2008)

	Clust	er (perce	ntage)
	1	2	Combined
Major Occupation Group			
Managers and senior officials	29.3	72.9	59.1
Gender			
Male	36.2	72.6	61.1
Married/Cohabiting	77.5	80.3	79.4
Prefer shorter hours, even if less pay	31.4	25.2	27.2
Public or Private sector (reported)			
Private	15.9	99.9	73.4
Industry Sector			
Agriculture and Fishing	2.6	97.4	100.0
Energy and Water	8.2	91.8	100.0
Manufacturing	1.5	98.5	100.0
Construction	7.1	92.9	100.0
Distribution, Hotels and Restaurants	0.7	99.3	100.0
Transport and Communications	6.0	94.0	100.0
Banking, Finance and Insurance	2.4	97.6	100.0
Public Admin. Education and Health	96.7	3.3	100.0
Other Services	23.3	76.7	100.0
n	2215	4800	7015

Table 6.3: Two-Step cluster analysis categorical variables (LFS, 2008)

A range of variables were entered into the model including major occupation group, total usual working hours, preferences for reductions in hours (even if requiring a reduction in pay), industry sector, public/private sector, and a number of demographic variables including gender, age, whether married/co-habiting, and number of dependent children. These reflect many of the key issues explored throughout this thesis, including occupational structure, hours of work, and preferences for work, as well as individual personal characteristics. The results, shown in Tables 6.2 and 6.3, detail the average characteristics of the individuals grouped into each cluster. This is broken down into each component variable, highlighting further variations. Managers, in cluster 2, are more likely to be male (72.6%). This highlights the relative feminisation of professional occupations, except in certain areas of management such as human resources. Managers, in this cluster, are characterised by almost entirely being employed in the private sector, and work longer average hours (mean hours of 46.2 per week) than the majority of professionals in cluster 1 (43.5 hours). This supports the evidence in Table 6.1. Worryingly, fewer managers state preferences for reductions in hours, if it were to require a commensurate reduction in pay; 25.2% of managers stating this preference in comparison with 31.4% of professionals (those in cluster 1). The analysis also suggests managers are slightly more likely to be married/cohabiting (80.3%) and have a greater number of dependent children, although little variation is found in these characteristics, as well as in average age. Industry sector variation suggests the majority of professionals to be located in service industries including public administration, education and health as would be expected.³⁷

More in-depth analysis has been performed using a logit regression model. This model explores the derived dichotomous dependent variable, "whether a manager or professional", where manager = 1, professional = 0. The independent variables comprise work (W), household (H) and individual (I) characteristics of respondents from the UK LFS 2008.

$$Occupation = f(W, H, I)$$
[6.1]

Where,

$$W = f(H_{48}, H_{SLP}, I_S)$$
[6.2]

$$H = f(M, D_c)$$

$$[6.3]$$

$$I = f(G, A) \tag{6.4}$$

In this model, work (*W*) variables include, whether respondents worked over 48 hours per week (H_{48}), preferences for shorter hours, even if less pay (H_{SLP}), and

³⁷ Significance tests were conducted for all variables within each cluster. All variables were significant at the 95% level with a single exception – whether married/cohabiting for cluster 2.

industry sector (I_S). Household characteristics (H) are a function of whether married/cohabiting (M) and number of dependent children (D_C), and individual characteristics (I) are a function of gender (G) and age (A).³⁸ The results of the model are summarised in Table 6.4.³⁹

		Std.		
Parameter	В	Error	Z	Sig.
Constant	0.399	0.201	1.988	0.047
Prefer shorter hours, even if less pay	-0.215	0.067	-3.227	0.001
Total usual hours over 48 hours	0.137	0.063	2.172	0.030
Male	-0.354	0.071	-4.984	0.000
Age: Reference is 55+				
16-24	-1.067	0.239	-4.461	0.000
25-34	-0.576	0.107	-5.363	0.000
35-44	0.075	0.137	0.547	0.584
45-54	0.131	0.110	1.182	0.237
Dependent children under 19	0.211	0.078	2.700	0.007
Married/Cohabiting	0.066	0.096	0.688	0.492
Private Sector	0.965	0.100	9.646	0.000
Industry Sector: Reference is Other Serve	ces			
Agriculture and Fishing	1.239	0.632	1.961	0.050
Energy and Water	-0.632	0.254	-2.489	0.013
Manufacturing	-0.118	0.166	-0.708	0.479
Construction	-0.078	0.182	-0.428	0.669
Distribution, Hotels and Restaurants	1.688	0.199	8.476	0.000
Transport and Communications	0.434	0.202	2.144	0.032
Banking, Finance and Insurance	-0.771	0.157	-4.910	0.000
Public Admin. Education and Health	-1.258	0.164	-7.661	0.000

Table 6.4: Logit regression: characteristics of managers and professionals (LFS, 2008)

In contrast to the argument of Goldthorpe (1995, 319) significant differences are found between managers and professionals which cannot be reduced to one of '*situs*'. Taking occupational group as the dependent variable, significant differences are found in the hours worked by these respective groups. The positive B (0.137) suggests that the odds of the respondent being a manager are increased where long hours are found. It is also found that managers are less willing than their professional counterparts to take a pay cut to secure a shorter

³⁸ The choice of these variables was made in order to provide a more nuanced understanding of not only the differences in patterns of work between managers and professionals, but also so that key differences between genders, and particular household characteristics could be drawn out.

³⁹ The values for Entropy (19.3%) and Concentration (23.6%) – the adjusted R^2 equivalents – reflect a reasonable explanatory power in the model. The log odds are reflected in the size of the +/- *B* estimate value.

work week reflected in the negative value of B (-0.215). The results suggest a greater proportion of managers and senior officials working over 48 hours, confirming the evidence presented in Table 6.1. Once the split between public and private sector workers is taken into account, the apparent long hours of managers in relation to those of professionals becomes, evidently, important. There are industry characteristics too. For example, a disproportionate need for managers in the distribution, hotel and restaurant industry, is reflected in the model as managers are found to be (relatively) more likely to work in this sector. This industry is characterised by low-pay, transient working, and low skills. It may also be that production methods necessitate close supervision rather than the detection of malfeasance by other means (Shapiro and Stiglitz, 1984; Bowles, 1985). The household characteristics of managers are also interesting. They are more likely to have larger numbers of dependent children (0.211), and are more likely to be married or cohabiting (0.066), although the latter variable is statistically insignificant casting doubt over the direction of the relationship. This confirms the findings of the cluster analysis. It may reflect the fact that individuals might take on managerial roles because of a financial compunction, as a consequence of their dependents.

Males are suggested to be more likely to be occupied in a professional capacity, reflected in the negative B (-0.354). Such roles are prevalent in banking, finance and insurance, as well as public administration, education and health. The gendered split is a slightly problematic result given that this differs from the cluster analysis, and may indicate an inconsistency with the model. The results, if associate professional and technical occupations were included, would possibly differ, as there are a number of occupations which are highly feminised, including education (particularly in reference to primary education) and nursing.

The model highlights that professionals display the greatest preferences for reducing their hours, even when this reduces their pay. Individuals undertaking professional roles are more likely to state a preference for a reduction in pay in order to ensure fewer hours of work than their managerial counterparts. This provides strong evidence suggesting that the grouping together of managers and professionals may oversimplify the characteristics of these disparate groups. This would seem to provide evidence for Esping-Anderson's (1993) hypothesis that 'scientist-professionals' and 'managers-administrators' comprise groups with distinct characteristics. Moreover Ehrenreich and Ehrenreich's (1979) assertion that the Professional-Managerial Class is minutely splintered would seem to have some basis when the working hours and characteristics of managers and professionals in the public and private sector are considered.

For ease of interpretation the parameter estimates generated by the model along with values of parentheses (e^{λ}) have been included in Appendix 9. This provides both the parameter estimates included in Table 6.4, but additionally provides parentheses, which can be used to further interpret the data. The values in the parentheses table confirm the results as discussed above, but also provide additional detail for the model. The parentheses suggest that managers are more than twice as likely to be employed in the private sector, and over five times as likely to work in the distribution, hotels and restaurants industry, than their professional counterparts, compounding the findings from Table 6.4.

Major occupation group	Prefer sh even if le	n	
	Public	Private	
Managers and Senior Officials	21.6	25.6	1421
Professional Occupations	34.1	27.7	799
Associate professional and technical	26.8	28.2	470
All other occupations	17.9	21.5	1384
Total UK	29.9	24.5	4074

Table 6.5: Preference for reduction in hours even if less pay (LFS, 2008)

Having observed that private sector managers and public sector professionals work long hours, this prompts the question of whether these employees are satisfied with their hours. Table 6.5 presents the responses when questioned about shorter hours. This table focuses on those full-time workers who report their total usual hours are in excess of 48 hours per week, who answered the following question positively: '*Would you rather work shorter hours than at present, even if it meant less pay*?' It should be noted that this is a hypothetical question and it may be more likely to solicit strong negative feelings around an activity such as work. However, Schor, challenging this view, has argued the opposite, i.e. people may understate their dissatisfaction with hours: 'The fact

that large numbers of people say they are contented with their working hours (or job conditions) may reveal that they are tractable, not that their deeper desires have been fulfilled' (1993, 129). If Schor's notion is accepted, the true level of dissatisfaction with hours may actually be under-reported here.

This evidence suggests some significant differences between groups of workers. The level of dissatisfaction with working hours, among those working long hours across all occupations is obvious. This is especially prevalent among those in professional jobs, with over a third of public sector respondents, and 27.7% of private sector respondents, stating a preference to work fewer hours, even if they receive less income.⁴⁰ This evidence undermines the claim that the right to waive rights under the Working Time Regulations (2007) is being effectively enforced. In particular Table 6.5 indicates a significant proportion of professionals are unhappy with the hours they work. Such dissatisfaction is perhaps exacerbated because professionals are subject to significant levels of unpaid overtime (see Figure 6.1). This may also be related to the nature of these occupations, as professionals are often paid for the completion of tasks, regardless of the length of time this takes. In contrast, even though managers may express a desire for fewer hours they are less likely, in comparable sectors, to accept a commensurate reduction in earnings to bring this about.⁴¹ In the context of gendered divisions, male private sector managers are less attracted to obtaining a reduction in hours, as 24.9% report a willingness to take a reduction in pay to achieve shorter hours. Comparatively, 28.4% of women managers working long hours stated they would take a pay cut to achieve shorter hours. A greater divide is found among professionals in the public sector; 30.6% of men compared with 36.1% of

⁴⁰ The differences between the responses of the different occupation groups in Table 6.5 are confirmed as significant using a Chi-squared test (Sig. 0.007 for private and Sig. 0.011 for public). A Cramer's V of 0.060 (private) and 0.127 (public) suggests a fairly good relationship for the latter. Note this relationship was tested on the numbers of 'yes' and 'no' responses to the question, '*Would you rather work shorter hours than at present, even if it meant less pay*?' The output shown in Table 6.5 is simplified to include only percentages of 'yes' responses.

⁴¹ The LFS provides excellent data on various aspects of working patterns. However, the wages and earnings responses are problematic and while these issues are highly pertinent the data is not sufficiently robust to facilitate investigation here.

women. This may highlight the presence of the 'time-devouring male employment' cultures in managerial occupations (Sirianni and Negrey, 2000, 72). Males, on average, may be 'happier' to work to this model than their female counterparts. Alternatively, this may indicate the influence of the compounding effect of household responsibilities in constraining the time available to females, again a discussion returned to in Chapter 8. This may also reflect the pressure for males to perform the 'bread-winner' role, making a reduction in pay much less attractive for them (McDowell et al, 2005).

The findings mirror those of Böheim and Taylor (2003, 113-4) as outlined in Chapter 2. They estimated that 40 percent of employees would prefer to work different hours than those they currently do. Of these, most employees would prefer to work fewer hours. They suggest that working hours cannot be varied at the discretion of the individual. Instead they are a product of *employer* preference, the level of local labour demand, individual demographics and unobserved effects specific to the individual, which vary with time. Böheim and Taylor's (2003) notion of employer preference could then be logically extended to that of "manager preference" — Baran and Sweezy's 'organization man' (1966, 4) — as agents of the principal. If that is assumed to be the case it can be observed that managers themselves tend to work longer hours. The compulsion from managers — tacit or otherwise — may be underlying this process.

The empirical analysis conducted in this chapter has highlighted the disparate nature of managerial and professional occupation groups (see Box 6.1 for a summary of this). The results of this empirical analysis direct our focus towards a culture of long hours among private sector managers and all professionals, but especially those in the public sector. A number of themes related to working hours including the role of overtime have been developed and investigated, and consideration has been given to satisfaction with hours among different occupational groups. Workers in professional occupations, on average, report some of the strongest preferences for reductions in hours (even with commensurate reductions in pay). The levels of dissatisfaction among those working the longest hours, summarised in Table 6.5, must cast doubt over the effectiveness of legislation enacted to prevent excessive working hours.

The cause of long hours among managers and their role in imposing long hours on others has been speculated and discussed in this chapter. The long hours worked by public sector professionals are something which also warrants some comment. Green (2001, 73) has suggested long hours are increasingly accompanied by greater levels of 'discretionary' effort and 'constrained' effort in the workplace. Green suggests that this was particularly evident between 1992 and 1997 in the public sector, and may be a driver of increased levels of workrelated stress among employees. The strong preferences for reductions in hours may therefore be a result of extended periods of unpaid overtime — reported as particularly affecting women in professional occupations (Harkness, 1999) and increased work intensity in public sector professional occupations.

Managers	Professionals			
Nature of Occupation				
Role of supervisor, monitoring employees, enacting will of the employer.	Highly qualified, and increasingly specialist.			
'Organization men' aligned with policies and	Traditionally high level of autonomy.			
targets of their employer.				
Self-selecting group: trained and groomed	However, becoming increasingly			
from within.	bureaucratic.			
Working Patterns				
Longest total hours, especially among private	Highly dissatisfied with hours of work,			
sector.	especially in public sector.			
Less dissatisfied with hours of work.	Longest hours of unpaid overtime.			
High car dependency.	Longest commutes — perhaps resulting from			
	increased specialisation, and/or practice of			
	managers.			

Box 6.1: Managers and Professionals as Distinct Occupation Groups

Finally, even though managers in the private sector work very long hours, their preference for reductions in hours is not as great as might have been expected. This provides evidence that individuals choosing to undertake management roles may be 'organisation' men or women, but also suggests that, at least in senior managerial occupations, the 'organisation man' has not been replaced by the 'flexible woman' (Castells, 2000, 12). Long hours are viewed simply as part of the job — an occupational norm — and are necessary, not least because managers are responsible for policing the activities of others. Because of the requirement for managers to supervise, their role requires presenteeism to ensure the company or organisation interests are in safe hands. Those undertaking

management roles may well be self-selecting, because they are attracted by the governing nature of these occupations. While management may be necessary in economic organisation, the evidence presented using the LFS seems to suggest that many managers work long hours. This indicates that more stringent regulation of working hours may be required if such employees are responsible for the day-to-day operation of organisations.

6.3 Commuting Behaviours: Empirical Analysis

Extending the discussion of the distinctions in the working patterns of managers and professionals outlined in this chapter, further disparities are found in the time allocation of these occupation groups, specifically regarding their commuting behaviours. The length and complexity of the journey to work increased during the latter part of the twentieth century (Bannister and Gallent, 1998). Workers in managerial and professional occupations tend to undertake the longest commutes, as reported in Chapter 4 (Pooley and Turnbull, 2005; Lindsay, 2003). However, among these workers gendered disparities are likely to exist. Females are constrained by household responsibilities limiting their movements. They are more closely tied to the home (McDowell et al, 2005). The commute may have significant compounding effects in terms of time scarcity for managers and professionals, and again may be driven by the habits and behaviours of managers, who impose ever greater requirements for flexibility and mobility.

The analysis here focuses on the national context, again using data from the 2008 fourth quarter LFS, but also with some reference to 1995 figures. Initial analysis of the data suggests a lengthening of the commuting times between reference points. Mean commuting time for full-time workers increased from 25.7 minutes per journey in 1995, to 28.5 minutes in 2008.⁴² This reflects substantial increases in the time spent commuting during this time. This finding contrasts with Pooley and Turnbull's (1999, 281) figures for the latter half of the twentieth century, which largely reported changes driven by the mode/method of transport to work. This perhaps provides evidence of the additive effect congestion has had in lengthening journey times since the beginning of the twenty first century. It may

⁴² The difference between the two means is confirmed as statistically significant (Sig. 0.000).

also reflect the more mobile and flexible travel patterns of contemporary workers. This will be returned to in greater detail in Chapters 7 and 8.

Returning to the focus of this chapter, key differences are found between broad occupation groups, specifically managers and professionals. The reported mean commuting times among broad occupation groups are given in Table 6.6 (again focussing only on full-time workers). The data suggests longer commutes among the highly skilled occupations than for other workers. This is particularly the case for all managers, and professionals in the private sector. Their commutes are much longer than the national average, but perhaps more importantly around ten minutes longer than for the majority of workers grouped as all other occupations in both the public (23.9 minutes) and private sectors (24.8 minutes).

		Mean Usual Home to Work Travel Time (minutes)				
Major Occupation Group		Public	Private	n		
Managers and senior	Male	38.6	33.8	3794		
officials	Female	31.2	28.1	1860		
	Total	35.1	32.1	5654		
Professionals	Male	32.3	36.1	2749		
	Female	27.2	32.3	1903		
	Total	29.5	35.2	4652		
Associate Professional	Male	31.4	36.3	2503		
and Technical	Female	26.4	31.5	2163		
	Total	28.7	34.4	4666		
All other Occupations	Male	26.0	26.0	9051		
_	Female	22.6	22.7	5993		
	Total	23.9	24.8	15044		
Total UK		27.8	28.7	30016		

Table 6.6: Mean usual home to work travel time (minutes) (LFS, 2008)⁴³

Examining managerial and professional occupations in more detail, the data shown in the table indicates some of the lengthiest commutes (in terms of time) are found among private sector professionals. They report, on average, undertaking journeys to and from their place of work of 35.2 minutes. In contrast managers report shorter commutes in the private sector (32.1 minutes). Public sector managers report lengthy commutes (35.1 minutes). Notably, public sector

⁴³ Note that only in London are considerably lengthier commutes found (47.5 minutes per journey on average for all full-time workers), as are greater proportions of public transport use (52.6% of full-time workers). Figures for the South East are similar to those of the remaining regions of the UK. With this noted only aggregated figures are provided in this chapter to give a national overview of commuting patterns.

professionals report the shortest average commuting times of these four groups. This is led by the shorter commutes of females in these occupations (27.2 minutes). This suggests that requirements from managers for flexibility among workers, which defines contemporary working routines (Carnoy, 2000, 109), may be a significant driving factor in the commutes reported. In the private sector, managers may be less able to appreciate the negative impacts of their requirements for workers to be increasingly flexible and mobile. Moreover, public sector managers, who report shorter working hours and lower levels of overtime, may be less likely to appreciate the additive impact of excessive hours of work, alongside lengthy commutes. Further this may reflect the differing labour markets for these occupations. Private sector managers may remain more dependent on organisational career ladders compared to their professional counterparts (Savage et al, 1992). In contrast professionals are characterised by a more diffuse labour market. They possess increasingly specialised skills resulting in, on average, longer commutes and a greater job search area (Lindsay, 2003).

A fairly consistent gendered split is found in all occupation groups as females, on average, report commutes of around 4-5 minutes less than their male counterparts. The greatest disparities are found among public sector managers where males commute, on average, 38.6 minutes (each way), while females report commutes of 31.2 minutes. Public sector professionals, too, show significant gendered variations, as outlined above. Analysis of the 2001 Census SL-HSAR reinforces this pattern, as 63% of female managers and 61.4% of female professionals report commutes of no more than 9km (per journey) compared with only 50% of male managers and 51% of male professionals.⁴⁴ This highlights consistently shorter commutes among females, even when employed in highly skilled occupations. This is returned to in greater detail in Chapter 8 with reference to the relative mobility of men and women and the implications this may have for women's careers.

The method of transport used for the journey to work is also of key importance in this thesis, with current policy targeting reductions in congestion with the aim of

⁴⁴ These patterns are confirmed as statistically significant (Sig. 0.000) using a Chi-Square Test.

reducing car use (DfT, 2006; 2007; Pooley and Turnbull, 2005, 226). Levels of car dependency are highest among managers; 79.3% use the car for the journey to work. Figures are high for professionals (75.4%), but are only slightly higher than the national average of 75.6% in 2008. Note must be made of the general high car dependency among all workers, especially managers. This suggests a continuing trend in the dependency on the car for the commute, following the findings of Pooley and Turnbull (1999, 287). It has been suggested that this will continue to be the case with the growing number of dual career households as both partners commute, often separately, to their place of work (Pooley and Turnbull, 2000, 22). Schemes aiming to address car dependency, such as the workplace parking levy in Nottingham, are reflected on in the next chapter. This represents a key issue for policy if effective ways to manage congestion and pollution are to be found, otherwise schemes targeting reductions in car dependency may simply complicate the journey to work.

The analysis of data from the LFS has revealed some key distinctions in the commuting patterns of managers and professionals (see Box 6.1). For professionals the lengthy commutes reported in the LFS may have a compounding effect, along with the reported long hours detailed in section 6.2, resulting in real time-scarcity. The dual impact of long hours and long commutes could also further add to the pressure on reductions in hours, where around a third of both public and private sector professionals report a willingness to accept a reduction in pay to achieve reductions in work-time. Time represents a premium resource for these individuals. Private sector managers, who report shorter commutes, may not appreciate the additive effect of the commute in addition to the long hours they impose on their employees. In this context the commute is a key factor in the time allocation of highly skilled individuals and households, and one that, along with hours of work, requires significant exploration. Following the national level analysis in this chapter, this is subsequently explored from a regional and local perspective in Chapters 7 and 8.

6.4 Conclusion

This chapter has explored contemporary patterns of work-time and organisation in the UK. It has suggested that at the organisation-level hierarchies matter in determining working hours, and focus has been given to the hours of managers. Managers have often been grouped with professionals such that some have described them as constituting a class (Ehrenreich and Ehrenreich, 1979; Goldthorpe, 1995). While this may be true it can be argued that in certain key respects professional and managerial occupations are distinct and need to be treated separately when looking at the issue of working hours. There are quantitative and qualitative differences in their respective roles. There may be similarities: managerial practice has become increasingly bureaucratic and professional occupations have seen reductions in autonomy and a move toward bureaucracy. However, managers are required to impose work on others and this suggests they are on one side of a hierarchical dynamic relationship in which they represent the company or organisation.

Reflecting on the commute the LFS data provides an initial overview of the journey to work, and suggests managers and professionals experience the longest commutes of all broad occupation groups. Car dependency is also higher among those employed in these occupations, especially managers. Interestingly the longest of all commutes are found among private sector professionals, who are likely to experience lengthy hours of work and unpaid overtime (Figure 6.1). Private sector managers report shorter commutes. This may reflect that managerial and professional labour markets are distinct in nature. Managers in some industries find their skills transferable, and may experience fewer moves between employers as they are moulded into their role while moving up organisational career ladders (Savage et al, 1992). Alternatively the lengthier commutes among professionals may provide some evidence for the trend observed where the commute is an alternative to permanent residential migration (Green, 1995; Hardill et al, 2006, 180), often where partners turn to nodal living as a compromise between their respective places of work (Doyle and Nathan, 2001, 11; Green, 1997). The commutes and mobility of these respective workers will be explored in greater detail in subsequent chapters, especially Chapter 8. Here specific reference will be made to the case study of Greater Nottingham.

It is clear from the patterns of work-time and commuting found in the LFS, that managers and professionals show not only distinct patterns in terms of hours of

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work, and in the nature of their occupations, but also distinct patterns in terms of travel to work, perhaps driven by managerial practice. Managers report shorter commutes in the private sector, but increasingly require greater flexibility and mobility from their workers. The commute may therefore have a significant compounding effect on time-use when the long hours of managers and professionals are considered. A number of gendered variations have also been revealed which draw out further distinctions between individuals employed in highly skilled occupations. Perhaps most notable are the extensive hours of male managers in the private sector, and the shorter commutes found among females. This may well reflect the impact of the household on their mobility levels. These factors will be returned to in greater detail in subsequent chapters.

The principal focus of this chapter was on working hours and the hours worked by managers and professionals. The empirical evidence highlights some interesting and highly significant differences between categories of workers (see Box 6.1). Evidence of long hours in the UK has been found, and it would seem that even though UK workers cannot be regularly required to work in excess of 48 hours, many so do against their wishes. The role of managers in this process has been speculated upon in this chapter. A significant minority of private sector managers work hours which are particularly long. It has been shown using the empirical analysis that these managers are, on average, not as dissatisfied with their work-time as are their professional counterparts in their respective sectors. This may reflect the fact that managers are in some sense "wedded" to the company or organisation, and their policies. Workers can voluntarily 'waive' their rights under the current UK work-time legislation. However it is managers — who seem to be more tolerant of long hours themselves — who have power over employees and their working conditions. In view of the high levels of dissatisfaction among those working long hours, it seems that the voluntary nature of working time regulation may need to be revisited by policymakers if their intent is to make serious inroads into work-time excesses.

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7

All Work and No Play: Work-Time, Care and Flexibility in the East Midlands and Nottingham

7.1 Introduction

The national analysis conducted in Chapter 6 revealed extensive hours of work among many managers and professionals, and the key distinctions between these occupations in the context of working patterns, preferences for reductions in hours, and their respective roles. This chapter now considers in greater detail elements of time allocation. It critically explores the challenges faced by households, reflecting on both human resource and public policies pertaining to working practices and the journey to work. These include the *Working Time Regulations*, work-life balance (BERR, 2008), and car parking policy, specifically the proposed workplace parking levy in Nottingham. The analysis moves from the individual to the household, and from national to regional and local context, focusing on the second and third research questions.

The household forms an important unit for analysis, especially for those combining dual careers, who must manage two work schedules alongside the demands of the home (McDowell et al, 2005). As discussed in Chapter 2, mainstream economic theory, including that of Becker (1976), fails to acknowledge the constraining effects of norms and habits in determining time allocation, and is 'gender blind'. Hakim's (2000) extension of the rational choice approach considers males as displaying strong preferences for paid work. In contrast, Hakim suggests women are heterogeneous, displaying a range of preferences for work and family life. According to Hakim mainstream labour market theory is deficient as it is grounded solely on male behaviour. However, Hakim maintains that most women have relatively unconstrained choices. This represents a major failing of Hakim's work. For example, institutional and radical perspectives consider how preferences are formed and that time under conditions of 'choice' is likely to be constrained by institutions and social culture

(Philp et al, 2005). Feminist theory also accounts for the role of constraint (Folbre, 1994; Nelson, 1995; Bell, 1974). It acknowledges the influence of gendered norms, and locates its analysis within the context of the household (McDowell et al, 2005; Fagan, 2001). A heterodox approach, combining institutional and feminist theory, is therefore used in this thesis as the theoretical framework for explaining complex patterns of time allocation among dual careers households.

Given this theoretical framework, which was developed in Chapter 2, this chapter investigates empirically contemporary time allocation and explores themes of work, flexible working, and the impact of caring. The focus of this chapter is on men and women in dual career households, where dual work schedules are combined with household responsibilities. Time allocation for these households is increasingly complex. In particular, in recent decades, there has been a blurring of the household-workplace interface. Furthermore, the new working environment is characterised by instability, and requires increasing flexibility on the part of the employee, especially among those in highly skilled occupations (Carnoy, 2000, 109).

Initially, in Section 7.2, the 2001 Census SL-HSAR, and the 1995 and 2008 fourth quarter LFS are used to analyse themes of work-time, caring, and the journey to work in regional (NUTS 1) context.⁴⁵ This is conducted at the level of the individual, providing a foundation for the remainder of this chapter, and the subsequent analysis in Chapter 8. Thereafter the focus of this chapter moves to the household. Section 7.3 details the findings of the small-scale case study of organisations and employees within Nottingham (NUTS 3), with comparison to the previous study in the City (Hardill et al, 1997; Hardill and Watson, 2004). This chapter is therefore significant, not only in cross-section, but also because it considers the experience of managers and professionals in the East Midlands at two chronological reference points.

⁴⁵ Both first and fourth quarter LFS data are used as they each include variables relevant to the analysis. The first quarter data-set contains data on home-working. The fourth quarter data-set provides data on the commute.

7.2 The East Midlands

This section provides the context for the case study of dual career households in Nottingham. Data is extracted from the LFS and Census SL-HSAR, exploring elements of time allocation in the East Midlands region. Examining the data for this region from the 2008 LFS, long working hours are evident among managers and professionals in the East Midlands region (total usual hours are recorded as 45.9 and 44.1 hours) and, further, are comparable with those reported nationally (45.9 and 44.0 hours respectively). Perhaps of greater significance, though, are the high proportions of individuals working over 48 hours per week. This suggests enduring long hours cultures in the region (Kodz et al, 1998; Sirianni and Negrey, 2000). And, significant proportions of both managers (31.0%) and professionals (27.7%) in the East Midlands report working these long hours.

Long hours of unpaid overtime are worked by both sectors of managerial workers and, especially, by public sector professionals in the East Midlands. These working patterns may be fuelling dissatisfaction with working hours. Importantly, over a third of private sector professionals report a willingness to accept a reduction in pay to obtain a reduction in their working hours (33.7%). High levels are also found among public sector professionals (28.8%). The smaller proportions of private sector managers reporting preferences for reductions in hours alongside reductions in pay (24.6%) may be the result of moulding effects, specifically the influence of assimilation into a culture of long hours as representatives of the organisation. Notably a key difference is found in the East Midlands as public sector managers *do* report substantial preferences for reductions in hours (35.3%). This is an important finding and one that suggests that within the East Midlands region managers in the public sector may be more understanding of the potentially negative impacts of long hours.

Many households, including dual career households, have to manage the additional complexities of unpaid care, one of the key tasks of social reproduction. Data from the Census SL-HSAR for 2001 shows that in England and Wales around 15% of women are care providers, compared with 10.9% of

men.⁴⁶ Of those individuals who provide care, 28.6% put in over 20 hours per week, although it should be noted that these numbers are lower among managerial and professional workers. Among managerial and professional workers female managers are the group most likely to provide over 20 hours of care (25.9% of this group for England and Wales). This adds further robustness to the suggestion that female work-time preferences are more directly affected by household constraints than their male counterparts (Fagan, 2001; McDowell et al, 2005). This also reflects the impact that gendered roles may have on the daily routines of females within dual career households, something that will be returned to in Chapter 8. This is an additional concern as this unpaid care does not explicitly refer to the care of children by parents (unless they suffer from a long term illness or are disabled). So, for many parents caring for children may be excluded from their reported hours spent caring.

A further constraint on time is caused by the commute. Mean commuting times among workers in the East Midlands (on average 23.7 minutes) are shorter than those reported nationally, but are representative of the UK when London is excluded (see Chapter 6). Lengthy commutes are found among certain groups in the East Midlands. This is especially the case for professionals (who face daily commutes of 28.9 minutes per journey).⁴⁷ Workers in the East Midlands are reliant on personal motor transport, and in particular the car (82.1% of all respondents reported using their car as the main method of transport to work). The LFS suggests these methods of transport account for 92.8% and 84.2% of all journeys to work for managers and professionals respectively, and are above the

⁴⁶ Note that figures for caring are given for England and Wales as the Census SL-HSAR does not allow analysis at the regional level. Respondents provided answers to the question 'Do you look after, or give any help or support to family members, friends, neighbours or others because of long-term physical or mental ill-health or disability, or problems related to old age?'. This question refers to the provision of unpaid care. It defines a person as a provider of unpaid care if they give help or support to family, friends, neighbours or others because of long term ill health or disability, or problems related to old age. Note that there is no specific reference to whether this care is provided within the household or outside the household, and the question does not explicitly refer to the provision of care for children – other than if long term ill or disabled.

⁴⁷ The variations between public and private sectors for managerial and professional occupation groups are statistically significant.

respective national averages for these groups (79.3% and 75.4%) in 2008. However, it should be noted that the national averages are influenced by London where use of public transport is much greater, as noted in Chapter 6. Regions other than London show similar trends of car dependency to the East Midlands. When the reported lengthy commutes are considered alongside long hours of work, and additional responsibilities within the home, this suggests extensive time constraints among dual career households. These findings will be used to inform the analysis of the data from the case study of Greater Nottingham in the following section.

7.3 The Case of Nottingham

Building on the regional analysis for the East Midlands, this section focuses on the findings from the case study of Greater Nottingham. Reference is also made to the earlier study to allow changes to be mapped between 1994/5 and 2006. Initially this section explores work-time among managers and professionals in dual career households, before engaging with work-life balance policies, including flexible working and home-working. Here the impacts, successes and failures of current human resource and public policy are reviewed, using the case of Greater Nottingham. The section subsequently introduces caring as an element of time allocation, and reports on how this, and flexible working, conflict with current policy agendas and patterns of travel to work.⁴⁸

Work-time of managers and professionals in Greater Nottingham

Examination of full-time working hours in 2006 in Greater Nottingham demonstrates that long hours remain a concern for managers and professionals in dual career households (Table 7.1).⁴⁹ This is especially the case for public (46.3 hours) and private (44.3 hours) sector professionals, and private sector managers

⁴⁸ Note that the quotations provided in this chapter and in Chapter 8, draw on statements from HRMs made in the interviews, and also from individual careerists completing the open questions on the questionnaire.

⁴⁹ F-tests confirm the significance of the patterns between occupation groups with 90% confidence for basic usual hours (Sig. of 0.082), and 99% for total usual hours (Sig. of 0.000). Variations between total usual hours for public and private sector managers are statistically significant. Variation between professionals in the public and private sector is found to be insignificant, suggesting little difference in their hours.

(42.9 hours). Examining variations by gender, both male and female workers report long hours. These are reported as 40.5 and 46.5 hours for male managers and professionals respectively, and 41.1 and 45.1 hours for female managers and professionals. Significant numbers of both male and female workers in these occupations, especially in the professions, also report working hours in excess of the 48 hour week threshold identified by the *Working Time Regulations* (2007). This is especially significant because these regulations have been in place in the UK for approximately a decade, and the work-life balance campaign has run since 2000 (BERR, 2008a).

Major Occupation group		Total usu	al hours	Percentag working hours		
		Public	Private	Public	Private	n
Managers and Senior	Male	38.8	42.0	0.0	7.1	26
Officials	Female	38.9	43.8	5.9	14.3	31
	Total	38.9	42.9	3.4	10.7	57
Professional Occupations	Male	46.6	45.9	42.9	40.0	26
-	Female	45.9	41.5	42.9	0.0	17
	Total	46.3	44.3	42.9	25.0	43
Assoc. Professional and	Male	43.5	36.0	50.0	0.0	5
Tech.	Female	38.2	_	0.0	-	6
	Total	39.5	36.0	12.5	0.0	11
All other occupations	Male	38.5	39.0	0.0	0.0	4
-	Female	37.0	40.8	0.0	0.0	3
	Total	38.0	39.9	0.0	0.0	7
Total Greater Nottinghan	1	42.4	42.4	22.7	11.6	118

Table 7.1: Working hours among occupation groups (Nottingham, 2006)

However, some improvement is recorded. Mapping the data at the two reference points, using the two Nottingham studies, suggests reductions in full-time working hours in Greater Nottingham during the past decade. This is particularly marked among managers, whose mean hours decreased from 45.0 hours in 1994-5 to 40.8 hours in 2006. Worryingly, though, significant differences are not found among professional workers.⁵⁰ This is further highlighted by the percentage of employees working over 48 hours per week, which has reduced in managerial occupations, but has actually increased from 37.9% to 39.5% among professionals. This puts further pressure on the time of these individuals. In

 $^{^{50}}$ The differences in total hours between 1994/5 and 2006 are statistically significant for managers (Sig. 0.000), but insignificant for professionals (Sig. 0.633). The variation in total hours for the whole sample of full-time workers is statistically significant (Sig. 0.004).

addition, any reductions in hours are likely to have been conditional upon increased productivity with associated peaks of work to meet deadlines (Green, 2001; Doyle and Reeves, 2001, 30). Long hours' cultures, it seems, endure within Greater Nottingham, particularly among groups of highly skilled workers, notably professionals. This finding is consistent with the working conditions reported in the interviews with HRMs, conducted in 2006. Employees may experience long hours as a result of hours being equated with commitment in the eyes of senior managers (White et al, 2003), an issue explicitly referred to on a number of occasions throughout the 2006 study. For example:

"I've spoken to people and they've said that they don't leave until their boss has gone and that everyone has to stay until goodness knows what time, but it does tend to be pockets of it, in certain departments rather than across the whole [organisation]." (HRM, Female, aged 28, Solicitors)

Enforced long hours, such as those reported in the East Midlands using the LFS data, and in the Greater Nottingham case studies, fuel dissatisfaction. The LFS shows that preferences for reductions in hours of work are most prominent among private sector (58.3%) and public sector (58.3%) managers. Consistent with the LFS findings, workers in Nottingham report significant preferences for reductions in hours (Table 7.2). In 2006 these were greatest among managers and professionals in the private sector (75% in both cases). Interestingly, though, dissatisfaction is high among all managerial and professional workers, possibly reflecting the heavy and increasing workloads of these groups (Green, 2001). These workers, while contracted for less than 40 hours, must meet deadlines and attend meetings. This mismatch between the preferences of the employee and their lived working routines highlights the power employers have over their workers in determining their work-time. These activities additionally reduce the effectiveness of flexible working arrangements, as the following HRMs reported:

"[Long hours] happen. More senior grades are ... more heavily loaded and have more responsibilities and tighter deadlines, it's the nature of the job." (HRM, Female, aged 40, Central Government)

"Our contractual default working week is 37 hours, and I have to say the vast majority of managers and professional people do far more than that, and at a certain level it's an expectation

that you do that without pay ... you get paid for 37 hours; how you deliver that and anything else you need to get the job done is up to you, and your manager." (HRM, Female, aged 47, County Authority)

More significant to this analysis are the high proportions of workers who state a willingness to take a reduction in income to achieve shorter hours. At the regional level, using the LFS, professionals, especially those employed in the private sector (33.7%), report the greatest willingness to accept a reduction in pay to obtain a reduction in their working hours. Similarly, a significant proportion of workers in Greater Nottingham consider a loss of income a worthy trade-off if it were to result in shorter hours (Table 7.2). Such dissatisfaction with work-time is a key indicator of the inadequacy of mainstream theory in explaining time-use, as it highlights a significant degree of disequilibrium. Interestingly, too, the willingness to work less hours even with less pay is greater among professionals than managers. Table 7.2 shows private sector professionals are more willing to reduce hours and pay than private sector managers. The smaller proportions of managers indicating preferences for reductions in hours may be the result of the influence of their organisation, assimilating them into a culture of long hours as 'company men/women' (Wheatley et al, 2008). Among public sector employees this is manifest, too, with public sector professionals being more willing to take a pay-cut to secure reduced hours than their managerial colleagues.

Major Occupation Group	Prefer Shorter Hours		Prefer sho even if l	orter hours ess pay?	Percentage who enjoy job	
	Private	Public	Private	Public	1994/5	2006
Managers and Senior Officials	75.0	69.0	25.0	19.0	87.0	91.2
Professionals	75.0	68.6	42.9	23.1	93.3	86.0
Associate Professional and Technical	33.3	37.5	0.0	25.0	90.7	72.7
Total Greater	67.4	64.0	27.8	20.8	91.2	87.3

Table 7.2: Preference for shorter hours and job satisfaction (Nottingham, 2006)

Comparing the satisfaction or otherwise of managerial and professional workers in Nottingham at the two reference points suggests increasing dissatisfaction with hours among these broad occupation groups. Preferences for reductions in hours have increased starkly between the two reference periods, even though hours are likely to be shorter in 2006 for all workers. Preferences increased from 57.4% to 71.9% among managers, while they increased from 48.4% to 69.8% among professionals during this period. Notably, females' preferences for reductions in hours are greater than males. Female managers' (28.6%) and professionals' (21.1%) preferences for reductions in hours, if achieved through a reduction in pay, are significantly higher than those of their male counterparts (10% and 15% respectively). This likely reflects females' greater constraint, something that some HR managers suggest may make them better equipped to monitor and enforce working practices of others:

"Getting women into [managerial roles] helps, because I think women are less hung up on the macho image. They say, 'no I've got other things and I'm gonna go home." (HRM, Female, aged 43, Government Department)

To provide a greater understanding of the potential drivers of this apparent dissatisfaction with hours of work, preferences for reductions in hours reported in the 2006 study can be further examined using a logistic regression model. The model explores the dichotomous variable, "prefer shorter hours than at present", where yes = 1, no = 0. The independent variables include work (W), commuting (C), household (H) and individual (I) characteristics of respondents from the 2006 Nottingham sample.

$$H_s = f(W, C, H)$$

$$[7.1]$$

Where,

$$W = f(H_w, O, Y)$$

$$[7.2]$$

$$C = f(C_T)$$

$$[7.3]$$

$$H = f(C_P) \tag{7.4}$$

$$I = f(G, A) \tag{7.5}$$

Work (*W*), in this model, is a function of total usual hours (H_W), major occupation group (*O*), and gross annual income (*Y*). The commute (*C*) is a function of commuting time (C_T). Household characteristics (*H*) are a function of whether respondent provides care (C_P), and individual characteristics are a

function of gend	ler (G) and	age (A) . ⁵¹	The	results	are	summarised	in	Table	7.3
(full results in A	ppendix 10)	.52							

Parameter Estimates	В	Exp(B)	S. E.	Wald	p-value		
Constant	-4.700	0.009	2.208	4.530	0.033		
Total Usual Hours	0.092	1.096	0.039	5.494	0.019		
Usual Home to Work Travel Time	0.011	1.011	0.010	1.192	0.275		
Provides Care	0.699	2.011	0.557	1.575	0.209		
Female	1.138	3.121	0.476	5.722	0.017		
Age: Reference is 55+							
16-24	-0.358	0.699	1.256	0.081	0.776		
25-34	-0.399	0.671	0.883	0.204	0.652		
35-44	-0.132	0.876	0.818	0.026	0.872		
45-54	-0.575	0.563	0.772	0.555	0.456		
Major Occupation Group: Reference i	s Manager	s and senic	or official	<i>s</i>			
Professionals	0.066	1.068	0.595	0.012	0.911		
Associate Professional and Tech.	-1.461	0.232	0.901	2.632	0.105		
All Other Occupations	-2.015	0.133	1.219	2.733	0.098		
Private Sector	-0.116	0.891	0.553	0.044	0.834		
Gross Annual Income: Reference is £40,000+							
£0-19,999	0.846	2.331	0.971	0.759	0.384		
£20,000-39,999	1.509	4.523	0.735	4.212	0.040		

Table 7.3: Logistic regression: preferences for reductions in hours (Nottingham, 2006)

The results suggest long hours are one important driver of preferences for shorter hours, as expected. This is reflected in the positive B (0.092) which suggests the odds of reporting preferences for shorter hours are increased with increases in hours of work. In addition, workers experiencing longer commutes (0.011), and those who provide care (0.699), are more likely to state preferences for shorter hours, although these results are statistically insignificant. Women are more likely than men to report preferences for reductions in hours, confirming the findings reported earlier (B of 1.138). This probably reflects the continuing influence of gendered roles in burdening them with the majority of household tasks (McDowell et al, 2005). Women are left under greater strain as not only their home, but also their (paid) employment, requires extensive time inputs.

⁵¹ This model uses many of the variables included in the logit model in Chapter 6, but with the addition of a number of key variables which measure work-related time use including commuting time and whether respondent provides care.

⁵² The model is confirmed as statistically significant (Sig. 0.003), with R^2 equivalents of 24.2 (Cox and Snell R^2) and 33.0 (Nagelkerke R^2) reflecting a reasonable degree of explanatory power.

They perform a 'double-shift' (Jones, 2003); paid and unpaid work for an employer and unpaid work in the home (Bell, 1974, 621). Exploring occupation groups, both managers and professionals are likely to state a preference for a reduction in hours relative to other occupation groups. Those with higher earnings are less likely to state preferences for reductions in hours, suggesting adequate remuneration may, for some, curb dissatisfaction with working conditions. The model confirms that lengthy working hours create dissatisfaction. Within dual-career households women are likely to be most affected, as they attempt to manage the increasingly blurred home-work interface.

Returning to Table 7.2, in contrast to preferences for hours, the percentages that enjoy their job remain high for both managers and professionals (91.2% and 86% respectively). Respondents who reported enjoying their jobs focused on a number of consistent factors which included flexibility, autonomy, social interaction, feeling their roles were rewarding, and making a difference. Those who reported dissatisfaction with their jobs included in their reasons poor management, long hours, lengthy and stressful commutes, poor morale, heavy workloads, and pressure from senior management. Examples include:

"Currently the hours are too long because I am undertaking almost two roles. This makes the job difficult." (Professional Survey Respondent, Female, aged 49, Higher Education)

"Pressure from above about hitting (impossible) targets that are beyond our control." (Managerial Survey Respondent, Male, aged 37, Other Employer)

The factors considered to make a job enjoyable highlight the positive impact of flexible working, and the importance of social networks and work identity (see Sparrow *et al*, 2001). It should be noted that levels of job satisfaction have decreased for professionals (see Table 7.2). This has been led by the intrusion of management, reducing autonomy, as well as long working hours and long commutes. The latter are likely the result of the increasing specialisation in the professions (Lindsay, 2003, 141). Interestingly, even though females report greater preferences for reductions in hour of work, they report enjoying their jobs more than males. This gives further cognisance to the restrictive nature of
the household, as it may be viewed as stress inducing making the workplace a more attractive proposition (MacDonald et al, 2005). Flexible working may offer one solution for females who must manage both workplace and home.

Flexible Working and Work within the Home

This section focuses on the use of flexible working arrangements, at the workplace and also within the home. This section pays particular attention to the discussion of the potential household implications of increasingly complex patterns of work, for which academic and policy literature is drawn on to aid in the explanation of the empirical findings. The flexible working arrangements and transport policies at the organisations in Nottingham are summarised in Table 7.4. This table gives an overview of the types of flexible working available (including flexi-time and home-working), and the transport policies in place, at each organisation at the time the case study was conducted.

One of the key findings shown in Table 7.4 is the division between public and private sector workplace policy. This is particularly evident in reference to formalised home-based teleworking schemes, and in terms of transport issues and car parking. While most public sector organisations offer employees formalised flexi-time, home-working and other schemes, in many private sector organisations these are not found. In some cases this may simply reflect the nature of the business — customer-facing environments do not offer significant home-working opportunities — however this could reflect that some organisations within the private sector are 'lagging behind'. Formalised car parking policy was also less common in private sector organisations, although some public sector organisations did not offer any formal schemes either e.g. the higher education institution. The car parking policies at the organisations in Nottingham are returned to later in this chapter, while this section now focuses on the discussion of flexible working arrangements.

Organisation	Flexible Working Arrangements	Flexi-time	Telework/ Homework	Car parking policy
City Government	Flexi-time, Compressed hours, Reduced hours, Job Share, Part-time, Maternity/Paternity Leave.	Flexi-time w/ core hours.	Piloting schemes. Reduces property needed.	Car sharing. Provision for Cyclists.
Government Department	Formal work-life balance policy, Flexi-time, Part- time, Job Share, Term-time, Teleworking, Distance Working, Maternity/Paternity Leave.	Flexi-time w/ core hours Unavailable for senior managers	Policy in place. Dealt with case- by-case.	No formal schemes.
Higher Education Institution	Flexible hours, Part-time, Teleworking, Maternity/Paternity leave.	No formal flexi-time scheme. Autonomy at senior grades.	New Policy in action. Usually work odd days at home.	No formal schemes.
County Authority	Flexi-time, Part-time, Job Share, Teleworking, Career break, Parental Leave, Maternity/Paternity Leave.	Flexi-time w/ core hours.	Draft Policy, currently case- by-case.	Lack of car parking. Policy targeting restrictions. Car sharing scheme. Provision for Cyclists.
Central Government	Flexi-time, Part-time, Teleworking, Maternity Leave, Parental Leave, Special Leave.	Flexi-time w/ no core hours.	Local Policy. Ad hoc basis. Most work odd days at home.	Lottery scheme. Car sharing increases chances of gaining space in lottery.
Optical Retailer	Part-time, Teleworking, Maternity/Paternity Leave.	No formal flexi-time scheme.	Ad hoc basis for senior managers.	No formal policies.
Manufacturer	Flexi-time, Job Share, Term-time, Annualised hours, Maternity/Paternity Leave, Parental Leave.	Flexi-time available to employees.	Policy in place.	Car sharing scheme Subsidised bus service, provision for Cyclists.
Solicitors	No formal work-life balance policies, Part-time, Term-time, Maternity Leave.	No flexi-time schemes.	No formal policy. Ad hoc basis, most work odd days at home.	Free parking for professional and senior support staff.
Telecoms	Part-time, Term-time, Reduced hours, Maternity/Paternity Leave.	No flexi-time schemes.	No home- working schemes.	No parking onsite unless long distance or work at night. Senior managers have access.
Voluntary and Community Sector	Flexi-time, Part-time, Reduced hours, Job share, Term-time, Teleworking, Maternity/Paternity Leave.	Flexi-time w/ core hours.	Policy in place. Dealt with case- by-case.	Car sharing Provision for cyclists — showers etc.

Combined with the movement of work into new arenas, the contemporary issue of the time-squeeze (Brown and Booth, 2002; Schor, 1993; Southerton, 2003) is resulting in greater demands from employees for flexible working arrangements. These schemes provide employers with the opportunity to extend office hours beyond the 9 to 5, into 24/7 working routines. In Nottingham a number of organisations, including central government, offer extended opening hours. In this case the office is open from 7am until 7pm. This measure increases contact time with customers, while also allowing employees greater flexibility.

As Table 7.4 suggests public sector organisations show greater acknowledgement, in terms of formal policy, of the growing need for flexibility in work. Public sector organisations generally have both formal flexi-time available to employees, although not always for senior managers, and allow home-working, at least on odd days each week.

Significantly, 60.4% of the respondents in the case study report working flexible hours. Females, often tasked with the majority of household responsibilities, report the greatest use of flexible working arrangements. In the 2006 sample in Nottingham, 68.6% of females report flexible working in contrast to just 51.6% of males.⁵³ For many workers this flexibility comes in the form of flexi-time, in the public sector at least. However, it also includes compressed hours and term-time working for others (see Table 7.4). These arrangements are particularly suitable for females who are managing dual responsibilities of work and home.

Flexi-time aims to empower the employee as they can decide when they undertake their specific hours of work, though there are usually a number of mandatory core hours (although not in all cases). It generally benefits the employee, although may not always:

"If I decide I'm leaving early on Friday afternoon, I'll leave early. But, the double edge of that is, that [my boss] will expect to be able to ring me on a Sunday" (HRM, Female, aged 46, Higher Education)

⁵³ These figures are confirmed as 95% significant using a chi-squared test (Sig. 0.044).

The publicity of the work-life balance campaign raised awareness of the potential benefits of flexible working arrangements. The design and implementation of flexible working arrangements should empower the employee. In some cases this has had significant positive effects in terms of both recruitment and retention of workers:

"We've got flexi-time, which is obviously a big one in terms of flexible work arrangements, so people can choose; you've got [the] hours that you're required to work, but it's up to you how you spread them across the week." (HRM, Female, aged 43, Government Department)

Comparing the use of flexible working arrangements in Nottingham with national patterns, using the 2008 LFS, a lower proportion of workers are found nationally who report a flexible working arrangement. Table 7.5 shows that only among professional workers are relatively large levels of flexible working found. This mainly reflects the proportion of these workers involved in term-time working arrangements (10.3%), found extensively in the education professions. However, flexible working is too often employer, not employee, driven in these occupations as employers' contract for term-time only. Interestingly much smaller proportions of managerial workers report working some form of flexible arrangements.⁵⁴ The primary form of flexible working reported in the LFS sample is flexi-time, a finding consistent with the case study sample.

Type of agreed working arrangement	Managers, Senior Officials (%)	Professionals (%)	Associate Professional and Tech. (%)	All other occupations (%)	Total (%)
Flexi-time	11.7	15.1	16.4	9.1	11.6
Annualised hours	3.4	5.4	4.4	4.3	4.3
Term time working	0.3	10.3	0.8	2.1	2.8
Job sharing	0.0	0.1	0.1	0.1	0.1
Other arrangement	1.2	1.4	1.5	1.8	1.6
None of these	83.4	67.7	76.9	82.7	79.7
n	6549	5145	5292	17399	34385

Table 7.5: Flexible working arrangements by occupation (LFS, 2008)⁵⁵

⁵⁴ The variations between the primary data and the LFS are likely to be a result of the policies surrounding flexible working in the sample of Nottingham organisations. Note that not all of the flexible arrangements listed in the LFS table are relevant or available at all of the Nottingham organisations e.g. the optical retailer did not offer annualised hours or job share (see Table 7.4). ⁵⁵ The category 'other arrangement' is derived from combining, 'nine day fortnight', 'four and a half day week' and 'zero hours contract'. The figures are statistically significant (Sig. 0.000).

The evidence presented here suggests that flexible working can be seen as having a dual meaning. While it provides flexibility often this will be driven by 'business need' resulting in many workers not truly being able to be flexible as per their preferences. Instead, being flexible entails *flexibility for their employer*. These two perspectives are not necessarily in opposition because it is possible that there are mutually beneficial gains from specific practices. Employers can benefit from flexible working, through opportunities to reduce office space (e.g. hot-desking), and increased opening hours are possible. Some employees will arrive earlier at work, while others leave later, resulting in office hours longer than previously possible. The dual nature of flexibility was referred to by HRMs:

"[Flexible working is] based on agreement, yes, as well as business need ... [an employee may] like to come in at 11, but actually most of our business takes place between 9 and 10:30, there might be occasions where you do need people to come in at different times, as long as your members of staff are prepared to be flexible." (HRM, Female, aged 28, Solicitors)

There remains a discontinuity between the implementation and effective use of these schemes. It is *employee flexibility for the employer* which remains most prominent, as business need drives workplace policy. Measures should be implemented in order to create greater *flexibility for the employee*, in hours of work for example. The focus of the employer on their own needs may have negative repercussions for many workers.

Increased availability of home-based teleworking is also manifest in the Nottingham sample. This is predominantly found on an ad hoc basis, again referring back to Table 7.4. Many workers are able to work from home one or two days per week, catching up on administrative work, or writing reports. Interestingly this may further burden workers with extra hours of labour, as they work on the move or at home, making use of ICT. As Jones (1990, 254) suggests technologies may only strengthen the hold economic activity has over our lives. As one HRM noted:

"Obviously with the portability of work now as well...you will take things home, you will develop them at home, and you'll be delivering, you will be travelling, you will quite regularly do over your normal working hours." (HRM, Female, aged 31, City Government)

Data on home-working is also collected in the LFS. Nationally, notable numbers of both managers (13.5%) and professionals (9.5%) report mainly working from home. Of the remainder who don't work at home all the time, greater levels of home-working whether paid or unpaid, are reported by managerial (36.2%) and professional (47.1%) workers, than for other occupation groups (Table 7.6). In the case of professionals this will be related to the higher levels of autonomy in these occupations. However, this may also be indicative of workers having difficulties differentiating work-time from personal time, as they regularly take work home. Gendered divisions are found in reported use of home-working. Over half (55.6%) of female professionals undertake paid or unpaid work for an employer within the home. In contrast fewer male professionals (41.8%) and male managers (37.9%) report home-working. Interestingly, just 32.2% of female managers report working at home. The lower proportion of managers working from home reflects the more observational nature of these occupations, as these workers have to be present to monitor and line-manage employees.

Major occupation group (main job)	Ever do any paid or unpaid work at home? (%)			
	2008	n		
Managers and Senior Officials	36.2	1519		
Professional occupations	47.1	1171		
Associate Professional and Technical	25.0	1234		
All other occupations	9.9	4266		
Total UK	22.4	8190		

Table 7.6: Percentage undertaking work at home (LFS, 2008)⁵⁶

While the majority of the managers and professionals sampled in Nottingham, and in the LFS, only worked at home for odd days each week, some of the key problems encountered when working at home remain evident. Key issues for workers include feeling they must always make themselves available, or are always on call (José de Freitas Armstrong, 1999, 52). The results of Harris's (2003, 430) survey of home-workers indicated that 56% of the home-workers surveyed allowed customers to contact them 24 hours a day and even at weekends. In addition, a major cause of stress among home-workers is the result of difficulties in dividing time and space between work and the home (Tietze and

⁵⁶ The data relates to paid and unpaid work for an employer and does not include household tasks. The data is again confirmed as statistically significant using a chi-squared test (Sig. 0.000).

Musson, 2005; Green et al, 2000, 305). Where employees are only working odd days at home problems of isolation and loss of social contact do not impact the worker greatly. However, the 'invisibility' of working away from the office may result in managers being unaware of the actual time workers spend on company business (Harris, 2003, 430). This invisibility could negatively impact the careers of these workers. Also of concern for workers in the Nottingham sample, was that work was being conducted at home in addition to full-time working hours at the workplace.

This is potentially a result of many of the workplaces surveyed in Nottingham not having a formally defined home-working policy for workers (Table 7.4). While highly skilled workers generally report the availability of home-working, at least for a few hours per week, the lack of formal policy may have significant negative impacts if employees are faced with demanding supervisors or managers. The more positive examples of employers in the case study sample offer formal schemes, which are agreed based on the employees home-working environment meeting a number of criteria including health and safety. Working from home raises health and safety issues for employers and employees including undertaking risk assessments within prospective home-working environments (see Chapter 3).

"In most cases it is a flexible home-working arrangement, but in a couple of cases it's actually more formally agreed. [They have] a modem link set up at home for them, and health and safety check their home premises to make sure that everything is compatible, and then the agreement is signed." (HRM, Female, aged 40, Central Government)

However, the health and safety risk assessment may result in issues of invasion of privacy (Fairweather, 1999), potentially causing some employees to avoid these flexible working options, or opt for less suitable alternatives. Beyond the health and social impacts for the employee, the employer also faces the cost of implementing these schemes. While home-based teleworking offers opportunities for employers to reduce the size of their office space, set-up costs can be considerable.

Caring and conflicts with work-time and travel

Many households, especially dual career households, have to manage the additional complexities of caring. Yeandle (2001, 43-45) reflects on the importance of the household and caring, and argues that they should be included in measures of work-time. However, mainstream theory, including much of Becker's earlier work, would see this activity as distinct from work as discussed in Chapter 2. But, it is clearly *not* leisure time.

Caring as an element of household time-use is explored using the primary data. Definitions of care include time spent caring for dependent children, as well as ill, disabled, or elderly relatives as per the Census SL-HSAR. Just under a third of survey respondents in the 2006 study in Nottingham (30.7%) reported providing care. As we would expect, the majority of these individuals reported caring for a child or children (79.5%), while the remainder provided care for elderly relatives and family members suffering illness. Of those providing care, 40% of full-time females report caring responsibilities of 20 or more hours per week. As with the data from the Census SL-HSAR, this indicates significant time constraints may be felt by those combining managerial and professional employment with caring responsibilities, especially women. This highlights an over-simplification of mainstream economic theory, which limits its application in explaining 'real' time allocation. The results are also of significant concern as elder care is likely to increase given the aging population of most western nations. This is likely to increase time spent caring for elderly relatives, in addition to the time spent caring for children, and in paid work.

Worryingly, the HRMs interviewed in 2006 suggested that those under the greatest pressure, as a result of caring responsibilities, may suffer in relation to career opportunities. This is especially the case where long hours cultures, which endure in many workplaces within Nottingham (and more broadly the UK), are the norm. As one respondent suggested:

"If it's the office culture of long hours ... it makes it very difficult for people with young children to keep up with everybody else, and that's not fair." (HRM, Female, aged 43, Government Department) A further impact of caring on time allocation, and especially paid employment, is centred on the journey to work. Parents must manage the responsibilities, not only of caring for their children, but also of the 'school run'. This may result in partners in dual career households having to work non-standard hours, perhaps starting later and finishing earlier. However, while many households share this responsibility between partners, some do not. Flexible working arrangements provide a potential solution to this issue, particularly flexi-time which is widely implemented by HR divisions in many organisations.

Some evidence is reported of a conflict between flexi-time and the journey to work, resulting from the lack of available car parking at many workplace locations. While in the future employers may face significant limitations — due to new government policy on traffic congestion and car parking, aimed at reducing car use (DfT, 2006, 2007; Pooley et al, 2005, 226-7) — insufficient car parking presently has significant negative impacts at the level of the individual and the household. Limited car parking can make the journey to work more stressful and complicated as employees may not be able to rely on a regular space at their place of work. This forces many individuals to arrive at their place of work early in order to obtain parking for the day, further limiting the potential benefits of flexible working arrangements.

"There isn't enough car parking here ... which I think [undermines] flexible working for people who work here. I mean theoretically you can arrive at work as late as 10 o'clock; if you arrive after half past 8 however the car park is full." (HRM, Female, aged 31, City Government)

The lack of formal policy pertaining to car parking at a number of organisations surveyed (see Table 7.4), and the lack of interest shown by HRMs at some of these organisations, suggested that some employers simply viewed the journey to work as an employee matter, not of their concern. Conflict of this nature over car parking particularly affects those with caring responsibilities, especially those that must timetable the 'school run' into their daily schedules. In many cases this is the responsibility of the female partner within a household. This impacts their lives, adding further stress to an already stress inducing journey to work. However, it is not recognised in employers' parking policies which are often driven by seniority and the first-come-first-served norm. Measures limiting car parking such as the proposed workplace parking levy (Nottingham City Council, 2009) may create additional pressures for women in terms of the journey to work in Nottingham. The problems are as follows:

"Women who can't [get to work early] because they have caring responsibilities or they have to go somewhere else first, feel doubly penalised, because they can't get a [parking] space." (HRM, Female, aged 46, Higher Education)

"It discriminates against people who do the 'school run' as well, because there's going to be added stress of getting here and not finding anywhere to park when they've done that." (HRM, Female, aged 47, County Authority)

For organisations, reductions in car parking facilities may initially result in high competition from employees for parking spaces. Some of the HRMs interviewed in Nottingham suggested that implementation of such a scheme may be met with businesses deciding to move outside of the boundary for the levy so they can avoid it. In future, car parking issues may well impact not only employees but employers decisions regarding workplace location. However, possible solutions to some of these issues may exist. For example, the HRM at the County Authority reported the use of schemes such as lotteries for car parking spaces (Table 7.4). These schemes, in place at a number of organisations in Nottingham, involve lottery draws, which are conducted each day to allocate car parking for the next day to attempt to provide greater equality in attaining car parking. They also allow positive discrimination towards certain groups. For example those car sharing may be entered into the lottery once for each worker travelling in the car; thus increasing the likelihood of these groups regularly obtaining car parking. However, this does not directly promote movements away from the current dependency on the car, a particular issue within the East Midlands. Moreover, this does not allow for forward planning. This is a key limitation as planning is of great importance for partners attempting to fit around school timetables.

The positive impacts of flexible working arrangements may, therefore, be eroded. *Employee flexibility for the employer* may be the key driver of flexible

working, rather than workers using these tools for their benefit, as implementation and availability are subject to 'business need'. Real tensions exist in the successful use of flexible arrangements, due to conflicts with workplace timetabling of meetings and deadlines, and with workplace car parking, not to mention the reported cultures of long hours and presenteeism within many workplaces. These all result in uncertainty over the length of the working day, and are issues which should be engaged with by policymakers if progress is to be made in improving work-life balance.

Instruments can be put in place by employers, such as positive discrimination for carers. Provision of parking for those in the greatest need — either due to needing their car for work, or for caring and household requirements — provides an appropriate method for ensuring those facing the greatest constraint are able to take advantage of the availability of flexible working arrangements. However, isolating those in the greatest need is easier said than done. Entrusting employers — who equate long hours with commitment and increasingly ask their workers to become more flexible and mobile — may well not lead to an improvement for those groups of workers in most need.

7.4 Conclusion

This chapter has explored the challenges faced by dual career households in allocating time, in a policy context. The theoretical framework distinguished a mainstream, Becker-based approach, from a heterodox approach influenced by feminist and institutional economics. Mainstream approaches, typified by Becker, were deemed unsatisfactory for the purpose of examining household and workplace activities. Institutional approaches which focus on moulding effects, habits and norms, were deemed more satisfactory. Moreover a gendered perspective was deemed absolutely necessary in any investigation of the household and work-time.

The empirical examination in this chapter suggests that long working hours remain a concern and should be a policy priority at both city and regional level. Workers indicate a preference for reductions in working hours, suggesting dissatisfaction with their current working conditions. Uncertainty is also evident over the length of the working day, due to remuneration being contractually based on the completion of tasks, and employment conditions requiring work to deadlines and attendance at meetings; this reduces the effectiveness of flexible working arrangements. Such limits are a particular concern given that ten years have passed since the implementation of the UK *Working Time Regulations*.

Broad support for flexible working arrangements was found. This was evident at most of the organisations in the case study of Greater Nottingham. Females, often tasked with the majority of household responsibilities, report the greatest use of flexible working arrangements. These arrangements can help employees to manage the increasingly blurred boundary between home and work. Work is increasingly invading the household environment. Growing numbers of individuals work at home, although this is largely found on an ad hoc basis. Many more workers simply struggle to leave their work at the office. There are important considerations here in regards to the 'non-work' space of the employee and whether, and how far, employers should delve into it. Work-life balance policy is needed, which not only improves flexibility and conditions of work, but also ensures that the household is centrally considered in the development, implementation and use of flexible working arrangements.

Examples of good practice from the case study organisations include the implementation of flexi-time schemes which are both popular and provide significant benefits for the employer, and their employees. However, in a number of cases this flexibility is driven by organisational requirements, such as offering longer opening hours. While this can, on occasion, benefit both employer and employee, often the focus remains with the needs of the organisation.

Further tensions exist. These are found between flexible working arrangements and the journey to work, as individuals need to arrive at their place of work early so they can obtain car parking. Some workers require their car for work, and/or for their household responsibilities. Lack of car parking may be particularly prohibitive for women performing the 'school run'. Reductions in availability of car parking may result in essential travel, made under constraint, becoming increasingly stressful and difficult to manage. Positive discrimination for those in greatest need of car parking offers a potential method for ensuring those under the greatest constraint are able to take advantage of flexibility within the workplace. However, identifying those in the greatest need represents a significant challenge. Differentiating between those who require their car, and therefore parking, for example those that care for elderly or ill relatives, and those that simply drive to work out of preference, may be problematic. Leaving this responsibility to employers represents a significant concern.

The evidence presented in this chapter suggests that equal opportunities policy, especially at employer level, must be considered in a broader context. This requires employers, and especially HR managers, to be more aware of the dynamics of the modern household. Certain practices presently adopted by employers implicitly discriminate against those with caring responsibilities, and may act as an impediment to the recruitment and retention of certain workers.

8

Location, Vocation, Location? Spatial Entrapment among Women in Dual Career Households.

8.1 Introduction

In the last chapter the analysis of time allocation among managers and professionals moved from the individual to the household. While the focus of the previous chapters was on work-time, the flexibility of work, and care, initial trends in the context of the commute were analysed at national and regional level, for the East Midlands, in Chapter 6. This chapter builds upon this outline, initially focusing on national and regional trends before shifting the analysis to the household. The chapter explores commuting patterns, factors impacting on daily mobility, inter-regional patterns of travel, and the trend observed by others, of the use of the commute as an alternative to permanent residential migration (Green, 1995; Hardill et al, 2006, 180). The key focal point of this chapter, though, is in exploring whether gender inequity exists within the PMC at work and within the home. In this sense, this chapter addresses the second research question, focusing on the commute and, in particular, on gender.

Patterns of work among females, at least in managerial and professional occupations, may increasingly mirror those of men. Women now show greater commitment to the labour market throughout their careers, and more work full-time (McDowell, 2004, 148; McDowell, 1991). While male input into the completion of the tasks of social reproduction has increased in some cases, many women remain constrained by household responsibilities, due to lack of equality within the home (McDowell et al, 2005). The use of flexible working arrangements is impeded by the enduring link between perceived commitment and the 'time-devouring male employment' culture (Sirianni and Negrey, 2000, 72), as reported in the previous two chapters. This leaves many women constrained in their working routines, resulting in a "double shift" (Jones, 2003).

The diminution of the male bread-winner, female homemaker model — where the male career would take precedence and the female would simply follow (Green et al, 1999, 50; Hochschild and Machung, 1990) — is reflected in household location increasingly taking the form of a compromise between partners' workplace locations (Doyle and Nathan, 2001, 11; Kloosterman and Musterd, 2001). However, gendered norms and household responsibilities, especially caring, may effectively limit female mobility (McDowell et al, 2005; Deitch and Sanderson, 1987, 619; Lever, 1987, 264; Hanson and Pratt, 1995).

This chapter is divided into three sections. In section 8.2 empirical analysis is conducted using data from the LFS, Census SL-HSAR, and the primary data sets collected in Nottingham. The section explores the household implications of changes in patterns of commuting and work-travel in the new work environment. Section 8.3 concentrates more directly on household decisions over commuting and migration. Finally, in section 8.4 gendered norms in mobility are modelled using Two-Step cluster analysis, informing subsequent logistic regression.

8.2 Household Implications of Complex Working Routines

In this section gendered variations in working and mobility are explored with reference to household roles and constraints. The greater commitment to paid work among females is reflected in the increased numbers of women in managerial and professional occupations as discussed earlier in the thesis. However, women also often perform the majority of household tasks (McDowell et al, 2005). This may have particular implications for those committed to both the household and paid employment. In this section empirical evidence is used to explore gender divisions in work, travel and mobility and, importantly, how any divisions impact on male and female working and commuting behaviours.

Combining Work and Home

The majority of men and women work full-time for significant parts of their working life. At certain stages of their working life, though, women may accept part-time work, as a result of having children, or as a result of decisions made within the household. This is reflected in the proportions of all females reporting part-time working arrangements, as 45.4% of all female workers are engaged in

part-time roles, compared to just 13.0% of males (LFS, 2008). Lower proportions of female managers (19.4%) and professionals (28.7%) report working part-time.⁵⁷ Indeed, at least in highly skilled occupations, ever increasing proportions of females are remaining in full-time employment for their entire careers.

Men and women often make use of other forms of flexible working arrangements, including flexi-time or compressed hours. These are particularly useful for those that combine full-time work with caring responsibilities, often women. Those undertaking flexible working arrangements, however, may be at a significant disadvantage in terms of career progression (Sirianni and Negrey, 2000). The productivity and commitment of these workers is often deemed secondary to hours worked (Harris et al, 2007, 501; Sirianni and Negrey, 2000). The working lives of females are often heavily influenced, not by personal preferences, but instead by their family responsibilities, constraining them compared to their male counterparts (Harris et al, 2007, 501). Where females are able to progress and/or continue with their career, this usually relates to the existence of a strong support network to aid with their household responsibilities (Harris et al, 2007, 498).

Females who do work full-time increasingly exhibit the working patterns of males as noted in Chapter 6. This is perhaps best indicated by the existence of long working hours among many females, particularly in professional occupations (mean hours of 43.7 per week) which are comparable to their male professional counterparts (44.3 hours) (LFS, 2008). Similarly long hours are found among males and females in the case study as reported in Chapter 7. This commitment to the labour market though, is likely to put significant strain on the household. This will be felt particularly strongly among those households where both partners are engaged in these demanding occupations.

The demands of the household include significant caring responsibilities, as discussed in Chapter 7. Females in particular reported providing lengthy hours of care (over 20 hours per week) in both the Census SL-HSAR and the case

⁵⁷ All figures are confirmed are statistically significant using a chi-square test (Sig. 0.000).

D L Wheatley

study. It must also be noted that some females who will reduce their hours to provide care for their children, while others will leave the labour market entirely. Women may exercise their maternity rights by returning to their previous employment on a part-time basis for a specified period of time.⁵⁸ This does indicate continuing divisions within the household in terms of caring responsibilities. While females may not leave the labour force to care for their children, moves between full-time and part-time working may have a negative impact on their career long term (Sirianni and Negrey, 2000, 72). Decisions of this nature, however, may not be made solely by the female but instead are likely to reflect significant constraint and compromise.

The impact of this combination of paid and unpaid activities is reflected in the relatively longer working week found among women in the 2006 Nottingham sample. The aggregated variable 'total time spent on all work-related activity', which includes paid working hours, time spent commuting, and hours of caring, reveals longer hours among females. They report 54.8 hours, on average, compared to 50.8 hours for men.⁵⁹ However, these reported hours do not include time spent on household tasks other than caring. The addition of shopping, cleaning, and combination activities e.g. the school run, may reveal far lengthier hours of work among women who often undertake the majority of these unpaid activities alongside full-time paid work. Potential under-reporting of the time used in these types of activities, by women, therefore becomes a concern. This is indicative of the 'double-shift' among highly skilled female workers.

Converging Commuting Patterns?

Building on the analysis of national and regional commuting trends in Chapter 6, distinctions are evident in the time used for home to work travel in the sample of managers and professionals in Greater Nottingham. Among the case study sample of managers and professionals average commute time increased from

⁵⁸ Notably the majority of employers in Nottingham also offered some form of paternity leave for fathers should they need time off or to temporarily reduce their hours to care for their children.

⁵⁹ Note that the difference between these two means is statistically insignificant (Sig. 0.186).

31.3 to 37.9 minutes per journey in the period 1994/5 to 2006.⁶⁰ This follows a similar pattern of increasing time spent commuting as that reported at the national level using the LFS data in Chapter 6. Noticeably time spent commuting among managers and professionals in Nottingham is approximately six minutes longer than the comparative time spent commuting among managers and professionals nationally (32.5 minutes). Additionally, in Nottingham, professionals are, on average, likely to experience longer commutes (48.8 minutes in the private sector, and 42.0 minutes in the public sector),⁶¹ and these are similarly well above those reported nationally in Table 6.6. Conversely, managers' report shorter commutes, although private sector managers undertake fairly lengthy commutes (40 minutes) on a regular basis.

Mean commuting times across the two reference points in Nottingham are indicative of lengthening commutes. This is particularly found among professionals whose commutes increased from 30.6 minutes (1994/5) to 43.3 minutes per journey (2006).⁶² These patterns may reflect the distinct nature of the labour markets in these occupations, as outlined earlier in this thesis. Alternatively, individuals may be choosing to live further from their place of work, or increased congestion may simply be lengthening their journey times. This may be particularly evident in Nottingham and the East Midlands due to the reliance on the car as a method of transport to work (see Chapter 6). Increases in the time spent commuting has been eclipsed by much larger increases in the distances travelled for the commute (Pooley et al, 2005).⁶³ The increasing impact

⁶⁰ The difference between the two means is confirmed at 95% statistical significance (Sig. 0.023).
⁶¹ Variations between the occupation groups are statistically significant. An F-test is statistically significant at the 90% confidence level (Sig. 0.084). Analysis of the difference in means for public and private sector managers and professionals is insignificant, as a result of the variances.
⁶² Variations between mean commuting times in 1994/5 and 2006 are confirmed as statistically

significant at 99% for professionals (Sig. 0.004), but insignificant for managers (Sig. 0.542).

⁶³ Notably, the car remains dominant in Nottingham as a preferred method of transport, as per the East Midlands. Reliance on the car (as well as van or motorbike) is greatest among public sector professionals (62.9% use this method of transport), and among managers and professionals in the private sector (71.4% and 100% respectively). Many commutes combine methods of transport, e.g. driving by car to a train station, then taking the train for the remainder of the journey. However, this makes commutes more complex, and stress inducing (Williams and Hill, 2007).

of congestion may come to reverse this trend. Consequently it is not only distance travelled which is increasing average commuting times.

It is temporal rather than spatial factors that are of the greatest importance to commuters in relation to the journey to work. In Nottingham, the maximum time individuals were willing to commute, on average, was 67.8 minutes per journey. The comparative maximum distance was, on average, 36.8 kilometres per journey. However while, on average, 90.5% of individuals reported a maximum time up to which they were willing to commute, just 57% of individuals reported a similar maximum distance. This suggests that it is the use of time which individuals and their households are most concerned with:⁶⁴

"I start early and finish early purely [to avoid traffic] congestion lengthening the journey." (Professional Survey Respondent, Male, aged 45, Higher Education Institution)

"[I dislike] driving to [my workplace location] at 5-10 miles per hour. It sometimes takes 15 minutes to drive half a mile." (Managerial Survey Respondent, Female, aged 44, Telecommunications)

Analysis of the 2008 LFS indicates that, in the UK, full-time males face the lengthiest commutes (30.3 minutes per journey in 2008). The greatest increases in commuting time, during the period 1995 to 2008, were among females. Full-time female workers commuted 1.9 minutes longer in 2008 than 1995, with a mean journey time of 25.7 minutes.⁶⁵ Among the case study sample of dual career households the mean commute for males was 38.8 minutes and for females 37 minutes. So, variations in the commute do still exist across all workers, broadly, but trends during the last decade suggest some female convergence towards male patterns. Managers and professionals show much less variation with similar commutes recorded for both males and females in Nottingham. This is an interesting result as it has been suggested that a longer commute is more costly where greater household responsibilities are found

⁶⁴ Responses from the survey are to the question 'Why do/don't you enjoy your job?'

⁶⁵ The difference between the two means was tested for statistical significance. The results confirmed statistical significance at 99% (Sig. 0.000).

(Madden, 1981). Those combining time intensive paid employment and commutes with household tasks, often women, may feel significant time scarcity. However, it is not just temporal problems that females face. Spatial constraints are a key concern.

The commutes of women partners often combine tasks of social reproduction, such as shopping and taking or collecting children to and from school. The 2006 Nottingham study provides a range of examples of this pattern of activity, including that of Stephen and Trudy (see Box 8.1). Stephen's labour market area is much larger than Trudy's because of the prioritisation of his career. Trudy undertakes the majority of household tasks, including the school run, with little input from Stephen. This severely limits Trudy's labour market area, as she must combine paid employment with the range of tasks within the household.

Stephen and Trudy

Stephen, aged 51 (a professional working in higher education), commutes around 50km each way per day, requiring him to leave his home at around 6:30am, returning around 7pm. Within this household Trudy, aged 45 (a manager employed by a county authority), is employed full-time but must fit the school-run into her commute, requiring the use of flexible working arrangements.

Daniel and Rachel

Daniel, aged 48 (a solicitor), and Rachel, aged 40 (a manager in central government), are a couple household located close to a transport hub. Rachel commutes to her workplace in Nottingham 8km each way per day using a car, while Daniel drives to his local train station and takes a train to his workplace location 30km away.

Alan and Sarah

Alan, aged 27 (a manager at an optical retailer), and Sarah, aged 26 (a manager working in communications), live in the city centre of Nottingham. Sarah makes a short five minute walk from her home to her workplace. Alan, although undertaking a short journey uses a car to make a short drive out of the city centre each morning to his workplace approximately 5km away.

Box 8.1: Complex Commutes⁶⁶

Similarly, Daniel and Rachel are a childless couple and have located close to a transport node, which affords them access to a range of labour markets. Rachel

⁶⁶ Note that some of this evidence was gathered in the interviews with HRMs, who gave examples of commutes of workers in their offices, and of their own routines.

drives only a short distance to work in Nottingham, often fitting in shopping or other household tasks on the way home, while Daniel performs a multi-part journey to work each day which takes around two hours in total (to and from work). However, it should be noted that not all couples follow this model. For example, Alan and Sarah made a conscious decision to locate in the heart of Nottingham's city centre to avoid extensive commuting (stated in their questionnaire). However, this decision was made as a childless couple. This household may decide to move out of the city if they start a family.

Women, then, may be divided into those with significant household responsibilities, including caring for children, and those that are childless (or empty-nesters), who are able to work longer hours and commute longer and further for work. However, for many women the distance between home and work may be smaller than for their male partners.

Divisions in terms of distance travelled to work reflect this pattern, with females consistently reporting travelling shorter distances on average than their male counterparts in Nottingham. In 2006 males in both managerial and professional occupations were likely to undertake longer distance journeys to work (22.8 and 27.7km) than their female managerial and professional counterparts (who commuted 13.8 and 23.7km on average).⁶⁷ The deviations from the mean distances are also of interest as they help to tell the story of increasing complexity in the commute. Some couples experience long distance journeys on a daily basis of well over 50km, while others simply walk to their place of work. Here not only gendered variations, but also variations between individual households, and the variability of the daily commute, create a complex picture of daily mobility. Variations in the commute are also reflected in the numbers of females who live and work in the same Local Authority District (LAD) in the LFS (2008). Among full-time females 52.8% of managers work and live in the same locale, compared with 47.1% of males. Differences are less notable among professionals, although women remain likely to work closer to their home

⁶⁷ Variations in distance comparing male and female professionals are statistically insignificant (F = 2.027, Sig. 0.157) as a product of the high deviation from the mean – this represents the high proportion of outliers who report either very short or very long commutes.

(46.9% of females compared to 43.9% of males).⁶⁸ This is not as high as the 66.8% of women who report living and working in the same LAD who are employed in the derived 'all other occupations' group. But these figures are insightful as they are indicative of gendered divisions in the commute. Moreover, they are reinforced by figures for all workers from the Census SL-HSAR (2001). Here 47.1% and 46.5% of female managers and professionals reported living and working in the same LAD, compared with 36.9% and 36.5% of male managers and professionals. Also important is that among women spatial constraint is reported more among managers. This is a concern because such occupations are particularly demanding and often involve some degree of presenteeism.

The qualitative data collected in Nottingham is indicative of the increasing complexity of the commute as part of a multi-activity journey. For dual career households combining work with these household related tasks will pose a significant challenge. While some partners split these responsibilities, some do not. This often leaves females with the majority of these tasks. One HRM commented:

"People have got other responsibilities outside of work and are expected to work flexibly and sometimes long hours ... if people have got caring responsibilities, they've got to go and pick up kids from school, or other things, they need the flexibility that having a car enables them to have." (HRM, Female, aged 47, County Authority)

This has implications for females as they are more constrained in relation to the location of their workplace — as per the sample commutes from the case study — as they tend to work closer to their place of residence, and more flexibly to accommodate the demands of the household.

8.3 Nodal Living and the Commuting-Migration Trade-off

The pursuit of dual careers, alongside strong preferences for semi-rural residential location in central England (such as near to a motorway hub or train station) providing access to several labour markets, has given rise to the

⁶⁸ Differences in the numbers of men and women who live and work in the same LAD are statistically significant for managers (Sig. of 0.000) and professionals (Sig. 0.033).

development of nodal living (see Doyle and Nathan, 2001, 9; Kloosterman and Musterd, 2001, 625; Green et al, 1999, 51; Green, 1997). This has been noted among both childless households, as well as those with dependent children, with both partners having access to a car (Green, 1997; Hardill *et al*, 1997). This section focuses on this trend, as discussed in Chapter 4, and that of the use of the commute as a substitute for permanent residential migration.

Traditionally household relocation would have been driven by the primary earner's employment, usually the male. The secondary earner, usually female, would simply have followed their partner — as the trailing spouse — to a new home in a new location (Savage, 1988, 555; McDowell, 2004, 151). Changes have occurred as females increasingly display a deeper commitment to the labour market throughout their careers. Migration may now take place as a result of women moving between job or workplace locations, as well as males. However, increasingly it is likely to reflect a compromise between the locations of partners paid work. Compromise over housing location usually leads households to reside in nodal locations, close to transport nodes. This provides access to a larger labour market, often somewhere in the middle of partners' workplace locations (Green, 1997). In the case study sample 11.9% of respondents reported that their households' location decisions had been made as a compromise between partners' respective workplace locations. However, this resulted in lengthier commutes as reflected in the proportions of managerial and professional workers, especially males, travelling inter-regionally for work. Using the 2008 LFS, it is found that only 7.0% of individuals report usually travelling inter-regionally to their place of work. However explored by gender, smaller proportions of females (5.1%) report working outside their home region than their male counterparts (8.8%). So, it remains that only a small although significant number of individuals undertake such lengthy commutes on a daily basis. This allows them access to a much wider geographical labour market (Green, 1997; Doyle and Nathan, 2001, 11), and may be used as a substitute to migration. Some councils may actually market locations in terms of their nodal position. North Staffordshire, for example, promotes its nodal location, offering good transport infrastructure, and affording access to labour markets in the West Midlands and Greater Manchester (Wheatley et al, 2008a, 229-30).

In the 2006 study almost 12 per cent of the 81 households who participated in the survey viewed their current residence as a compromise between their two workplace locations. Examples of this form of living arrangement are shown in Figure 8.1. The figure shows the daily movements for work (using arrows) carried out by six couples in 2006. Two specific examples are given of nodal living among the Nottingham sample, households one and two.



Figure 8.1: Commuting trends and examples of nodal living.

The households highlighted in Figure 8.1 all live in close proximity to a major transport hub — the M1 — as well as convenient public transport networks from Sheffield to Nottingham and York, and from Loughborough to Nottingham. Interestingly, household one, Chris and Amber, who are a professional couple employed as a solicitor and in higher education respectively, both make use of public transport in their journeys to work. Chris travels from Sheffield to York

on the train while Amber, although undertaking a shorter commute, performs a multi-part journey to Nottingham, driving to the railway station then getting the tram to work once off the train. However, performing this sort of multi-part journey on a regular basis may increase levels of stress (Williams and Hill, 2007; Wener et al, 2003; Koslowsky et al, 1995) and requires substantial inputs of time and effort from the employee.

Interestingly, Figure 8.1 also reflects the enduring link between gender and proximity between home and work. The female partners in households two and three undertake substantially shorter commutes than their male partners. Household two, Terry — a professional employed in higher education — and Vanessa — a manager employed by County Authority — provide an example of this, as parents of two young children, aged six and seven. Vanessa is limited in her movements, as she must remain flexible in order to fulfil her household and caring responsibilities. Terry undertakes few of the tasks of social reproduction.

In addition, examples are given of households who have chosen to live some distance from their workplace in order to retain a preferred living environment (households four and five). Paul and Helen (household four) both work in Nottingham and live in rural Derbyshire. Although they work in the same city they travel to work in separate cars as this may give them flexibility if they require their car for work, or to perform household tasks. In summary, in 2006 females in the surveyed dual career households were able to maintain a deeper commitment to the labour market than those surveyed in the previous study of Nottingham in the 1990s (Hardill and Watson, 2004). But they still occupy the secondary career and lack the spatial mobility of their male partners.

Use of the commute as an alternative to permanent migration is also evident from the case study sample. A significant proportion of the survey respondents (35.8%) report using the commute in this manner. This compounds the arguments and findings of others on this phenomenon (Green, 1995; Green and Canny, 2003; Hardill et al, 2006; and Oswald and Benito, 2000, 18). The majority of these workers (44.8%) reported that preference for their current living environment was the reason for using the commute in this way. Reasons

for this decision include close proximity to schools, not wanting to uproot children during their younger years, social bonds and networks, and preferences for the aesthetics or the postcode of their current address. The reasons for this choice may further relate to the increased insecurity of contemporary employment (Daniels 1999), coupled with the potential disruption and stress faced by entering local and regional housing markets. The use of the commute as a substitute for permanent migration in Nottingham, highlights that significant numbers of workers, particularly those in dual-career households, are constrained to commute longer than would otherwise be necessary (Cameron and Muellbauer, 1998, and Rouwendal and Nijkamp, 2004). This offers an indication of the growing complexity of 'managing' the work-home interface.

One of the key factors in determining this trade-off which was highlighted in Nottingham was respondents wanting to avoid uprooting the family, allowing the family home to remain in one location. The family home may be located in a more prosperous location, or in the countryside, these being preferred to an urban living environment. This is especially the case for those with children who will often wish to raise their offspring in a semi-rural location, although it should be noted that school catchment areas play a significant role in the migration decisions of some parents. Consequently, the distance between home and work is likely to be positively correlated with more highly skilled or senior jobs:

"As you get better off, your immediate instinct is to move your family out, away from the poverty and the crime, and the drugs, so actually I think if anything it's about moving out." (HRM, Female, aged 40, Central Government)

However, it should be acknowledged that not all of the survey respondents considered the commute to be a positive alternative to migration. Instead some viewed potential lengthy commutes as stressful and inconvenient, and actively used residential migration to off-set the need for a lengthy commute. This may be reflected, in some cases, by the fairly short periods of time respondents reported living at their current address, 4.5 years on average, in the case study sample. For example:

"When I relocated for [my current employment] I specifically bought a house that I could walk to work from." (Managerial Survey Respondent, Female, aged 31, County Authority)

Nevertheless, the highest proportions of workers moving long distances are found in highly skilled occupations. Professionals in particular are likely to have moved greater distances, as 25.3% of this occupation group moved 50km or more in their previous change of residence (Census SL-HSAR). Referring back to previous discussion distance moved is likely to relate to differences in the relative labour markets of professionals compared with other workers (Lindsay, 2003, 141).

Within the Nottingham sample a number of examples were found which revealed a range of factors influence decision-making among households in relation to migration (see Box 8.2). These include the precedence of the male partner's career in household decisions to change residential location, as well as the differences of the relative sizes of labour markets of managers, often local, and professionals, which may require inter-regional or even international movements.

Dennis and Gwen

Dennis, a professional employed by an optical retailer, and Gwen relocated from Devon to Nottingham. This is an example of a long distance move made for work. The decision to move in this household was made to further Dennis's career so that Dennis, aged 40, could join his current employer, while Gwen, aged 41, was temporarily working part-time.

Jenny and Terry

Terry, a 47 year old professional employee in higher education, reported previous employment in Greece and Saudi Arabia. In this childless couple Jenny, aged 44 and also in higher education, has followed Terry's movements for work since they became a couple. This example also offers an insight into the complex nature of the geographical movements made by some households for paid work, and of the international nature of labour markets for professional employees.

Garry and Margaret

In common with a number of other managers sampled in the case study, Garry aged 36, and Margaret aged 29, who are both managers employed by a county authority previous addresses. In this case relocation was not required for work. Moves may have thus been made for a preferred home and locality.

The distance between work and home for females remains smaller than for males as Hanson and Pratt (1995) also noted in the US. Females are likely to be under greater constraint than their male counterparts as they often, but not always, perform the majority of household and caring responsibilities, including child care, cleaning, shopping and cooking (Fagan, 2001, 257). This is especially the case for those with dependent children, resulting in them on average feeling they must work closer to their permanent residence to allow them to complete their household tasks. The additional pressures of paid work make for particularly complex and demanding routines for females, often resulting in significant temporal and spatial constraint. This is something that feminist theorists suggest impacts the working lives of women as discussed in Chapter 2. The household is central in their decision-making and thus has a major constraining effect.

8.4 Modelling Gendered Norms in Mobility

Modelling mobility characteristics is performed in two stages, first using exploratory cluster analysis. This is followed by a logistic regression model, informed by the results of the cluster modelling. Cluster analysis is applied here, as in Chapter 6, as an exploratory tool. Two-Step cluster analysis is used to model mobility characteristics among highly skilled males and females. This technique groups individuals based on their shared characteristics, allowing relationships to be observed that may have otherwise been difficult to observe. The first cluster analysis uses data from the fourth quarter LFS 2008. The Two-Step cluster analysis produces four groups of individuals based on their mobility characteristics. These are generated by observing variables related to mobility at work including: length of time with current employer, whether the respondent lives and works in the same LAD, usual home to work travel time, method of transport to work, and total usual hours of work. The model also includes occupation details (occupation group, public or private sector), household variables (length of time at address, married/cohabiting, dependent children), and personal characteristics (gender, age). The results are shown in Table 8.1 and 8.2 (full results in Appendix 11).

	Cluster (mean values)				
	1	2	3	4	Combined
Length of time at address	4.1	4.1	4.6	4.5	4.4
Length of time w/employer	5.4	5.6	6.0	5.9	5.8
Usual home to work travel time	30.2	35.6	30.5	26.1	31.8
Total usual hours in main job	41.8	41.6	45.5	38.9	41.9
No. dep. children under 19	0.2	0.9	1.0	0.8	0.8
Age	39.4	42.0	45.2	43.7	42.9
n	2471	1963	3210	3412	11056

Table 8.1: Two step cluster analysis continuous variables (LFS, 2008)

	Cluster (percentage)					
	1	2	3	4	Combined	
Live and work in same LAD						
Yes	45.5	40.5	35.6	45.0	41.6	
Usual method of transport to w	ork					
Car, Van, Motorbike	71.6	2.4	100.0	100.0	76.3	
Public Transport	17.9	60.0	0.0	0.0	14.6	
Manual (Bicycle, Walk)	10.5	37.6	0.0	0.0	9.0	
Married/Cohabiting						
Yes	0.0	98.4	100.0	99.8	77.3	
No	100.0	1.6	0.0	0.2	22.7	
Major Occupation Group						
Managers and senior officials	49.5	50.8	68.9	40.8	52.7	
Public or Private sector (reported)						
Private	67.9	69.0	100.0	37.2	68.0	
Gender						
Male	49.5	63.1	100.0	24.2	58.8	
n	2471	1963	3210	3412	11056	

Table 8.2: Two step cluster analysis categorical variables (LFS, 2008)

The cluster analysis suggests significant variations between genders. For example significant differences are found between genders in clusters three and four. Male managers in cluster three, who are married and have dependent children, work the longest hours (45.5 hours), and undertake the second longest commutes of all the clusters (30.5 minutes), while 64.4% of these individuals travel outside their LAD of residence to their place of work. In contrast, in cluster four, the individuals are predominantly female professionals who work the shortest hours of all the clusters (38.9 hours) and have shorter commutes (26.1 minutes). Almost half of these workers (45.0%) live and work in the same LAD. Individuals in cluster two, who are predominantly male, have the longest commutes (35.6 minutes) and are the greatest users of public transport. Those in cluster one are unmarried, least likely to have dependent children, and are equally likely to be male or female, managers or professionals. The results provide an indication of the gendered norms already discussed in this chapter. In

some cases males with children take on the 'breadwinner' role, undertaking extensive working hours and journeys to work, travelling further in time and distance. Meanwhile females with similar household characteristics remain closer to their home and work shorter hours, likely reflecting their greater household responsibilities. This is consistent with the findings of Harris et al's (2007) UK study, and Hanson and Pratt's (1995) study of the US.

Repeating the Two-Step cluster analysis for the primary data, the characteristics of the dual career households working in Nottingham are explored (results shown in Appendix 12). Fairly consistent results are found with that of the LFS, but with the primary data instead split into three clusters.⁶⁹ Cluster one contains the majority of the female respondents, mostly employed in public sector managerial roles. They report working shorter hours on average (35.2 hours), and undertaking shorter commutes in both time (28.4 minutes) and significantly distance (8.2 km). In stark contrast is cluster two. Here male public sector professionals work the longest hours (43.5 hours) and undertake the longest commutes in both time (49.9 minutes) and distance (33.6 km). These workers are also the most likely to use public transport for their journey to work (31.9%), likely reflecting the mobile nature of these occupations. Finally, in cluster three are private sector workers, who also report long hours (42.7 hours), but with shorter commutes than those in cluster two. The second cluster analysis confirms that gendered norms are present among highly skilled workers. Females, on average, travel shorter distances to their place of work and in many cases work shorter hours. This is an indication of their greater contribution within the home, in contrast to their male counterparts who remain highly committed to their occupations, work long hours, and undertake extensive commutes. This is again indicative of the compromise made by many females, and indeed of the constraining effect of the household as observed by feminist theory.

The cluster analysis provides a suitable basis for modelling mobility. This is further examined using a binary logistic regression model. The model explores

⁶⁹ The reduction in clusters from four in the LFS to three in the primary data may reflect the smaller sample size, limiting the number of significant clusters which can be generated.

the derived dichotomous variable, "lives and works in the same LAD", where yes = 1, no = 0. The independent variables comprise work (*W*), commuting (*C*), household (*H*) and individual (*I*) characteristics of respondents from the UK LFS 2008.⁷⁰

$$LAD = f(W, C, H)$$

$$[8.1]$$

Where,

$$W = f(H_W, H_S, F_T, L_E, O, I_S)$$

$$[8.2]$$

$$C = f(C_T, C_M)$$

$$[8.3]$$

$$H = f(L_A, M, D_C)$$
[8.4]

$$I = f(G, A)$$

$$[8.5]$$

Work (*W*) variables include total usual hours (H_W), preferences for shorter hours (H_S), whether full-time (F_T), length of time with employer (L_E), major occupation group (*O*), and industry sector (I_S). The commute (*C*) includes commuting time (C_T) and method of transport to work (C_M), household characteristics (*H*) include length of time at address (L_A), whether married/cohabiting (*M*), and number of dependent children (D_C). Individual characteristics include gender (*G*), and age (A). The parameter estimates (B) are presented in Table 8.3.⁷¹

The positive B (0.224) reflects that women are more likely to live and work within the same LAD, confirming the findings of the case study and cluster analysis. This is an important result as it provides statistical robustness to the suggestion that women's spatial mobility is limited by the household. Interestingly, the model suggests that professionals are more likely than managers to work outside the area in which they live, adding robustness to the lengthier commutes found among professionals in earlier analysis. This is reflected in the negative B (-0.096) which suggests that for professionals the odds of living and working in the same LAD is lower than for managers.

⁷⁰ Full results are included in Appendix 13. The model is confirmed as statistically significant (Sig. 0.000), with R^2 equivalents of 32.1 (Cox and Snell R^2) and 42.9 (Nagelkerke R^2).

⁷¹ For statistical robustness the model was also run at regional level using data for only the East Midlands. This generated comparable results to those reported here, but with a substantially reduced sample size of 2,514 which affected statistical significance.

Working 9 to 5? Complex patterns of Time Allocation among Managers and Professionals in Dual Career Households

Parameter Estimates	В	Exp(B)	S.E.	Wald	p-value
Constant	1.588	4.896	0.187	72.152	0.000
Total usual hours of work	-0.008	0.992	0.002	19.588	0.000
Prefer shorter hours than at present	-0.055	0.946	0.029	3.641	0.056
Full-time	0.137	1.146	0.052	6.934	0.008
Length of time with employer	0.039	1.040	0.009	20.649	0.000
Major Occupation Group: Reference is	Managers	s and senior	r officials	5	
Professionals	-0.096	0.909	0.051	3.485	0.062
Associate Professional and Technical	-0.002	0.998	0.050	0.001	0.971
All other occupations	0.403	1.496	0.041	97.873	0.000
Industry Sector: Reference is Agricultur	e and Fish	hing			
Energy and Water	-0.126	0.882	0.192	0.431	0.512
Manufacturing	-0.133	0.876	0.157	0.714	0.398
Construction	0.071	1.074	0.163	0.191	0.662
Distribution, Hotels and Restaurants	0.030	1.031	0.156	0.037	0.847
Transport and Communication	-0.210	0.810	0.160	1.720	0.190
Banking, Finance and Insurance	-0.182	0.833	0.158	1.334	0.248
Public Admin., Education and Health	0.078	1.082	0.156	0.253	0.615
Other Services	-0.147	0.863	0.164	0.801	0.371
Usual home to work travel time	-0.080	0.923	0.001	4658.341	0.000
Usual Method of travel to Work: Referen	nce is Car	, Motorbik	e, Taxi		
Public Transport (Bus, Train, Tube)	0.727	2.069	0.047	243.690	0.000
Manual Transport (Bike, Walk)	1.619	5.050	0.055	877.209	0.000
Length of time at Address	0.016	1.016	0.009	3.095	0.079
Married/cohabiting	-0.080	0.923	0.034	5.644	0.018
No. of dependent children under 19	0.043	1.044	0.016	6.911	0.009
Gender (Female)	0.224	1.251	0.032	50.167	0.000
Age: Reference is 55+					
16-24	-0.003	0.997	0.063	0.002	0.963
25-34	-0.112	0.894	0.051	4.789	0.029
35-44	-0.165	0.848	0.047	12.130	0.000
45-54	-0.097	0.907	0.043	5.061	0.024

Table 8.3: Binary logistic regression: live and work in same LAD (LFS, 2008)

Time spent commuting is likely to be longer for those who work outside of their LAD as we would expect. Those working outside of their LAD are also more likely to use their car for the journey to work, as public transport (0.727) and manual transport (1.619) are relatively more likely to be found among those who live and work in the same LAD. Respondents in the middle age bracket (35-44) are most likely to travel outside of their LAD for work. Those that are married are less likely to live and work in the same LAD (-0.080), but those with dependent children are more likely to (0.043). This may well represent the constraining effect that caring for children has on mobility, especially for females. Hours of work are likely to be longer for those travelling outside of their LAD. This reflects the greater proportions of professionals working outside of their local authority, and is a key concern given the impact of long hours alongside their substantial travel. Preferences for reductions in hours are found

more among those who work outside of their area of residence. The B (-0.055) reflects that the odds of an individual reporting preferences for shorter hours is less for those that live and work in the same LAD.

In summary, the model suggests that household factors are central to whether workers travel outside of their LAD for work. Household requirements, and most importantly gender, are the key variables in distinguishing whether individuals live and work in the same local authority district. This is consistent with the findings of Harris et al (2007). Females are likely to remain in workplaces closer to their home due to their household responsibilities as they are more closely tied to their homes (Lever, 1987, 264; Hanson and Pratt, 1995). This confirms the earlier analysis giving robustness to the suggestion that while equality is increasingly found between genders in paid employment, inequity remains within the home. This is important as it is indicative of the constraint females' face, as outlined in Chapters 2 and 3. The impact this has on their mobility, and in turn career, remains a concern even among the highly skilled.

8.5 Conclusion

This chapter has explored patterns of commuting and mobility among managers and professionals in dual career households, with specific focus on issues of gender. The commute has become longer in terms of time and distance, and increasingly diffuse. This is especially evident among dual career households. Managers, on average, report shorter commutes, perhaps as a result of their skills being relatively transferable between roles and workplaces. Conversely, professionals report longer and more diffuse commutes, reflecting the specialised nature of these occupations (Lindsay, 2003, 141). However, of greatest interest to this thesis is that it is the temporality of the commute which concerns workers. Time, not distance, is of greatest concern to individuals and households in managing their complex commuting patterns.

Evidence has been found to support the claim that more households are compromising when making migration decisions and nodal living. However this increases the overall time spent commuting for these households (Doyle and Nathan, 2001; Kloosterman and Musterd, 2001; Green et al, 1999; Green, 1997). In addition evidence has been found of the trend reported by others (Green, 1995; Hardill et al, 2006, 180; Oswald and Benito, 2000) of some households using the commute as an alternative to permanent residential migration. Some workers do still move frequently and those in professional occupations are those who report moving the greatest distances. Household decisions over commuting and migration must be considered increasingly complex and pertinent issues.

Females, although increasingly exhibiting male patterns of work and mobility, remain constrained by the uneven division of labour within the household. Male managers and professionals are more mobile in their working routines than their female counterparts in terms of inter-regional movements for work, and movements between LADs. Males often still take the traditional 'bread-winner' role of full-time worker, experience substantial work travel, but make a reduced contribution to household tasks. Females are increasingly employed in full-time occupations, but often perform the majority of the tasks of social reproduction such as cleaning and shopping (McDowell et al, 2005). These tasks, including the 'school run', may be split between partners, but they may not. This results in a real 'time-squeeze' for partners in dual career households, especially females employed full-time, and particularly if dependent children are present (Brown and Booth, 2002; Schor, 1993; Southerton, 2003). Females are constrained by a 'double-shift' of paid work for an employer and unpaid work within the home.

Combining dual schedules is problematic, particularly with enduring long hours cultures, and increasing commutes. However, the continuing burden of the household undoubtedly affects female employment, even among highly skilled full-time workers, resulting in them on average working closer to their permanent residence. Consequently highly skilled working females, and in particular those with children, may be under the greatest constraint. It is clear then that a female sacrifice remains, not in terms of hours worked, but instead in their spatial mobility. The majority of responsibility within the household still lies with females (McDowell et al, 2005), resulting in a 'double-day' (Sirianni and Negrey, 2000, 62). Considering the current working environment, which increasingly requires and rewards flexibility and mobility, this could have significant career implications for these female workers.

9

Conclusions

9.1 Introduction

This PhD is a theoretically informed empirical investigation of contemporary patterns of time allocation, including work, care and commuting among managers and professionals in dual career households. It has drawn upon strands of economic theory, beginning with mainstream rational choice theory, which was critically explored using heterodox perspectives including institutionalist and feminist economy theory. The review of literature was used to develop a theoretical framework for this thesis. Mainstream theory is limited, thus heterodox theory which considers the moulding effects of norms, power and constraint, gender, and the household is applied to explore time allocation.

This chapter highlights the major findings of this PhD. After this brief introduction focus is given to the key findings and contributions to knowledge made in this thesis. These findings fulfil the key objective of this PhD, in exploring the time allocation of managers and professionals in dual career households. Specific reference is made to the findings of this thesis which address each of the research questions:

- Which theoretical approach(es) mainstream, institutional or feminist

 offer the most suitable explanation of individual and household choices and constraints in the allocation of time?
- 2. Do distinctions need to be made within the Professional-Managerial Class (PMC), and are these distinctions occupational and/or gender specific?
- 3. What challenges, in a policy context, do dual career households face in managing the combined demands of work-time, caring and commuting?

In order to address the above research questions this thesis used a mixed methods approach. Secondary data, including the fourth quarter 1995 and 2008 LFS, and

the 2001 Census SL-HSAR, was combined with the collection of primary data, in the form of a case study. The case study collected primary data in Greater Nottingham during 2006, through in-depth semi-structured interviews with Human Resource Managers (HRMs), and a survey of managers and professionals in dual career households. The opportunity was also taken to compare the 2006 data with earlier data collected as part of the 'location and mobility decisions of dual career households' project funded by the Leverhulme Trust (grant F/740). The choice of data allowed the empirical analyses to focus on a number of spatial scales, beginning with national and regional context, using the secondary data, before moving to the local level, specifically organisations and the household, using the case study data.

The four theoretically informed empirical contributions to knowledge made in this PhD are highlighted in the following section. Finally, in the last section brief reflection is made of the key successes of this PhD, and potential opportunities for further research.

9.2 Key Findings and Contributions to Knowledge

This section summarises the key findings made. The focus is on answering the research questions, using the findings from both the review of academic and policy materials and empirical analyses.

1. Which theoretical approach(es) — mainstream, institutional or feminist — offer the most suitable explanation of individual and household choices and constraints in the allocation of time?

In answering the first research question a comprehensive review of academic and policy literature was conducted. The alternative theoretical approaches were explored in Chapter 2, while elements of these theories were returned to in chapter 4 (in relation to time allocation and the journey to work). The exploration of theory informed the empirical analyses conducted in Chapters 6 to 8. This thesis has contributed by exploring the suitability of the alternative theoretical perspectives in explaining contemporary time allocation. The review of literature began with a critical investigation of the mainstream rational choice theory of labour supply. This revealed a number of limitations in mainstream approaches
due to its assumptions, focus on choice, and location of analysis at the level of the individual. Extensions to mainstream theory, including Becker's (1976) theory of the allocation of time, question the assumptions in mainstream theory. However, Becker's approach is itself limited by its focus on the individual, and its disregard for the process of preference formation on the decisions made over time allocation for work and/or commuting. Becker, along with other mainstream approaches, is also somewhat gender 'blind'.

A mainstream approach which is gender sensitive is provided by Hakim (2000). Her view on the preference determination of women, suggests women's 'individual' preferences can be categorised in reference to their preferences for work. They are either: (1) work based; (2) home-based; or (3) somewhere in between. However, Hakim's approach is founded on the assumptions of mainstream theory. It assumes women make free choices reflecting their preferences. This approach lacks acknowledgement of constraint and inequality.

Institutional economic theory provides a more appropriate perspective by highlighting the influence of social institutions and social culture in preference formation (Hodgson, 1988, 68-71). This results in the development of customs, habits and norms in human behaviour (Dugger, 1979, 902). While the concept of institutions and norms influencing preference formation is key to developing an adequate understanding of time allocation among dual career households, these perspectives remain relatively 'gender blind'. They also lack acknowledgement of the household division of labour, and care.

These factors are considered in feminist economic theory. Feminist theorists critique mainstream approaches for their focus on *'homo economicus'*, as they offer little acknowledgment of the different challenges faced by men and women in allocating time (Nelson, 1995). Feminist theory highlights the limitations of focusing solely on the individual in analysing decision-making, as the household has a significant influence on the preferences and behaviours of individuals, including their allocation of time. Females face the greatest constraints as a result of enduring gendered norms within the home.

Men and women in dual career households often perform two jobs — paid employment and unpaid household work — resulting in them facing particular complexities in allocating time. This, however, is particularly acute among 'career' women. Alongside demanding paid employment they will often undertake greater household responsibilities than their male counterparts, including caring (McDowell et al, 2005). Some households employ marketised care as a solution, but many do not. Women's decision-making is therefore heavily influenced by their household.

Mainstream approaches to time allocation therefore remain unsatisfactory. In contrast feminist and institutionalist approaches contribute to our understanding of the evolving constraints households face. The approaches are complementary. Institutional theory reflects on individual and household decision-making in regards to the influencing effects of habits, customs, and norms, such as normalised hours of work. Meanwhile feminist theory considers the role of gender and the household and accounts centrally for constraint. A gendersensitive heterodox view accounting for habits and norms, constraints, and conducted at the level of household, is perhaps most suitable for explaining complex patterns of time allocation among households, including dual career households. This approach was employed in this thesis. The findings of the empirical analyses validated this view. Mainstream approaches are severely limited by their reliance on 'homo-economicus'. Individual and household preference formation is heavily influenced by social and organisation norms, especially in terms of hours worked (Chapter 6). Key distinctions remain between genders (Chapter 8), something that 'gender blind' mainstream approaches do not acknowledge. Meanwhile the household must be acknowledged as a key unit of analysis, and a major influence on the time allocation of partners in dual career households.

2. Do distinctions need to be made within the Professional-Managerial Class (PMC), and are these distinctions occupational and/or gender specific?

This question was answered using a range of evidence and draws on the findings of Chapters 6, 7 and 8. The secondary data analysis provided a number of important findings with a national and regional focus, at the level of the individual (using the LFS), and the household (Census SL-HSAR). The case study data shifted the spatial focus to the local level — organisations and households — providing findings reflecting on the lived experiences of managers and professionals in dual career households in Greater Nottingham.

Working Practices and Work-time

Paid work is increasingly characterised by flexibility. Flexible working arrangements including flexi-time, part-time, and home-based teleworking are now available at many organisations. This was evident in the case study of Nottingham (Table 7.4). However, flexibility may be considered to have a double meaning. While it provides flexibility, often this will be driven by 'business need' leaving many workers unable to be flexible as per their preferences.

Mobile technologies create further flexibility in paid work, but also blur the boundary between home and work, resulting in some employees facing difficulties in dividing their time between activities (Hardill et al, 1997; Hill et al, 1996). Increases in the flexibility and mobility of work, and changes in the nature of many occupations result in difficulties in measuring when, how hard, and how long individuals are working. This forms a particular problem as some employers equate long hours with effort and commitment to the firm.

Both secondary data and the findings from the case study suggest working hours remain high for managers and professionals even after almost a decade of the *Working Time Regulations* (WTR) and the work-life balance agenda (BERR, 2008). Hours are particularly long for private sector managers and public sector professionals (LFS, 2008; case study data). Males with dependent children are likely to work the longest hours, perhaps driven by financial compunction, especially where they generate the main household income. This has important implications for workers, especially as Green (2001, 73) has suggested long hours are increasingly accompanied by greater levels of 'discretionary' effort and 'constrained' effort in the workplace. Constrained effort may be a driver of increased levels of work-related stress among employees.

Professionals, subject to long hours and the greatest levels of unpaid overtime, report high levels of dissatisfaction with hours (LFS, 2008; case study data). However, in contrast private sector managers are relatively less dissatisfied even though they work the longest hours of all broad occupation groups. This reflects the differences between the roles of managers and professionals. They are representatives of the firm, assimilated into cultures of long hours, and equate long hours with effort (White et al, 2003). For these managers long hours are viewed simply as part of the job — an occupational norm — and are necessary, not least because managers are responsible for policing the activities of others. Their role requires their presence at the workplace to ensure the organisations interests are in safe hands. Those undertaking management roles may well be self-selecting, because they are attracted by the governing nature of these occupations. Professionals, in contrast, are used to receiving a level of autonomy over their work and are likely to be more adverse to the imposition of long hours.

It has been argued by some that managers and professionals represent a single group: the Professional-Managerial Class (Ehrenreich and Ehrenreich, 1979). However, the empirical evidence in this thesis suggests they are distinct. While they display some common characteristics, including their mobility and marriage rates (Goldthorpe, 1995), they differ in their commuting and working patterns, and significantly in their preferences for reductions in hours of work.

Managers represent the organisation, often termed "organization men" (Baran and Sweezy, 1966, 41). Professionals, in contrast, are characterised by a high level of qualifications, autonomy, and greater specialisation. Managers remain more dependent on organisational career strategies compared to their professional counterparts (Savage, 1988; Savage et al, 1992). Professionals are increasingly characterised by a more specialised labour market, resulting in, on average, longer commutes (Lindsay, 2003, 141). Managers (bureaucrats) represent the impersonalising, routinising, world of conformity, in contrast to the creative dynamic role of 'knowledge' which arises from professional autonomy (Savage et al, 1992). The grouping of managers and professionals in analyses may therefore result in important nuances in routines of work and travel being missed. On that basis the first finding is as follows:

(1) Managers and professionals have often been grouped. However, as occupation groups, they are distinct. Combining managers and professionals ignores key distinctions and nuances in their patterns of work and travel, stated preferences for work, and in the nature of their occupation roles.

Commuting Practices

The secondary data analysis in Chapter 6 highlighted the lengthy commutes of managers, and especially professionals, in both national and regional context. These workers report the longest commutes of all occupation groups. The commute may therefore have a significant compounding effect on time-use when the long hours of managers and professionals are considered. Those reporting the longest commutes (in both time and distance) are private sector professionals (LFS, 2008 and Census SL-HSAR). Women report shorter commutes than their male counterparts in all broad managerial and professional occupation groups (LFS, 2008). The longer commutes among professionals may reflect the increasingly specialised nature of these occupations which results in these workers' labour markets being much broader than for managers: inter-regional and perhaps even international (Lindsay, 2003, 141). In contrast, managers in some industries experience fewer moves between organisations, on average, as they adopt organisational career strategies. This may be reflected in the shorter commutes among private sector managers. Notably, it is commuting time not necessarily distance that concerns commuters. Their tolerances are time focused.

Car dependency remains high in the UK, especially among managers (LFS, 2008). Car dependency is greatest in the provinces, including the East Midlands. This is a particular issue given current transport policy targets reductions in car use. The potential impacts (both positive and negative) of this policy may thus be most markedly felt in the East Midlands and other comparable regions.

The analysis of secondary and primary data sources, especially in Chapter 8, presented evidence of nodal living among dual career households. This refers to households locating close to transport hubs as a compromise between partners' workplace locations and to provide access to several labour markets. However, this compromise is often made at the cost of lengthy journeys, especially for

men, impacting on the time allocation of these households. Evidence was also provided — from the case study — to support the trend whereby dual career households are substituting the commute for household migration. Statistical evidence from the LFS — which revealed high proportions of workers, especially professionals, are working outside of their LADs — supported the existence of this trend within the UK. This was also reinforced by the numbers of male workers displaying inter-regional commuting flows (LFS, 2008). This use of the commute is often driven by a resistance to uproot families, but may also reflect the desire for certain living environments. This evidence represents the second finding which is as follows:

(2) Evidence supports the trend of nodal living and of dual career households substituting the commute for household migration. However, these compromises lengthen the total time spent commuting in these households. This creates further complexities for these households as they attempt to manage two routines of paid work alongside the demands of the home.

Gender Inequity in Work and Travel

Gendered divisions in patterns of work, including working hours, and commuting times, are converging for managers and professionals. Women increasingly show deeper commitment to the labour market (McDowell, 2004, 148). Greater proportions of women are remaining in full-time employment for the duration of their careers. Hours of full-time females are increasingly comparable to males, especially in professional occupations (Chapter 6). The increased availability of flexible working arrangements, driven in part by the work-life balance agenda, is helping men and women to manage complex dual schedules of work and home. Most organisations, especially in the public sector, offer a variety of flexible working arrangements. Interestingly, greater proportions of women reported the use of flexible working (Chapter 7). This may be a direct reflection of the relatively greater household responsibilities that females face. However, in many workplaces there remains continuing links between perceived commitment and long hours associated with 'time-devouring male employment' cultures (Sirianni and Negrey, 2000). These links between hours and commitment may effectively limit opportunities for those who work flexibly, often women.

While equality in hours becomes increasingly characteristic among male and female managers and professionals in many workplaces, gender inequity within the home persists. Tasks of social reproduction, including caring, remain unevenly distributed (Census SL-HSAR; case study data). Females are therefore tasked with undertaking not only demanding paid employment, but unpaid work within the home — the double shift persists (Jones, 2003; McDowell et al, 2005). This results in a real 'time-squeeze' for females employed full-time, particularly if dependent children are present. Moreover, tasks such as the school run may be split between partners, but often are not.

Distances to work — measured using both Two-Step cluster analysis and a logistic regression model in Chapter 8 — remain, on average, shorter for females. This builds upon the findings of other research, including Harris et al's (2007) findings among part-time female workers, and is indicative of the constraints females face in contrast to their male counterparts. A female sacrifice remains. They are spatially entrapped as they combine paid employment with the responsibilities of the home. This may have significant career implications for females in a working environment where employers increasingly require and reward flexibility and mobility. This further poses a particular challenge for human resource managers to ensure the careers of females do not suffer as a result of household constraints. Time and gender constraints limit their levels of mobility and often impact on their working routines, requiring them to work flexibly. Policy is needed which does not simply reward long hours, but instead acknowledges the real benefits of increased flexibility in work. The third finding is thus as follows:

(3) Equality in hours of work is increasingly characteristic of highly skilled men and women. However, continuing inequity within the household burdens women with the majority of responsibilities, including caring. Women therefore work closer to their place of residence. A female sacrifice remains, not in hours worked, but in relation to their spatial mobility. This may have severe career implications in a working environment which increasingly requires and rewards flexibility and mobility.

3. What challenges, in a policy context, do dual career households face in managing the combined demands of work-time, caring and commuting?

This thesis has a number of key findings relating to the challenges partners in dual career households face in combining demanding paid work, with travel and home. These findings have significance to these households, and also more broadly to human resource and public policy. In answering this research question discussion includes material from the review of literature in Chapters 3 and 4, and evidence from the empirical results, especially Chapter 7.

Organisation and Public Policy Challenges facing Dual Career Households

Evidence was presented in Chapters 6 and 7 which revealed the long hours worked by managers and professionals. This is a particular concern given more than ten years have passed since the implementation of the *Working Time Regulations* in the UK. However, further significance must be attached to the long hours found among managers, especially in the private sector. These managers do not seem dissatisfied with their hours. This may reflect the assimilation of managers into the policies of their employers (see Chapters 6 and 7). This is a particular concern when it is considered that it is managers that have the power to enforce current UK work-time legislation. Considering the dissatisfaction with hours found among many workers, especially when their hours are long, it seems that the voluntary nature of working time legislation may need to be revisited in order to address work-time excess.

Increased availability of flexible working arrangements, driven by the work-life balance agenda (BERR, 2008; Clutterbuck, 2003), can offer benefits for many workers. New technologies are also impacting on the way work is conducted. The home is now a place of paid work as well as unpaid work. Home-based teleworking, although often implemented on an ad hoc basis, may provide significant benefits to the employee through increased flexibility. However, those working in the home face a number of difficulties including divisions of space and time for work, stress caused by isolation, and the possible encroachment of work into other household activities. Where formal home-working schemes are found, employers are tasked with carrying out health and safety assessments of working environments for employees. This, however, raises important issues in relation to defining the 'non-work' space of the employee and whether, and how far, employers should encroach into it. The working routines of one household member may impact greatly on the lives of others. Greater flexibility and increased control over time allocation may be possible for households when flexible arrangements are employed. However policy must acknowledge the impacts on all household members, and in particular the blurring of the spatial and temporal divisions between the home and work.

Current transport policy focuses on reducing congestion and pollution using tools including road charging, park and ride schemes, and workplace parking levies (WPLs) — including the planned scheme in Nottingham (Nottingham City Council, 2009). These policy apparatus offer potential benefits in terms of reductions in congestion in urban areas. However, some workers require their car to execute tasks for paid work, and for household responsibilities. Lack of car parking may therefore be particularly prohibitive for individuals, often women, performing the 'school run'. Policies must consider those with complicated dual schedules: work and home. Those combining schedules may otherwise be constrained by policy targeting reduced car usage, making complex multi-activity journeys all the more difficult and costly.

The use of the commute as an alternative to permanent residential migration has also been reported (Chapter 8). Using the commute in this manner results in households often locating close to transport nodes. This is likely to result in households owning two cars against the current policy background targeting reductions in the use of the car. Planning policy increasingly acknowledges the importance of nodal living to many households, and some local authorities market themselves as nodal locations as discussed in Chapter 8. Public transport does not provide an adequate solution to these issues. Current preferences are for semi-rural living, and workplaces located in out-of-town business parks, combined with 24/7 working practices. These are not well served by current public transport services. Public transport networks need to recognise the changes in everyday mobility in both 'work' and 'non-work' spheres.

Human Resource Policy Challenges facing Dual Career Households

The work-life balance agenda has been acknowledged by many organisations, as evident in the discussion with HRMs during the case study of Greater Nottingham (see Table 7.4). A significant element of this agenda promotes flexible working. Both male and female employees are able to benefit from the added flexibility offered by flexi-time, job share etc. It helps them to combine paid work with household tasks, including caring. However, in many cases flexibility is determined by 'business need'. It entails the employee being *flexible for the employer* and simply benefits organisations by offering longer opening hours, and making their organisation more attractive, improving recruitment and retention. Difficulties also exist in the successful use of these schemes, including scheduling of meetings and working to deadlines, as well as conflicts with workplace car parking.

Conflicting Organisation and Public Policy

Perhaps the most interesting and pertinent policy issue faced by partners in dual career households is the conflict, reported in the case study of Greater Nottingham, between organisation and public policies. The conflict was between organisation level flexible working arrangements, specifically flexi-time, and transport and car parking policy led by broader national and regional policy agendas targeting reductions in car use (Pooley et al, 2005). This limits the availability of car parking in a city within the East Midlands region, one of the most car dependent regions in the UK (LFS, 2008). The result is that for many workers the opportunity to work flexibly is restricted by the need to arrive at work early to secure a parking space.

Positive discrimination for those under the greatest constraint may offer an appropriate solution. Providing adequate parking for these individuals and giving them priority — or at least a better chance of obtaining parking on a regular basis — may reduce the likelihood of them being negatively impacted by current and future transport policy agendas. This requires HRMs to actively engage with their employees to establish those with the greatest need. Highlighting these individuals poses one of greatest challenges for HRMs. Leaving this responsibly to employers also represents a significant concern.

Organisation and public policy needs to be considered in a broader context, so that it fully takes into account the range of impacts and outcomes it will have, as well as how it will interact with other policy. This is required if conflicts such as that reported above are to be avoided in future. Policy must also consider the complexities of the household. Consideration needs to be given to gendered norms and uneven constraint within the household. Empirical evidence in Chapter 8 suggests significant divisions in household labour, and unevenness in the allocation of responsibilities between male and female partners. Policy must engage with this or otherwise risk exacerbating the level of constraint faced by females combining demanding paid employment with the home.

Evidently, managers, and especially professionals, are exhibiting increasingly complex working routines. They exhibit longer working hours than those in other broad occupation groups, and report the lengthiest commutes (in time and distance). Concurrently, the complexity of movements for paid work have also increased. Many highly skilled workers have to 'manage' the added constraint of caring, for dependent children and, in some cases, for the elderly or disabled (Census SL-HSAR, 2001; case study data). Caring responsibilities often fall on women and have significant impacts on their available time. These factors when combined, make time allocation among managers and professionals, especially women, particularly problematic. Time is clearly the pertinent issue as time scarcity must be considered a significant concern currently faced by many dual career households, and one that requires attention at policy level. Thus, the final contribution of this thesis is as follows:

(4) Time is increasingly scarce for dual career households. Evidence has been presented which is indicative of complex working routines among partners in dual career households, including long hours and diffuse commuting patterns. Many households also provide care, which requires considerable inputs of time. Women are often tasked with this responsibility. Given the range of evidence time scarcity must be considered a significant concern for dual career households, and one that has been exacerbated in the last decade in the UK.

9.3 Closing Comments

This PhD has used a mixed methods approach to explore time allocation among managers and professionals in dual career households. This analysis has generated a number of important empirical contributions to knowledge. While the approach used in this thesis is in no way unique in business and management research, it does differ from much research, especially in the discipline of economics, where the theoretical foundation of this thesis is located. This PhD has drawn upon different strands of economic theory. These theoretical perspectives were used to inform the empirical elements of this thesis, highlighting the importance of the process of preference formation, distinctions between genders, and the complex interactions found within the household. The analysis has drawn out findings relevant to both academic and policy audiences.

The methodologically pluralist approach used in this PhD combined quantitative analysis of secondary data sources, with a quantitative-qualitative case study, including analysis at different time reference points. The mixed methods allowed analysis of different spatial scales, highlighting trends at the national and regional level, which were then reinforced, and investigated in more depth at the level of the organisation and household. This successful use of triangulation provided this thesis with reliability and validity in the empirical findings, allowing a range of evidence to be presented for greater robustness.

In the context of continuing this research, there is a rationale for a follow-up study of Greater Nottingham, focusing on the household dynamics of the dual career households involved in the survey. In-depth follow-up interviews were used in the 'location and mobility decisions of dual career households' study. A survey of 130 dual career households was followed-up using interviews with 30 households. Notably, partners were interviewed separately (Hardill and Watson, 2004). Other research by Tietze and Musson (2002; 2005) used 25 in-depth interviews with home-based teleworkers and their families, conducted within the home. Both of these research projects generated rich primary data. Using these methods and exploring gendered norms, constraints, and inequality within households, and perhaps even interviewing couples together, would be an interesting direction for further research into dual career households.

References

- Adkins, L. (2000). Objects of innovation: post-occupational reflexivity and retraditionalisations of gender. In Ahmed et al (eds.), *Transformations: thinking through feminism*, London: Routledge, 259-72.
- Anas, A., Arnott, R., and Small, K. (1998). Urban spatial structure, *Journal of Economic Literature*, 36, 1426-1464.
- Anon (2005). DTI minister stands firm despite EU ruling on work-time opt-out. *Personnel Today*, May, 1.
- Arulappan, M. (2003). When it's Work and not Life...Work-Life Balance: A Critique [online]. Available at: <u>www.employersforwork-</u> <u>lifebalance.org.uk/pdf/International_Arulappan.pdf</u>.
- Ayres, C. (1951). The Co-ordinates of Institutionalism. *American Economic Review*, 41, May, 47-55.
- Bailey, D. and Kurland, N. (2002). A review of telework research: Findings, new directions, and lessons for the study of modern work. *Journal of Organizational Behavior*, 23(4), 383-400.
- Bannister, D. (ed) (1998). Transport policy and the environment, London and New York: E&FN Spon.
- Bannister, D. (2003). Critical Pragmatism and Congestion Charging in London. International Social Science Journal, 176, 249-264.
- Bannister, C. and Gallent, N. (1998). Trends in commuting in England and Wales – becoming less sustainable? *Area* 30(4):331-42.
- Baran, P.A. and Sweezy, P.M. (1966). *Monopoly Capital: An essay on the American Economic and Social Order*. Pelican Books.

- Baruch, Y. (2004). Transforming careers: from linear to multidirectional career paths – organizational and individual perspectives. *Career Development International*, 9(1), 58-73.
- Bazen, S. and Thirlwall, T. (1989). *Deindustrialization*. Oxford: Heinemann Educational.
- Beck, U. (2000). Brave New World of Work. Cambridge: Polity.
- Beck, J. and Young, M. (2005). The assault on the professions and the restructuring of academic and professional identities: A Bernsteinian analysis. *British Journal of Sociology of Education*, 26(2), April, 183-197.
- Becker, G. (1976). *The Economic approach to Human Behaviour*. Chicago: The University of Chicago Press.
- Becker, G. (1985). Human Capital, Effort and the Sexual Division of Labor. Journal of Labour Economics, 3(1), 33-58.
- Bell, C. S. (1974) Economics, Sex and Gender. Social Science Quarterly, December, 55(3), 615-631.
- BERR (2008). Flexible Working and Work-Life Balance [online]. Available at: <u>www.berr.gov.uk</u>.
- BERR (2008a). *Working Time Regulations: Statutory Instruments*. Available at: <u>http://www.berr.gov.uk/whatwedo/employment/employment-legislation/working-time-regs/page16620.html</u>.
- Beyers, W.B. (2002). Services in the new economy: Elements of a research agenda. *Journal of Economic Geography*, 2: 1-29.

- Bielenski, H., Bosch, G., and Wagner, A. (2002). Working Time Preferences in Sixteen European Countries. Luxembourg: Office for Official Publications of the European Communities.
- Bienefeld, M. A., (1972). Working hours in British Industry. London: Weidenfeld and Nicolson.
- Bishop, K. (2004). Working time patterns in the UK, France, Denmark and Sweden. Labour Market Trends [online]. Available at: <u>www.statistics.gov.uk/articles/labour_market_trends/Working_time_patt</u> <u>erns.pdf</u>.
- Böheim, R. and Taylor, M. (2003). Option or obligation? The determinants of Labour Supply preferences in Britain. *The Manchester School*. March. 71(2). 113-131.

Boulin, J. (1993). The Social Organisation of Time. Futures, June, 511-20.

- Bosworth, D., Dawkins, P., Stromback, T. (1996). *The Economics of the Labour Market*. Addison Wesley Longman Limited.
- Bowles, S. (1985). The Production Process in a Competitive Economy:
 Walrasian, Neo-Hobbesians and Marxian Models. *American Economic Review*, 75(1), 13-36.
- Burchell, B. and Fagan, C. (2004). Gender and the intensification of work: evidence from the European working conditions surveys. *Eastern Economic Journal*, 30(4).
- Breheny, M. (1999) (ed.). *The People: Where Will They Work?* London: Town and Country Planning Association.
- Britton, N. J., Halfpenny, P., Devine, F., Mellor, R. (2004). The future of regional cities in the information age: The impact of information

technology on Manchester's financial and business services sector. *Sociology*, 38(4), 795-814.

- Brown, S. L. and Booth, A. (2002). Stress at Home, Peace at Work: A Test of the Time Bind Hypothesis. *Social Science Quarterly*, 83(4), December, 905-920.
- Bruegel, I. (1996). Gendering the Polarisation Debate: A Comment on Hamnett's
 `Social Polarisation, Economic Restructuring and Welfare State
 Regimes'. Urban Studies, 33(8), 1431-1439.
- Bryan, M. (2002). Free to Choose? Differences in the Hours Determination of Constrained and Unconstrained Workers. Working papers for the Institute for Social and Economic Research 2002-28. Colchester: University of Essex.
- Bryan, M. (2004). Workers, workplaces and working hours. Working papers for the Institute for Social and Economic Research 2004-25. Colchester: University of Essex.
- Bryman, A. (2004). *Social Research Methods* (2nd Ed.). Oxford: Oxford University Press.
- Bryman, A. and Bell, E. (2003). *Business Research Methods*. Oxford: Oxford University Press.
- Bryman, A. and Cramer, D. (2005). *Quantitative Data Analysis with SPSS 12* and 13. Hove: Routledge.
- Buzar, S., Ogden, P., Hall, R. (2005). Households matter: the quiet demography of urban transformation. *Progress in Human Geography*, 29, 413-36.

- Cameron, G. and Muellbauer, J. (1998). Housing Market and Regional Commuting and Migration choices. *Scottish Journal of Political Economy*, September, 45(4).
- Carnoy, M. (2000). *Sustaining the New Economy*. USA: Russell Sage Foundation.
- Castells, M. (1989). The Information City. Oxford: Blackwell Publishing.
- Castells, M. (2000). Materials for an explanatory theory of the network society, *British Journal of Sociology*, 51, 5-22.
- Castells, M. (2000a). The Rise of the Network Society. Oxford: Blackwell Publishing.
- Castells, M. and Aoyama, Y. (1994). Paths towards the Informational Society: Employment Structure in G-7 countries 1920-90. *International Labor Review*, 133 (1).
- Chapman, T. (1999). You've got him well trained: the negotiation of roles in the domestic sphere. In Chapman, T. (ed) *Ideal homes? Social change and domestic life*. London: Routledge.
- Clark, W., Huang, Y., Withers, S. (2003). Does commuting distance matter? Commuting tolerance and residential change. *Regional Science and Urban Economics*, 33, 199-21.
- Clutterbuck, D. (2003). *Managing Work-life Balance: a guide for HR in achieving organisational and individual change*. London: CIPD.
- Colander, (2000). The Death of Neoclassical Economics. *Journal of the History of Economic Thought*, 22(2).

- Commons, J. (1921). Eight-Hour Shifts by Federal Legislation. In Commons (ed.), *Trade Unionism and Labor Problems, Second Series*. Boston: Athenaeum Press, 807–823.
- Commons, J. (1931). Institutional Economics. *American Economic Review*, 21, December, 648-57.
- Crafts, N. (1993). *Can De-Industrialization Seriously Damage Your Wealth?* London: Institute of Economic Affairs.
- Crafts, N. (1996). Deindustrialisation and Economic Growth. *The Economic Journal*, 106(434), 172-183.
- Coyle, D. and Quah, D. (2002). Getting the measure of the new economy. *iSociety at The Work Foundation*. May.
- Cresswell, J. W. (2003) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (2nd Ed.). London: Sage.
- Cresswell, T. (2006). *On the Move: Mobility in the Modern Western World*. London: Routledge.

Crompton, R. (1980). Class Mobility in Modern Britain. Sociology, 14, 117-119.

- Crompton, R. and Harris, F. (1998). Explaining Women's Employment Patterns: 'Orientations to Work' Revisited. *The British Journal of Sociology*, 49(1), 118-136.
- Crompton, R. and Sanderson, K. (1990). *Gendered Jobs and Social Change*. London: Unwin Hyman.
- Daniels, P. (1999). Services in a Shrinking World. In Bryson, J., Henry, N., Keeble, D., Martin R. (eds), *The Economic Geography Reader*, Chichester: Wiley, 156-66.

Deitch, C. and Sanderson, S. (1987). Geographic Constraints on Married Women's Careers. *Work and Occupations*, 14(4), 616-634.

Department for Trade and Industry (DTI) (1998). *Our Competitive Future: Building the Knowledge Driven Economy* [online]. White Paper. Available at: <u>http://www.dti.gov.uk/comp/competitive/wh_int1.htm</u>.

Department for Trade and Industry (DTI) (2000). Working Anywhere: Exploring Telework for Individuals and Organisations. Second Edition. UK Online for Business.

Department of Trade and Industry (DTI), (2003). *The Second Work-Life Balance Study: Employee Survey Summary of Emerging Findings*.

Department for Trade and Industry (DTI) (2004). Employment Relations Research Series No. 31: A survey of workers' experiences of the Working Time Regulations [online]. Available at: <u>http://www.dti.gov.uk/er/emar/errs31.pdf</u>.

Department for Transport (DfT) (2006). *Eddington Transport Study* [online]. Available at: <u>http://www.dft.gov.uk/about/strategy/transportstrategy/eddingtonstudy</u>.

Department for Transport (DfT) (2007). *Towards a Sustainable Transport System* [online]. Available at: <u>http://www.dft.gov.uk/about/strategy/transportstrategy/pdfsustaintranssys</u> <u>tem.pdf</u>.

Devine, F. (1992). Gender Segregation in the Engineering and Science Professions: a Case of Continuity and Change. Work, Employment and Society, 6, 557-75.

Devine, F., Britton, N. J., Mellor, R., Halfpenny, P. (2003). Mobility and the Middle Classes: A case study of Manchester and the North West. *International Journal of Urban and Regional Research*, September, 27(3), 495-509.

- Downward, P. and Mearman, A. (2007). Retroduction as mixed-methods triangulation in economic research: reorienting economics into social science. *Cambridge Journal of Economics*, 31, 77-99.
- Doyle, J. (2000). New Community or New Slavery: The emotional division of labour. *The Industrial Society*. Loughton, Essex: CW Press.
- Doyle, J. and Nathan, M. (2001). Wherever Next: Work in a mobile world. *The Industrial Society*. Loughton, Essex, CW Press.
- Doyle, J. and Reeves, R. (2001). Time Out: the Case for Time Sovereignty. *The Industrial Society*. Loughton, Essex: CW Press.
- Dugger, W. (1979). Methodological differences between Institutional and Neoclassical Economics. *Journal of Economic Issues*, 13(4), December, 899-909.
- Duncan, S., Edwards, R., Reynolds, T., Alldred, P. (2003). 'Motherhood, Paid Work and Parenting: Values and Theories', Work, Employment and Society, 17, 309-330.
- Ehrenreich, B. and Ehrenreich, J. (1979). 'The Professional-Managerial Class.' In P. Walker (ed.) *Between Labor and Capital*, Boston: South End Press, pp.5-48.
- Epstein, C. F., Seron, C., Oglensky, B. and Saute, R. (1999). *The part-time paradox: time norms, professional life, family and gender.* New York: Routledge.
- Erikson, R. and Goldthorpe J.H. (1992). *The constant flux: a study of class mobility in industrial societies*, Oxford: Clarendon Press.

- Esping-Anderson, G. (ed.) (1993). *Changing Classes: Stratification and Mobility in Post-industrial Societies*. London: Sage.
- Esping-Anderson, G. (1999). Social Foundations of Postindustrial Economies, Oxford: Oxford University Press.
- European Commission (2005). *Working Time Directive*. Available at: <u>http://www.cec.org.uk/info/pubs/bbriefs/bb28.htm</u>.
- Evetts, J. (1994). Women and Career in Engineering: Continuity and Change in the Organisation. *Work, Employment and Society*, 8, 101-112.
- Fagan, C. (2001). Time, Money and the Gender Order: Work Orientations and Working-Time preferences in Britain. *Gender, Work and Organization*, July, 8 (3), 239-66.
- Fagan, C. and Burchell, B. (2002). Gender, jobs and working conditions in the European Union. European Foundation for the Improvement of Living and Working conditions. Available at: http://www.eurofound.eu.int/publications/files/EF0249EN.pdf.
- Fagan, C., Hegewich, A., Pillinger, J. (2006). *Out of Time: Why Britain needs a new approach to working-time flexibility*. TUC Research Paper.
- Fairweather, N.B. (1999). Surveillance in Employment: The case of Teleworking. *Journal of Business Ethics*, 22(1), 39-49.
- Faulkner, N. (1986). The Women's Studies Movement: A Decade inside the Academy. *Frontiers: A Journal of Women Studies*, 8(3), 55-61.
- Felstead, A, N., Jewson, N., and Walters S. (2004). Changing Places of Work, London: Palgrave.

- Ferber, M.A. and Nelson, J. (1993). *Beyond Economic Man: Feminist Theory and Economics*. Chicago: University of Chicago Press.
- Ferber, M.A. and Nelson, J. (2003). 'Beyond Economic Man: Ten Years Later' in Ferber, M.A. and Nelson, J. (eds.), *Feminist Economics Today: Beyond Economic Man*. Chicago: University of Chicago Press.
- Fieldman, S. (1999). Once, Twice, Three Times the Money... *The Observer, Cash*, 4th July.
- Figart, D. (2001). Wage-setting under Fordism: the rise of Job Evaluation and the Ideology of Equal Pay. *Review of Political Economy*, 13(4), 405-25.
- Figart, D. and Golden, L. (1998). The Social Economics of Work time: Introduction. *Review of Social Economy*, Winter, 56(4).
- Folbre, N. (1991). The Unproductive Housewife: Her Evolution in Nineteenth-Century Economic Thought. Signs: Journal of Women in Culture and Society, Spring, 16(3), 463-84.
- Folbre, N. (1994). Who Pays for the Kids? Gender and the Structures of Constraint. London: Routledge.
- Folbre, N. (2001). *The Invisible Heart: Economics and Family Values*. New York: The New Press.
- Frey, B. S. and Stutzer, A. (2004). Economic Consequences of Mispredicting Utility. *Institute for Empirical Research in Economics* [online]. University of Zurich. Working Papers Series No. 218. Available at: <u>www.aeaweb.org/annual_mtg_papers/2005/0108_1015_1202.pdf</u>.
- Friedman, M. (1953). The Methodology of Positive Economics. In Hausman (ed.) *The Philosophy of Economics: an Anthology*. Cambridge: Cambridge University Press.

- Gatenby, R. (2004). Married Only at the Weekends? A Study of the Amount of Time Spent Together by Spouses. *Office for National Statistics* (ONS): London.
- Gibbons, S. and Machin, S. (2006). Transport and Labour Market Linkages:
 Empirical evidence, implications for policy and scope for further UK research [online]. Department for Transport, *The Eddington Transport Study: Research Annex 1.2.* Available at:
 http://www.dft.gov.uk/about/strategy/transportstrategy/eddingtonstudy/researchannexes/volume1/transportandlabourmarkets.pdf.
- Gilligan, C. (1982). *In a Different Voice*. Cambridge, MA, and London: Harvard University Press.
- Glucksmann, M. (1995). 'Why "Work"? Gender and the "total social organisation of labour". *Gender, Work and Organisation*, April, 2(2), 63-75.
- Goldthorpe, J. (1995). 'The service class revisited', in T. Butler and M. Savage (eds) *Social change and the Middle Classes*, London: UCL Press, 313-29.

Graham, S. and Marvin, S. (2001). Splintering Urbanism. London: Routledge.

- Greater Manchester Public Transport Executive (2008). *Our Future Transport*. Available at: <u>http://www.gmfuturetransport.org</u>.
- Green, A. E. (1995). The geography of dual career households: a research agenda and selected evidence from secondary data sources for Britain, *International Journal of Population Geography*, 1, 29-50.
- Green, A. E. (1997). A question of compromise? Case study evidence on the location and mobility strategies of dual career households, *Regional Studies* 31(1): 643-59.

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- Green, A. E. and Canny, A. (2003). *Geographical Mobility: Family Impacts*, Policy Press, Bristol.
- Green, A. E. (2004). Is Relocation Redundant? Observations on the Changing Nature and Impacts of Employment-related Geographical Mobility in the UK. *Regional Studies*, 38(6), August, 629-641.
- Green, A. E., Hogarth, T., Shackleton, R. E. (1999). Longer distance commuting as a substitute for migration in Britain: A review of trends, issues and implications. *International Journal of Population Geography*, 5, 49-67.
- Green, A. E. and Owen, D.W. (2006). *The Geography of Poor Skills and Access to Work*. York: Joseph Rowntree Foundation.
- Green, F. (2001). It's Been A Hard Days Night: The Concentration and Intensification of Work in Late Twentieth-Century Britain. *British Journal of Industrial Relations*, March, 39 (1), 53-80.
- Green, F. (2004a). Work Intensification, Discretion, and the Decline in Well-Being at Work. *Eastern Economic Journal*, 30(4).
- Green, H., Strange, A., Trache, H. (2000). The Homeworking Revolution:Considering the Property Dimension. *Regional Studies*, 34(3), 303-307.
- Haberman, S. J. (1982). Analysis of Dispersion of Multinomial Responses. Journal of the American Statistical Association, 77, 568-80.
- Hakim, C. (2000). Work-Lifestyle Choices in the 21st Century: Preference Theory. New York: Oxford University Press.
- Hammersley, M. (1996). The Relationship between Qualitative and Quantitative Research: Paradigm Loyalty versus Methodological Eclecticism. In Richardson, J. T. E. (ed.) *Handbook of Research Methods for Psychology and the Social Sciences*. Leicester: BPS Books.

- Hanson, S. and Pratt, G. (1995). *Gender, Work and Space*. New York: Routledge.
- Hardill, I. (2002). *Gender, Migration and the Dual Career Household* International Studies of Women and Place series. London: Routledge.
- Hardill, I., Bentley, C., and Cuthbert, M. (2006). The East Midlands: The Missing Middle? In Hardill, I. *et al* (eds.), *The Rise of the English Regions?* London: Routledge.
- Hardill, I., Graham, D., Kofman, E. (2001). *Human Geography of the UK: an Introduction*. Routledge: London.
- Hardill, I. and Green, A. (2003). Remote Working: altering the Spatial Contours of Work and Home in the New Economy. *New Technology, Work and Employment*, 18(3).
- Hardill, I., Green, A.E., and Dudleston, A.C. (1997). The 'Blurring of Boundaries' between 'Work' and 'Home': Perspectives from Case Studies in the East Midlands, *Area*, 29. 3: 335-43.
- Hardill, I. and Watson, R. (2004). Career priorities within dual career households: An analysis of the impact of child rearing upon gender participation rates and earnings, *Industrial Relations Journal* 35(1): 19-37.
- Harkness, S. (1999). 'Working 9-5?' in P. Gregg and J. Wadsworth (eds), *The Labour Market Under New Labour: The State of Working Britain*. Manchester: Manchester University Press, 90-108.
- Harris, L. (2003). Home-based Working and the Employment Relationship: Managerial Challenges and Dilemmas. *Personnel Review*, 32(4), 422-437.

- Harris, L., Foster, C. and Whysall, P. (2007). Maximising women's potential in the UK's retail sector. *Employee Relations*, 29(5), 492-505.
- Harvey, D. (1989). The Condition of Postmodernity. Oxford: Blackwell.
- Harvie, D., Slater, G., Philp, B., Wheatley, D. (2009). Economic well-being and British regions: the problem with GDP per capita. *Review of Social Economy*, forthcoming.
- Hausman, D. and McPherson, M. (1953). Economics, Rationality and Ethics. In
 Hausman (ed.) *The Philosophy of Economics: an Anthology*. Cambridge:
 Cambridge University Press.
- Hess, S., Bierlaire, M., Polak, J. (2005). Estimation of Value of Travel-time Savings using mixed Logit Models. *Transportation Research Part A*, 39, 221–236.
- Hewitt, P. (1993). *About time: The Revolution in Work and Family Life*. London: Rivers Oram Press.
- Hill, E. J., Hawkins, A., and Miller, B. (1996). Work and Family in the Virtual Office: Perceived Influences of Mobile Telework. *Family Relations*, 45 (3), 293-301.
- Himmelweit, S. (1995). The Discovery of 'Unpaid Work': The Social Consequences of the Expansion of Work. *Feminist Economics*, 1(2), 1-19.
- Himmelweit, S. and Sigala, M. (2002). The Welfare Implications of Mother's Decisions about Work and Childcare. ESRC Future of Work Programme, Working Paper 20.
- H.M. Treasury (2006). *Stern Review on the Economics of Climate Change* [online]. Available at: <u>http://www.hm-</u>

treasury.gov.uk/independent_reviews/stern_review_economics_climate_c
hange/stern_review_report.cfm.

Hobsbawm, E. (1968). Labouring Men. London: Weidenfeld and Nicolson.

- Hochschild, A. R. and Machung, A. (1990). *The Second Shift, Working Parents and The Revolution at Home*. London: Piatkus.
- Hodgson, G. (1988). Economics and Institutions. Cambridge: Polity Press.

Hodgson, G. (1999). Economics and Utopia. London: Routledge.

- Hogarth, T. and Daniel, W. (1988). *Britain's new Industrial Gypsies: Long Distance weekly commuters*. London: Policy Studies Institute.
- Horrell, S. and Humphries, J. (1995) 'Women's labour force participation and the transition to the male breadwinner family, 1790-1865', *Economic History Review*, 48(1), 89-117.
- IER/IFF (2001). Work-life balance 2000: Results from the Baseline Study [online]. Department for Education and Employment, Research Report Number 249. Available at: <u>http://www.dfes.gov.uk/research/data/uploadfiles/RR249.PDF</u>.
- Jackson, P. and van der Wielen, J. (1998). *Teleworking: International Perspectives*. London: Routledge.
- Jarvis, H., Pratt, A.C. and Cheng-Chong, W. (2001). *The secret life of cities: the social reproduction of everyday life*. Harlow: Prentice Hall.
- Johansson, B., Klaesson, J., Olsson, M. (2003). Commuters' Non-Linear Response to Time Distances. *Journal of Geographical Systems*, November, 5(3), 315-30.

Johnson, L., Andrey, J., Shaw, S. (2007). Mr. Dithers Comes to Dinner: Telework and the Merging of Women's Work and Home Domains in Canada. *Gender, Place and Culture*, 14(2), 141-161.

Jones, A. (2003). About Time for Change. June. London: The Work Foundation.

Jones, B. (1990). Sleepers, Wake! Melbourne: Oxford University Press.

- José de Freitas Armstrong, N. (1999). Flexible work in the virtual workplace: discourses and implications of teleworking. In Felstead and Jewson, *Global Trends in Flexible Labour*. London: Macmillan Press.
- Kanbur, R. (2002). Economics, Social Science and Development. *World Development*, 30, 477-86.
- Kanter, R. M. (1977). *Men and Women of the Corporation*. New York: Basic Books.
- Kapp, K. W. (1968). In Defence of Institutional Economics. Swedish Journal of Economics, 70, March, 1-18.

Kennedy, P. (2000). A Guide to Econometrics (4th Ed.). Oxford: Blackwell.

- Kilpatrick, A. and Lawson, T. (1980). On the nature of industrial decline in the UK. *Cambridge Journal of Economics*, 4, 85-102.
- Kinnear, P.R. and Gray, C.D. (2004). SPSS 12 Made Simple. Hove: Psychology Press.
- Kitson, M. and Wilkinson, F. (2007). The Economics of New Labour: Policy and Performance. *Cambridge Journal of Economcis*, 31(6), 805-16.
- Kloosterman, R.C. and Musterd, S. (2001). 'The Polycentric Urban Region: Towards a Research Agenda. *Urban Studies*, 38(4), 623-33.

- Knorr, A. and Eisenkopf, A. (2006). Road Pricing in Practice: The London Congestion Charge. Transportation Conference-Banff, Alberta, Canada 2006.
- Kodz, J., Davis, S., Lain, D., Strebler, M., Rick, J., Bates, P., Cummings, J., Meager, N., Anxo, D., Gineste, S., Trinczek, R., Pamer, S. (2003). *Working long hours: a review of the evidence: Volume 1 Main report*. Employment Relations Report Series No. 16. London: Institute for Employment Studies.
- Kodz, J., Harper, H., Dench, S. (2002). Work-life Balance: Beyond the rhetoric.IES report 384, London: Institute for Employment Studies.
- Kodz, J., Kersley, B., Strebler, M. T. and O'Regan, S. (1998). Breaking the Long Hours Culture. IES report 352, London: Institute for Employment Studies.
- Koslowsky, M., Kluger, A.N., Reich, M. (1995). Commuting Stress: Causes, Effects, and Methods of Coping. New York: Plenium.
- Land, H. and Rose, H. (1985). 'Compulsory altruism for some or an altruistic society for all?'. In P. Bean, J. Ferris and D. Whynes (eds) *In Defence of Welfare*, London: Tavistock.

Lawson, T. (1997). Economics and Reality. London: Routledge.

Lawson, T. (2003). *Reorienting Economics*. London: Routledge.

Leadbeater, C. (1999). Living on thin Air: The New Economy. London: Viking.

Leahy, M. and Doughey, J. (2006). Women, Work and Preference Formation: a Critique of Catherine Hakim's Preference Theory. *Journal of Business Systems, Governance and Ethics*, 1(1), 37-48.

- Lever, W. (1987). New Trends in the Supply and Demand patterns of Labour in Western Economies. In Fischer and Nijkamp (eds), *Regional Labour Markets*. New York: North-Holland, 249-267.
- Lewis, J. (2002). Gender and Welfare State Change. *European Societies*, 4.4, 331-57.
- Liff, S. and Ward K. (2001). Distorted Views Through the Glass Ceiling: The Construction of Women's Understandings of Promotion and Senior Management Positions. *Gender, Work and Organisation*, 8(1), 19-36.
- Lindsay, C. (2003). A Century of Labour Market Change. *Labour Market Trends*, March, 133-144.
- Lipietz, A. (1997). The post-Fordist World: Labor Relations, International Hierarchy and Global Ecology. *Review of International Political Economy* 4(1), 1-41.
- Lloyd, J. (2003). Dwelltime: Airport Technology, Travel and Consumption. *Space and Culture*, 6, 93-109.
- Lucas, R. (1987). Models of Business Cycles. Oxford: Basil Blackwell.
- Lyons, G, and Urry, J. (2005). Travel time use in the information age. *Transportation Research Part A: Policy & Practice*, February, 39(2/3), 257-276.
- Lyons, G., Jain, J., Holly, D. (2007). The use of travel time by rail passengers in Great Britain. *Transportation Research Part A: Policy & Practice*, January, 41(1), 107-120.
- MacDonald, M., Phipps, S., Lethbridge, L. (2005). Taking Its Toll: The Influence of Paid and Unpaid Work on Women's Well-Being. *Feminist Economics*, March, 11(1), 63-94.

- Mackie, P. J., Jara-Díaz, S., Fowkes, A. S. (2001). The Value of Travel Time Savings in Evaluation. *Transportation Research Part E*, 37, 91-106.
- MacInnes, J. (2005). Work-life balance and the demand for reduction in working hours: Evidence from the British Social Attitudes Survey 2002. *British Journal of Industrial Relations*, 43(2), 273-295.
- Madden, J.F. (1981). Why Women Work Closer to Home. Urban Studies, 18(2), 181-94.
- Mahoney, J. (2003). Strategies of causal assessment in comparative historical analysis. In J. Mahoney and D. Rueschemeyer (eds) *Comparative historical analysis in the social sciences*, Cambridge: Cambridge University Press, 337-72.
- Mahoney, P. and Hextall, I. (1998). Transforming Professionalism: The TTA and the National Professional Qualifications in England and Wales. *TNTEE Publications*, September, 1(2).
- Martin, R. and Rowthorn, B. (eds) (1986). *The Geography of Deindustrialization*. London: Macmillan.
- Marvin, S., and Medd, W. (2006). "Metabolisms of Obesity: Flows of Fat Through Bodies, Cities, and Sewers", *Environment and Planning A*, 38, 313-324.

Marx, K (1976). Capital. Vol. 1, trans. Ben Fowkes. London: Penguin

Mason, J. (2002). Qualitative Researching. London: Sage.

McDowell, L. (1991). Life without Father and Ford: the new gender order of post-Fordism. *Transactions of the Institute of British Geographers NS*, 16, 400-19.

- McDowell, L. (2004). Work, Workfare, Work/Life Balance and an Ethic of Care. *Progress in Human Geography*, 28(2), 145-163.
- McDowell, L., Perrons, D., Fagan, C., Ray, K., Ward, K. (2005). The contradictions and intersections of class and gender in a global city: placing working women's lives on the research agenda. *Environment & Planning A*, March, 37 (3), 441-461.
- McDowell, L., Ward, K., Fagan, C., Perrons, D., Ray, K. (2006). Connecting Time and Space: The Significance of Transformations in Women's Work in the City. *International Journal of Urban and Regional Research*, 30(1), 141-58.
- McQuaid, R., Greig, M., Adams, J. (2001). Unemployed Job Seeker attitudes towards potential Travel-to-Work Times. *Growth and Change*. Summer. 32. 355-368.
- Meagher, G. and Parton, N. (2004). Modernising Social Work and the Ethics of *Care, Social Work and Society*, 2(1), 10-27.
- Meagher, G. and Nelson, J.A. (2004). Survey Article: Feminism in the Dismal Science" *Journal of Political Philosophy*, 12(1), March, 102-126.
- Mitchell, W. C. (1925). Quantitative Analysis in Economics. *American Economic Review*, 15, March, 1-12.
- Mirowski, P. (1981) Is there a Mathematical Neoinstitutional Economics? Journal of Economic Issues, 15(3), September, 593-613.
- Morley, D. (2000). *Home Territories: Media, Mobility and Identity*. London: Routledge.

- Muellbauer, J. and Murphy, A. (1991). Regional Economic Disparities: the Role of Housing, in Bowen, A., Mayhew, K. (eds) *Reducing Regional Inequalities*, London: NEDO and Kogan Page.
- Nelson, J.A. (1995). Feminism and Economics. *The Journal of Economic Perspectives*, 9(2), Spring, 131-148.
- Nelson, J.A. (2004). Clocks, Creation and Clarity: Insights on Ethics and Economics from a Feminist Perspective. Global Development and Environment Institute Working Paper No. 03-11.
- Nolan, P. and Slater, G. (2003). The Labour Market: History, Structure and Prospects. In *Industrial Relations: Theory and Practice* (2nd Edition).
 Oxford: Blackwell Publishers. 58-80.
- Norušis, M.J. (2007). SPSS 15.0 Advanced Statistical Procedures Companion. New Jersey: Prentice Hall.
- Norušis, M.J. (2007a). SPSS 15.0 Statistical Procedures Companion. New Jersey: Prentice Hall.
- Nottingham City Council (2006). *Economy: Largest Employers* [online]. Available at: <u>http://www.nottinghamcity.gov.uk/sitemap/cd_economy</u>.
- Nottingham City Council (2007). Nottingham Population Estimates [online].
- Nottingham City Council (2009). *Workplace Parking Levy* [online]. Available at: <u>www.nottinghamwpl.com</u>.
- Nyberg, A. (2000). From Foster Mothers to Child Care Centers: a History of Working Mothers and Child Care in Sweden. *Feminist Economics*, 1, 5-20.

Oakley, A. (1974). The Sociology of Housework. Bath: The Pitman Press.

O'Connor, J. (1973). The Fiscal Crisis of the State. New York: St Martin's Press.

Office for National Statistics (1998). *How Exactly is Employment Measured*. London: The Stationary Office.

Office for National Statistics (1998a). Social Trends 28. TSO, London.

- Office for National Statistics (2001). Changing to Standard Occupational Classification (SOC) 2000 – dual coding on the Labour Force Survey. *Labour Market Trends* [online]. July, 357-364. Available at: <u>http://www.statistics.gov.uk/downloads/theme_labour/LMT_109_7.pdf#p</u> <u>age=13</u>. (Accessed on 4 January 2006).
- Office for National Statistics (2002). *SOC 2000 Backcasting* [online]. Available at: http://www.statistics.gov.uk/about/methodology_by_theme/socbackcastin g/default.asp. (Accessed on 4 January 2006).
- Office for National Statistics (2009). *Table 17: All in employment by occupation* [online]. Available at: <u>http://www.statistics.gov.uk/</u>.
- Ogbonna, E. and Harris, L. C. (2004). Work Intensification and Emotional Labour among UK University Lecturers: An Exploratory Study. *Organization Studies*, 25(7).
- Oswald, A. and Benito, A. (2000). Commuting in Great Britain in the 1990s. Warwick Economics Research Papers Series 560.

Pawson, R. and Tilley, N. (2006). Realistic Evaluation. London: Sage.

Perrons, D. (2003). The New Economy and the Work-life balance: Conceptual explorations and a case study of New Media. *Gender, Work and Organization*, 10 (1), 65-93.

- Perrons, D. (2004). *Globalization and Social Change: People and Places in a Divided World*. London: Routledge.
- Perrons, D., Fagan, C., McDowell, L, Ray, K., Ward, K. (2005). Work, Life and Time in the New Economy. *Time and Society*, 14 (1), 51-64.
- Perrons, D., Fagan, C., McDowell, L., Ray, K., Ward, K. (eds.) (2006). Gender divisions and Working Time in the New Economy: changing patterns of Work, Care and Public Policy in Europe and North America. London: Edward Elgar.
- Peterson, J. and Lewis, M. (1999). *The Elgar Companion to Feminist Economics*. Cheltenham: Edward Elgar.
- Philliber, W.W. and Vannoy-Hillier, D. (1990). 'The effects of Husband's Occupational attainment on Wife's achievement', *Journal of Marriage* and Family 52: 323-29.
- Philp, B. (2001). Marxism, Neoclassical Economics and the Length of the Working Day. *Review of Political Economy* 13(1): 27-39.
- Philp, B., Harvie, D., Slater, G. (2005). Preferences, Power and the Determination of Working hours. *Journal of Economic Issues*, March, 39 (1).
- Pooley, C. G. and Turnbull, J. (1999). 'The Journey to Work: a Century of Change'. *Area*, 31.3, 281–292.
- Pooley, C. G. and Turnbull, J. (2000). Modal choice and modal change: the journey to work in Britain since 1890. *Journal of Transport Geography*, 8, 11-24.
- Pooley, C. G., Turnbull, J., Adams, M. (2004). The impact of new transport technologies on intra-urban mobility: a view from the past. Paper

presented to the *Alternative Mobility Futures* conference, Lancaster University, January.

- Pooley, C. G., Turnbull, J., Adams, M. (2005). A Mobile Century? Changes in everyday Mobility in Britain in the Twentieth Century. Hampshire: Ashgate Publishing.
- Pooley C, G., Turnbull J., Adams, M. (2006). The impact of new Transport Technologies on Intra-urban Mobility: a View from the Past, *Environment and Planning A*, 38, 253-267.
- Prud'homme, R. and Bocarejo, J. P. (2005). The London Congestion Charge: a Tentative Economic Appraisal. *Transport Policy*, 12, 279-287.
- Quah, D. (1996). The Invisible Hand and theWeightless Economy. LSE Economics Department and CEP, Centre for Economic Performance Occasional Paper No. 12, April.
- Quah, D. (2000). The Weightless Economy: In Whose Interest? <u>CEP's CentrePiece</u>, Spring, 5(1), 28-30.
- Quah, D. (2001). Technology Dissemination and Economic Growth: Some Lessons for the New Economy [online]. Public Lecture, University of Hong Kong. Available at: <u>http://econ.lse.ac.uk/~dquah</u>.
- Quick, C. (2005). Firms face 48-hour Week Challenge. *Accountancy*. June, 135(1342). 12.
- Rapoport R. and Rapoport R. (1976). *Dual Career Families Re-examined*. London: Martin Robertson.
- Reid, D. (1996). Weddings, Weekdays, Work and Leisure in Urban England 1791-1911. *Past and Present* 153, pp.135-163.
- Rifkin, J. (1995). *The end of Work: The decline of the Global Labour Force and the dawn of the Post-Market era*. New York, G. P. Putnams Sons.
- Ritchie, J. and Spencer, L. (2003). [eds] *Qualitative Research Practice*. London: Sage.
- Roberts, K. (2007). Work-life Balance the Sources of the Contemporary Problem and the Probable Outcomes. *Employee Relations*, 29(4), 334-51.
- Rouwendal, J. and Meijer, E. (2001). Preferences for Housing, Jobs, and Commuting: a Mixed Logit Analysis. *Journal of Regional Science*, 41(3), 475-505.
- Rouwendal, J. and Nijkamp, P. (2004). Living in Two Worlds: A Review of Home-to-Work Decisions. *Growth and Change*. 35(3). 287-304.
- Rueschemeyer, D. (2003). Can One or a few Cases Yield Gains? In J. Mahoney and D. Rueschemeyer (eds) *Comparative Historical Analysis in the Social Sciences*, Cambridge: Cambridge University Press, 305-36.
- Rutherford, M. (2001). Institutional Economics: Then and Now. *Journal of Economic Perspectives*, 15(3), Summer, 173-194.
- Rye, T. (1999). Employer attitudes to Employer Transport plans: a Comparison of UK and Dutch experience. *Transport Policy*, 6(3), 183-196.
- Samuelson, P. A. (1948). Consumption Theory in terms of Revealed Preferences. *Economica*, 15(60), November, 243-53.
- Savage, M. (1988). Missing Link? The Relationship between Spatial Mobility and Social Mobility. *The British Journal of Sociology*, 39(4), 554-577.

- Savage, M., Barlow, J., Dickens, P., Fielding, T. (1992). Property, Bureaucracy and Culture: Middle Class Formation in Contemporary Britain. London: Routledge
- Savickas, M.L. (2000), Renovating the Psychology of Careers for the 21st Century. In Collin, A. and Young, R.A. (Eds), *The Future of Career*, Cambridge University Press, Cambridge, 53-68.
- Schor, J. (1993). The Overworked American: The unexpected decline of Leisure. New York: Basic Books.
- Schubert, U., Gerking, S., Isserman, A., Taylor, C. (1987). Regional Labour Market Modelling: A State of the art review. In Fischer and Nijkamp (eds), *Regional Labour Markets*. Elsevier Science Publishers, 53-94.

Sennett, R. (1998). The Corrosion of Character. New York: Norton.

- Shapiro, C., and Stiglitz, J. (1984). Equilibrium Unemployment as a Worker Discipline Device, *American Economic Review* 74(3), pp.433-444.
- Sheller, M. and Urry, J. (2006). The New Mobilities Paradigm. Environment and Planning A 2006, 38, pages 207-226.
- Singh, A. (1977). UK Industry and the World Economy: a case of Deindustrialisation? *Cambridge Journal of Economics*, 1, 113-136.
- Singh, V. and Vinnicombe, S. (2000). Gendered meaning of Commitment from High Technology Engineering Managers in the United Kingdom and Sweden. *Gender, Work and Organisation*, 7(1), 1-19.
- Sirianni, C., and Negrey, C. (2000). Working Time as Gendered Time. *Feminist Economics*, 6, 59-76.

Skeggs, B. (2004). Class, Self, Culture. London: Routledge.

- So, K. S., Orazem, P. F., Otto, D. (2001). The effects of Housing Prices, Wages, and Commuting time on joint Residential and Job location choices. *American Agricultural Economics Association*, November, 83 (4), 1036-1048.
- Southerton, D. (2003). 'Squeezing Time': Allocating Practices, Coordinating Networks and Scheduling Society. *Time and Society*, 12(1), 5-25.
- Sparrowe, R. T., Liden, R. C., Wayne, S. J., Kraimer, M. L. (2001). Social Networks and the Performance of Individuals and Groups. Academy of Management Journal, 44(2), 316-325.
- Spencer, D.A. The Demise of Radical Political Economics? *Cambridge Journal* of Economics, 24, 543-64.
- Spencer, D.A. (2003). Love's Labor's Lost? The Disutility of Work and Work Avoidance in the Economic Analysis of Labor Supply. *Review of Social Economy*, June, 61(2), 235-50.
- Spencer, D.A. (2004). Deconstructing the Labour Supply Curve. *Metroeconomica*, November, 55(4), 442-458.
- Spencer, D.A. (2004a). From Pain Cost to Opportunity Cost: The Eclipse of the Quality of Work as a Factor in Economic Theory. *History of Political Economy*, Summer, 36(2), 387-400.
- Spencer, D. A. (2006). Work for all Those Who Want It? Why the Neoclassical Labour Supply Curve is an inappropriate foundation for the Theory of Employment and Unemployment. *Cambridge Journal of Economics*, 30, 459-72.

Spencer, D.A. (2009). The Political Economy of Work. London: Routledge.

- Stanworth, C. (2000). Women and Work in the Information Age. *Gender, Work and Organization*, 7(1), 20-32.
- Stradling, S. G., Meadows, M. L., Beatty, S. (2000). Helping Drivers out of their Cars: Integrating Transport Policy and Social Psychology for Sustainable Change. *Transport Policy*, 7, 207-215.
- Steedman, I. (2001). Consumption takes Time: Implications for Economic Theory. London: Routledge.
- Stewart, M. and Swaffield, J. (1997). Constraints on the Desired Hours of Work of British men; *Economic Journal*, 107(127): 520-535.
- Sullivan, O. (1997). Time Waits for no (Wo)Man: An Investigation of the Gendered Experience of Domestic Time. *Sociology*, 31(2), 221-39.
- Sullivan, W. (1995). Work and Integrity: the Crisis and Promise of Professionalism in America, New York: Harper Collins.
- Taylor, F. (1967). The Principles of Scientific Management. London: Norton.
- Taylor, R. (2002). Britain's World of Work Myths and Realities. *Economic and Social Research Council* (ESRC): Swindon.
- Tietze, S. and Musson, G. (2002). Working from Home and Managing Guilt. *Organisations and People*, 9(1), 34-9.
- Tietze, S. and Musson, G. (2005). Recasting the Home–Work Relationship: A Case of Mutual Adjustment? *Organization Studies*, 26, 1331-52.

Townsend, A. (1997). Making a Living in Europe, London: Routledge.

Tronto, J. (1993). *Moral Boundaries: A Political Argument for an Ethic of Care*. New York: Routledge.

- Tummers, M. P. and Woittiez, I. (1991). A simultaneous Wage and Labor Supply Model with Hours Restrictions. *The Journal of Human Resources*, August, 26(3).
- van Ommerman, J., Rietveld, P., Nijkamp, P. (2000). Job Mobility, Residential Mobility and Commuting: A theoretical analysis using Search Theory. *The Annals of Regional Science*, 34, 213-232.
- Vassie, L. (2000). Managing Home-Working: Health and Safety Responsibilities. *Employee Relations*, 22(6), 540-554.
- Veblen, T. (1899). The Theory of the Leisure Class. New York: Macmillan.
- Veblen. T (1900). Preconceptions of Economics Science. *Quarterly Journal of Economics*, February, 14.
- Veblen, T. (1909). The limitations of Marginal Utility. *The Journal of Political Economy*, November, 17 (9).
- Verhoef, E., Nijkamp, P., and Rietveld, P. (1996). Regulatory Parking Policies at the Firm level. *Environment and Planning C: Government and Policy*, 14, 385-406.
- Visco, I. (2000). The New Economy: Fact or Fiction? [online] *OECD Observer*. 221-222, June. Available at: <u>http://www.oecdobserver.org</u>.
- Wajcman, J. (1996). Women and Men Managers: Careers and Equal Opportunities. In Crompton, R., Gallie, D., Purcell, K. (Eds.) Changing forms of Employment. London: Routledge.
- Wajcman, J. and Martin, B. (2002). Narratives of Identity in Modern Management: The Corrosion of Identity Difference? *Sociology*, 36, 985-1002.

- Walby, S. (2002). Gender and the New Economy: Regulation or deregulation? [online] ESRC seminar 'Work, life and time in the new economy', LSE, October. Available at: http://www.leeds.ac.uk/sociology/people/swdocs/.
- Waller, W. and Jennings, A. (1990). On the Possibility of a Feminist Economics: The Convergence of Institutional and Feminist Methodology. *Journal of Economic Issues*, June, 24(2), 613-622.
- Weber, M. (1947). *The theory of Social and Economic Organisation*. London: Free Press, Macmillan.
- Weber, M. (1976). *The Protestant Ethic and the Spirit of Capitalism*. London: Allen and Unwin.
- Weiss, R. and Kahn, R. (1960). Definitions of Work and Occupation, Social Problems, 8(2), Autumn, 142-151.
- Wener, R. E., Evans, G. W., Phillips, D., Nadler, N. (2003). Running for the 7:45: the effects of Public Transit Improvements on Commuter Stress. *Transportation*, May, 30(2), 203-220.
- Wheatley, D. (2008). Managing complex Commuting and Working Patterns: The case of Greater Nottingham. *Regions*, 269, Spring '08.
- Wheatley, D., Hardill, I., Philp, B. (2008). "Managing" reductions in Working Hours: A Study of Work Time and Leisure Preferences in UK Industry. *NTU Discussion Papers in Economics*, No. 2008/5.
- Wheatley, D., Hardill, I., Green, A. (2008a). Mobile Work and Challenges for Public Policy. In Hislop (ed.) *Mobility and Technology in the Workplace*, 227-39, Oxford: Routledge.
- White, M., Hill, S., McGovern, P., Mills, C., Smeaton, D. (2003). High Performance Management Practices, Working Hours and Work-life Balance. *British Journal of Industrial Relations*, 41(2), 175-195.

- Whitelegg, J. (eds.) (1992). *Traffic Congestion. Is there a way out?* Hawes: Leading Edge.
- Whitelegg, J. (1997). Critical Mass: Transport, Environment and Society in the Twenty-First Century. London: Pluto Press.
- Wilensky, H. L. (1961). Orderly Careers and Social Participation: the impact of Work History on Social Integration in the Middle Mass. *American Sociological Review*, 26(4), 521-39.
- Williams, F. (2002). The presence of Feminism in the Future of Welfare, *Economy and Society*, 31(4), 502-519.
- Williams, G. and Hill, R. (2007). Commuting Stress: The Role of Resilience. *NTU Working Together: A Staff Celebration*, September, Nottingham.
- Witte, E. (1954). Institutional Economics as seen by an Institutional Economist. *Southern Economic Journal*, 21, October, 131-40.
- Woodward, D. (2007). Work-life Balancing Strategies used by Women Managers in British "modern" Universities. *Equal Opportunities International*, 26(1), 6-17.
- Yeandle, S. (2001). Three Sorts of Time. In Women in the New Economy: A Regional Perspective [online]. The Smith Institute. Available at: <u>http://www.smith-institute.org.uk/pdfs/women-regional-perspective.pdf</u>.
- Yin, R. K. (2003). *Case Study Research: Design and methods* (3rd Ed.), Thousand Oaks, CA: Sage Publications.

Appendix

1 Information on Secondary Data Sources

The Labour Force Survey

The LFS has been collected on a quarterly basis since 1992. The LFS provides a large sample size of around 120,000-150,000 individuals. The data-set provides a number of variables essential to researching working and commuting patterns, some of which are not found in other sources of data. The LFS is conducted through face-to-face interviews, with subsequent contact made by telephone. The survey is split into two main sections, the first dealing with household characteristics, and the second covering economic activity. The LFS uses international definitions of employment, unemployment and economic inactivity. This is combined with a wide range of related topics such as occupation, training, hours of work and personal characteristics of household members aged 16 or over.

The Census SL-HSAR

The Census Special Licence Household Sample of Anonymised Records is generated from the *Census of Population*, and is only available for 1991 and 2001. The SL-HSAR is a 1% representative sample of UK households (England and Wales), and includes sections on housing and tenure, demographic, and socio-economic information for all members of the household. The Census SL-HSAR household data-set provides a sample of approximately 225,000 households, equivalent to 525,000 individuals. Due to the possibility of risk of exposure, which is more prominent in the SL-HSAR, access to this data has been negotiated through application for a Special Licence (SL).

2 Interview schedule

Changing Commuting and Working patterns among Managers and Professionals

Interviewee Name	
Interview Length	
Interview Location	

Introduction:

This interview will be done in the **strictest confidence**. Any information given will be completely **anonymous**. The interview is expected to last up to **45 minutes**. You are **free to end the interview** whenever you wish, but it would help my research if you would take the time to stay until all questions have been asked.

I will **take notes and also a recording** of the proceedings if that is okay. If at any time I am writing and quiet I am just catching up. If at any time you would like me to **stop taking notes**, due to responses you are giving simply indicate this.

Are you happy to begin the interview?

Interview Topics/Questions:

General Questions about the company

- 1. Could you give me a brief description of what the firm does/makes.
- 2. How long has the firm been located at these premises?
- 3. How many individuals does this location employ?
- 4. Of those, how many are managers? ...and how many are professionals?
- 5. Do you think there has been an increase in the titling of jobs as 'manager'?
- 6. Why do you think individuals choose to work here? What do you offer?
- 7. Do you think employees enjoy working here?
- 8. Would enjoyment differ for those in managerial and/or professional occupations?

Company policy relating to working patterns

- 9. What type of contracts are the staff employed under?
- 10. Do the contracts of managers and professionals differ to those of other employees?
- 11. Are the salaries of your staff based on fixed working hours?
- 12. Does the company offer opt-outs for the WTR?
- 13. If so, how are these opt-outs implemented? And, why are these long hours required?
- 14. Would you say the management/professional staff employed within this organization work longer hours than other employees? ... If so, why do you think this is?
- 15. Does the company offer its staff overtime? ... If so, is this paid?
- 16. Do employees undertake any unpaid overtime?

...and is this rewarded in other ways? (Time off or incentives for example)

- 17. Do employees show any preference for reductions in their hours of work?
- 18. Are the managers employed in the organisation actively encouraged to promote workers attendance through their own presenteeism?
- 19. Are long hours seen as representing commitment for those in managerial and professional roles?
- 20. Are the professionals employed in the organisation given a level of autonomy over their work? Has this autonomy changed over the last 5-10 years?

Company policy relating to the Work-life balance scheme

- 21. Are there active policies to improve the work-life balance of employees?
- 22. Does the company offer flexible working arrangements?
- 23. Can workers actively reduce their hours of work?
- 24. Does the company offer the option of teleworking (working from home) at least to some extent?
- 25. Are there any special policies for workers who also have caring responsibilities?
- 26. Do any of these arrangements differ for management or professional staff?
- 27. Level of undertaking within firm?

Recruitment and retention of staff

- 28. How do you think company policy on working hours affects the recruitment and retention of staff?
- 29. How do you think company policy relating to work-life balance affects the recruitment and retention of staff?
- 30. Do you think the (geographical) location of the company premises affects the recruitment and retention of staff?

Housing/Mobility

- 31. What proportion of the staff employed here are permanent residents in the area?
- 32. Do the majority of managers and professionals live closer or further from these premises, than other employees?
- 33. Do new employees generally move close by for easier access to work?
- 34. Do many employees undertake long journeys to work?
- 35. What is the longest journey you are aware of an individual undertaking?
- 36. How do you think the company's (geographical) location affects the working lives of its staff?

Commuting

- 37. How do the majority of your employees travel to work?
- 38. Do you have any schemes in place in relation to the journey to work?
- 39. Does the company cover the costs of business travel?
- 40. What do you think of the idea of covering the cost of commuting?
- 41. Number/proportion of long distance commuters.
- 42. Does the company have on site parking facilities for staff?
- 43. How will the introduction of a parking levy in Nottingham affect you?

3 Consent Form



Working 9 to 5? Complex patterns of Time Allocation among Managers and Professionals in Dual Career Households

Interview Consent Form

- This interview will be performed in the strictest confidence.
- Any information given will have names and identifiers removed before use.
- You are free to **end the interview** whenever you wish, but it would help my research if you would take the time to stay until all questions have been asked.
- I will take **notes and also a recording** of the proceedings if this is okay. If at any time I am writing and quiet I am just catching up.
- If at any time you would like me to **stop taking notes**, due to responses you are giving, simply indicate this.

Interviewee Consent:

Please read and confirm your consent to being interviewed for the project by ticking the box(es) and signing and dating this form.

I understand my participation is voluntary, and that I am free to withdraw at any time.

I give permission for the interview to be recorded by the researcher, on the understanding the tape will be destroyed upon completion of the project.

I agree to take part in the research.

Name of respondent	Date	Signature
Name of researcher	Date	Signature

Researcher contact details:

Address: Mr D. Wheatley, Nottingham Business School, Nottingham Trent University, Burton Street, Nottingham, NG1 4BU. Email: daniel.wheatley@ntu.ac.uk.

4 Interview Coding Table

Themes/Codes	Interview No. 1
Managerial/professional roles	I
Re-titling of roles to 'manager'	n
Loss of autonomy in professions	dns
Employees enjoy working at org?	n = restrict / loss jobs
Hours of Work	1 10001000/1000 jobb
Long hours	esn man
Overtime – naid/unnaid_frequency	naid $o/t = claim$ usually thru flexi
Use of WTR opt-outs	Y, not many, may work long, but not ovr
Related to workloads?	v
Evidence of presenteeism/macho	y y reducing
cult	y, reducing
Is situation improving?	v – working on erradic
Link to managerial practice	y in places
Satisfaction with hours	y can ask to change but den On bus
	need
Satisfaction linked to	dns
presenteeism/managerial practice?	
Flexibility	
Work-life balance agenda	y
acknowledged/in place	
Flexible working policy	y, lots
Flexi-time	y – compl. flexible
Home-working	y – ad-hoc
Formal policies in place	Some – not hw
Flexible arrangements frequently	y, some need to be agreed with line man.
used	
Policies for carers	y, sp. leave
Commuting/Location	
Location of org.	city, good – close shopping, but traffic
Dominant method of transport	mixed, pt/car
Long commutes?	Some, WM
Substitution of commute for	y, more at snr levels
migration?	
Workers required to be mobile	dns
Does organisation consider	y, use flexi to improve, but parking an
commute important impact on	issue
working day?	
Link between commute and stress	dns
Use of commute as multi-activity	y, in late can school-run, miss traffic
journey – school run, shopping	
Work travel	not much, costs covrd
Transport Policy	
Car parking an issue?	y, most controv. issue
Schemes in place e.g. lottery/car	lot. sys. – better odds car-share
share	

Promotion of other forms of	n
transport	
Impact of car parking levy	dnknow
Recruitment and Retention	
Recruit/Retent. good/bad?	good, but loss of jobs
Impact of flexible work availability	Good, low turnover – ppl likel flexi
Leave due to difficulties with hours	n
Leave due to difficulties with	n
commute	
City/non-city location impact	city – pos.
Gender/Household Issues	
Full-time parents working at org?	y, incl. man.
Difference in male/female use of	More fem. but most staff gen.
flexible arrangements	ç
Females in senior roles + impacts	Y, sen. man. Reduce. In long hour cult. + use of flexi.

Anything else – misc.

257

5 Survey Advertisement





Research into the changing working and commuting patterns of managers and professionals

Would you like to be involved in an exciting academic research project and have the chance to win a luxury hamper delivered in time for Christmas 2006?

The research, which is funded by the Economic and Social Research Council, and conducted by Nottingham Trent University, examines the changing working and commuting patterns of managers and professionals (and their households) employed in organisations in Nottingham.

The aims of the research include examining the effectiveness of the *Working Time Regulations* maximum 48 hour working week, in reducing the working hours of managers and professionals. Additionally, the research will examine the impacts to workers and their households of the 'work-life balance' campaign, the 'new economy', and of changing mobility, longer and increasingly diffuse commuting patterns.

Follow the link below to register your details to agree to take part in this important research project.

http://ess.ntu.ac.uk/sutton/formfiles/eb016020/registration.htm

When you have completed and submitted the registration form your details will be sent to the researcher, who will then post out a questionnaire. The questionnaire is around 40 questions in length, and should take no longer than 20 minutes to complete. It should be completed by you, and your partner (if present). The completed questionnaire should then be returned in the stamped addressed envelope provided. The questionnaire data will be anonymised and kept completely confidential.

The first 30 respondents from each organisation will automatically be entered into a prize draw for a **luxury hamper** upon completing and returning the questionnaire (draw to be held on 1^{st} December 2006).

Upon completion of the project the researcher will issue each organisation a summary of the results. This will provide an insight into the internal labour patterns of organisations in Nottingham.

Researcher contact details:

Address: Mr D. Wheatley, Department of Accounting, Finance, and Economics, Chaucer Room 496, Nottingham Trent University, Burton Street, Nottingham, NG1 4BU. **Email:** daniel.wheatley@ntu.ac.uk.

6 Personal Details Form

Research into the changing working and commuting patterns of managers and professionals

This survey was created by Mr D. Wheatley, a researcher at NTU.

Thank you for showing interest in this exciting research project. Please complete the form below to register your interest in taking part in the research.

Your details will be sent to the researcher, who will then post out a questionnaire to the below address. The questionnaire should be completed by you, and your partner (if present), and then returned in the stamped addressed envelope provided.

Complete all fields. **Statement of consent:** I agree to take part in this research project Ο Yes C No **Personal Details** Surname Forename(s) Please enter your address Postcode Telephone number (include std code) Please enter your E-mail address Please enter the name of your employer

Your details will be used solely for this research and all information in this form, and that given in the questionnaire, will be kept strictly confidential.

7 Questionnaire with covering letter

Nottingham Trent University Burton Street Nottingham NG1 4BU

Daniel Wheatley Nottingham Trent University Burton Street Nottingham NG1 4BU

9th November 2006

Dear Respondent,

Thank you for your interest in this research project, and for your willingness to take part. I have included a questionnaire and a stamped addressed envelope in which to return it.

The questionnaire is divided into seven sections. Section A refers to the household as a whole. Sections B, C, and D are for you to complete. Sections E, F and G are for your partner (where applicable). The information given in the questionnaire will remain strictly confidential. Only aggregate statistical totals will be used in the published results of the survey.

To return the questionnaire simply post it in the stamped addressed envelope included. Any queries related to the completion of the questionnaire should be referred to Daniel Wheatley (daniel.wheatley@ntu.ac.uk).

Upon return of the questionnaire you will be entered into the prize draw for a luxury hamper, which will be drawn on the 1st December 2006. Good Luck!

Sincerely,

Daniel Wheatley

Nottingham Business School

NOTTINGHAM[®] TRENT UNIVERSITY

Working 9 to 5? The changing patterns of Commuting and Work among Managers and Professionals

A research project funded by the Economic and Social Research Council



The questionnaire is divided into seven sections. Section A refers to the household as a whole. Sections B, C, and D are for you to complete. Sections E, F and G are for your partner (where applicable). Any queries related to the completion of the questionnaire should be referred to Daniel Wheatley (daniel.wheatley@ntu.ac.uk). Details for returning the completed questionnaire are included on the final page.

Section A: General Household Details

Please tick appropriate box, unless stated otherwise. Complete all sections in Block Capitals.

A1. Household Composition

Please complete for <u>all</u> members of household, including non-relations (lodgers or employees for example).

Person No.	Name	Age	Place of Birth (and country if not UK)	Sex	Position in Household
Example	DANIEL	30	NOTTINGHAM	Μ	HUSBAND OF RACHEL
Example	RACHEL	25	DERBY	F	WIFE OF DANIEL
1					
2					
3					
4					
5					
6					

A2. Housing Tenure.

Owner Occupier (owned outright or with a mortgage)	
Rented or provided with a job or business	
Rented Privately	
Rented from Local Authority	
Rented from Housing Association	

Working 9 to 5? Complex patterns of Time Allocation among Managers and Professionals in Dual Career Households

Other (specify)

A3. Property type.

Detached house/bungalow	
Semi-detached house/bungalow	
Terraced	
Flat/Apartment	
Other (specify)	• • • • • • • • • • • • • • • • • • • •

A4. Length of time in current property. If 12 months or under answer question A5.

Less than 6 months	
6-12 months	
Over 12 months, but less than 2 years	
2-5 years	
6-10 years	
11-20 years	
Over 20 years	

A5. If you have moved residence in the last 12 months, why did you move?

Relocation of current job	
Change of job	
Move closer to job	
Change in tenure	
Change in size of household	
Move to a better or more suitable residence	
Move closer to relatives/friends	
Near to school	
Environmental reasons	
Aspiration to live in the country	
Other (specify)	• • • • • • • • • • • • • • • • • • • •

A6. Number of cars and vans in household (including company vehicles).

None	
One	
Two	

Three
More than three

Section B: Your Working patterns

Please tick appropriate box, unless stated otherwise.

Sections B, C, and D are about the working, commuting and time use patterns respectively, for you and section E, F and G for your partner. Please ensure all appropriate sections are completed.

B1. Your Career History. Give details of jobs held in last 10 years. Put in reverse chronological order.

	Job Title	Employer	Town	Dates	Reasons for leaving
Job 1					
Job 2					
Job 3					
Job 4					
Job 5					
Job 6					

B2. Qualifications. Please tick all qualifications currently held.

No formal Qualifications	
GCSE or equivalent	
A Level/Scottish higher	
OND	
HND	
Nursing/Teaching Qualification	
First Degree	
Higher Degree	
Professional Qualification	
Foreign Qualification	

Other (specify)

.

B3. Economic position (in the past week). If not in employment move to question B24.

Working for an employer	
Self-employed, employing other people	
Self-employed, not employing other people	
On a government employment or training scheme	
Waiting to start a job you have already accepted	
Unemployed and looking for a job	
At school or in other full-time education	
Unable to work due to long-term sickness or disability	
Retired from paid work	
Looking after the home or family	

B4. Please give the full title of your main current job.

.....

B5. Please give the name of your employer. Give the trading name if one is used. Do not use abbreviations.

.....

B6. Industry Sector in current job.

Agriculture and Fishing	
Energy and Water	
Manufacturing	
Construction	
Distribution, Hotels and Restaurants	
Transport and Communications	
Banking, Finance, and Insurance	
Public Admin., Education, Health	
Other Services	

B7. Please indicate the type of contract you hold.

Permanent	
Fixed Term Contract	
Term only	

Seasonal				
Other (specify)				
B8. Length of ti	me in current	t employn	nent.	
		Years		Months
B9. Do you worl	k full-time or	part-time	e hours in yo	our current job?
Full-time				
Part-time				
B10. Do you wo	rk flexible ho	urs?		
Yes				
No				
B11. Basic usua	l hours of wo	rk (not ind	cluding overt	ime).

..... Hours

B12. Do you work overtime? If 'yes' answer question B13-14, if answered 'no' move to question B15.

Yes □ No □

B13. Usual hours of paid overtime per week.

..... Hours

B14. Usual hours of unpaid overtime per week.

..... Hours

B15. Total usual hours of work per week. Include both paid and unpaid overtime. This will be the same as basic usual hours if no overtime is worked.

..... Hours

B16. Are you able to work from home? If 'yes' answer question B17, otherwise move to question B18.

Yes □ No □

B17. How many hours do you work from home per week?

..... Hours

B18. Would you prefer to work shorter hours than at present? If 'yes' answer question B19-20, if answered 'no' move to question B21.

Yes □ No □

B19. Would you prefer shorter hours, even if this resulted in a reduction in pay?

Yes	Ľ]
No]

B20. Would you be more prepared to continue to work your current total hours, if all your overtime were paid? Do not answer if you work no overtime.

Yes	
No	

B21. Do you enjoy your job?

Yes □ No □

B22. Why do/don't you enjoy your job?

B23. Are you paid a salary or wage in current employment?

Salary	
Wage	

B24. Gross (before tax) annual income in the last 12 months.

£

B25. Do you provide care to any persons? If 'yes' answer question B26-27. If 'no' move to section C.

Yes □ No □

B26. Who do you provide care to?

Other (specify)	
Non-family/Volunteer work	
Non-family member	
Family member suffering illness	
Elderly relative	
Child/Children	

B27. Number of hours of care given per week.

..... Hours

Please continue to Section C

If not in employment continue to section D

Section C: Your Commuting Patterns Please tick appropriate box, unless stated otherwise.

C1. Average home to work travel time (minutes).

..... Minutes

C2. Distance of travel from home to work (km). If 'work from home' continue to section D.

Note: 1.61 km = 1 mile.

..... km

C3. How many days a week do you usually work (in your job)?

..... Days

C4. Is there a maximum time, over which you would not be willing to commute for work?

Yes (state maximum time)	Minutes
No	

C5. Is there a maximum distance, over which you would not be willing to commute for work?

Yes (state maximum distance)	km
No	

C6. Usual method of transport to work. If you don't travel by car move to question C9.

Car/Van	Tram	
Taxi	Bus	
Motorbike	Bicycle	
Train	Walk	

C7. If usually travelling by car/van, how do you usually do this?

Driver	
Passenger	
Sometimes driver/sometimes passenger	
	-

C8. Would the introduction of the parking levy on your employer affect your commute?

Yes, change method of transport to work	
Yes, lengthen travel to work	
No	

C9. Do you commute as an alternative to permanent residential migration closer to your place of work? If 'yes' answer question C10.

Yes	
No	

C10. Why is a potentially longer commute a more attractive alternative to permanent residential migration? Tick the most important reason.

Hassle of changing residence	
Can't afford to move	
Prefer current living environment	
Stay close to relatives/friends	
Stay close to school (or catchment area)	
May not stay in current job	
Current residence a compromise between yourself and partners place of work	
Other (specify)	

Please continue to Section D

Section D: Your Usual Weekly Time Use Please tick appropriate box, unless stated otherwise.

D1. What are your total hours of direct employment related activity. This includes working hours, any overtime, and all time spent commuting.

..... Hours

D2. How long do you spend per week on all work related activity. This includes the above, with the addition of unpaid work such as caring.

..... Hours

D3. Would you be interested in taking part in a follow-up interview?

Yes □ No □

Thank you for completing your section of the questionnaire.

The remaining sections (E, F, and G) should be completed by your partner (where applicable)

Section E: Working patterns (Partner) Please tick appropriate box, unless stated otherwise. Please ensure all appropriate sections are completed. **E1.** Career History (Partner). Give details of jobs held in last 10 years. Put in reverse chronological order.

	Job Title	Employer	Town	Dates	Reasons for leaving
Job 1					
Job 2					
Job 3					
Job 4					
Job 5					
Job 6					

E2. Qualifications. Please tick all qualifications currently held.

No formal Qualifications	
GCSE or equivalent	
A Level/Scottish higher	
OND	
HND	
Nursing/Teaching Qualification	
First Degree	
Higher Degree	
Professional Qualification	
Foreign Qualification	
Other (specify)	

E3. Economic position (in the last week). If not in employment move to question E24.

Working for an employer

E4. Please give the full title of your main current job.

.....

E5. Please give the name of your employer. Give the trading name if one is used. Do not use abbreviations.

.....

E6. Industry Sector in current job.

Agriculture and Fishing	
Energy and Water	
Manufacturing	
Construction	
Distribution, Hotels and Restaurants	
Transport and Communications	
Banking, Finance, and Insurance	
Public Admin., Education, Health	
Other Services	

E7. Please indicate the type of contract you hold.

Permanent	
Fixed Term Contract	
Term only	
Seasonal	
Other (specify)	

E8. Length of time in current employment.

..... Years Months

E9. Do you work full-time or part-time hours in your current job?

Full-time	
Part-time	

E10. Do you work flexible hours?

Yes	
No	

E11. Basic usual hours of work (not including overtime).

..... Hours

E12. Do you work overtime? If 'yes' answer question E13-14, if answered 'no' move to question E15.

Yes □ No □

E13. Usual hours of paid overtime per week.

..... Hours

E14. Usual hours of unpaid overtime per week.

..... Hours

E15. Total usual hours of work per week. Include both paid and unpaid overtime. This will be the same as basic usual hours if no overtime is worked.

..... Hours

E16. Are you able to work from home? If 'yes' answer question E17, otherwise move to question E18.

Yes □ No □

E17. How many hours do you work from home per week?

..... Hours

E18. Would you prefer to work shorter hours than at present? If 'yes' answer question E19-20, if answered 'no' move to question E21.

Yes □ No □

E19. Would you prefer shorter hours, even if this resulted in a reduction in pay?

Yes	
No	

E20. Would you be more prepared to continue to work your current total hours, if all your overtime were paid? Do not answer if you work no overtime.

Yes	
No	

E21. Do you enjoy your job?

Yes □ No □

E22. Why do/don't you enjoy your job?

E23. Are you paid a salary or wage in current employment?

Salary□Wage□

E24. Gross (before tax) annual income in the last 12 months.

£

E25. Do you provide care to any persons? If 'yes' answer question E26-27. If 'no' move to section F.

Yes	
No	

E26. Who do you provide care to?

Working 9 to 5? Complex patterns of Time Allocation among Managers and Professionals in Dual Career Households

Other (specify)	
Non-family/Volunteer work	
Non-family member	
Family member suffering illness	
Elderly relative	
Child/Children	

E27. Number of hours of care given per week.

..... Hours

•

Please continue to Section F

If not in employment continue to section G

Section F: Commuting Patterns (Partner) Please tick appropriate box, unless stated otherwise.

F1. Average home to work travel time (minutes).

..... Minutes

F2. Distance of travel from home to work (km). If 'work from home' continue to section D. Note: 1.61 km = 1 mile.

..... km

F3. How many days a week do you usually work (in your job)?

..... Days

F4. Is there a maximum time, over which you would not be willing to commute for work?

Yes (state maximum time)Minutes No □

F5. Is there a maximum distance, over which you would not be willing to commute for work?

Yes (state maximum distance)km

No

F6. Usual method of transport to work. If you don't travel by car/van move to question F9.

Car/Van	Tram	
Taxi	Bus	
Motorbike	Bicycle	
Train	Walk	

F7. If usually travelling by car/van, how do you usually do this?

Driver	
Passenger	
Sometimes driver/sometimes passenger	

F8. Would the introduction of the parking levy on your employer affect your commute?

Yes, change method of transport to work	
Yes, lengthen travel to work	
No	

F9. Do you commute as an alternative to permanent residential migration closer to your place of work? If 'yes' answer question F10.

Yes □ No □

F10. Why is a potentially longer commute a more attractive alternative to permanent residential migration? Tick the most important reason.

Hassle of changing residence	
Can't afford to move	
Prefer current living environment	
Stay close to relatives/friends	
Stay close to school	
May not stay in current job	
Current residence a compromise between yourself and partners place of work	
Other (specify)	

Please continue to Section G

Section G: Usual Weekly Time Use (Partner) Please tick appropriate box, unless stated otherwise.

G1. What are you total hours of direct employment related activity. This includes working hours, any overtime, and all time spent commuting.

..... Hours

G2. How long do you spend per week on all work related activity. This includes the above, with the addition of unpaid work such as caring.

..... Hours

Thank you for your assistance in completing the questionnaire Please return completed questionnaires in the stamped addressed envelope provided

8 Distinctions between Managers and Professionals: Two-Step Cluster Analysis (LFS, 2008)

Auto-Clustering

Number of Clusters	Schwarz's Bayesian Criterion (BIC)	BIC Change(a)	Ratio of BIC Changes(b)	Ratio of Distance Measures(c)
1	84756.568			
2	70392.088	-14364.480	1.000	3.095
3	65877.246	-4514.842	.314	1.207
4	62167.089	-3710.157	.258	1.189
5	59075.736	-3091.353	.215	1.103
6	56289.156	-2786.581	.194	1.304
7	54195.362	-2093.794	.146	1.002
8	52106.244	-2089.118	.145	1.163
9	50335.712	-1770.532	.123	1.094
10	48733.057	-1602.655	.112	1.299
11	47542.306	-1190.751	.083	1.171
12	46552.954	-989.352	.069	1.090
13	45660.673	-892.281	.062	1.066
14	44835.263	-825.410	.057	1.020
15	44029.255	-806.008	.056	1.002

a The changes are from the previous number of clusters in the table.

b The ratios of changes are relative to the change for the two cluster solution.

c The ratios of distance measures are based on the current number of clusters against the previous number of clusters.

Cluster Distribution

			% of	
		Ν	Combined	% of Total
Cluster	1	2215	31.6%	1.8%
	2	4800	68.4%	4.0%
	Combined	7015	100.0%	5.8%
Excluded Cases		113814		94.2%
Total		120829		100.0%

9 Distinctions between Managers and Professionals: Loglinear Logit Regression Model (LFS, 2008)

		Ν
Cases	Valid	6390
	Missing	114439
	Weighted Valid	6390
Cells	Defined Cells	2880
	Structural Zeros	0
	Sampling Zeros	1896
Categories	Major Occup Group 2	2
	Total usual hours 48	2
	Shorter hours even if less	2
	pay	Z
	Full time	1
	Industry Sector	9
	Age bands	5
	Sex	2
	Married/co-habiting/Civil	2
	Partners	Z
	Public or private sector	2
	(reported)	2

Data Information

Convergence Information(a,b)

Maximum Number of Iterations	10
Converge Tolerence	.00100
Final Maximum Absolute Difference	.00056(c)
Final Maximum Relative Difference	.00033
Number of Iterations	5

a Model: Multinomial Logit

b Design: Constant + MajOcc2 + MajOcc2 * Agebands + MajOcc2 * fdpch19 + MajOcc2 * industrysector + MajOcc2 * mardy6 + MajOcc2 * publicr + MajOcc2 * sex + MajOcc2 * shorterhourslesspay + MajOcc2 * totalhrs48

c The iteration converged because the maximum absolute changes of parameter estimates is less than the specified convergence criterion.

Goodness-of-Fit Tests(a,b)

	Value	df	Sig.
Likelihood Ratio	887.985	1420	1.000
Pearson Chi-Square	751.822	1420	1.000

a Model: Multinomial Logit

b Design: Constant + MajOcc2 + MajOcc2 * Agebands + MajOcc2 * fdpch19 + MajOcc2 * industrysector + MajOcc2 * mardy6 + MajOcc2 * publicr + MajOcc2 * sex + MajOcc2 * shorterhourslesspay + MajOcc2 * totalhrs48

Analysis of Dispersion(a,b)

	Entropy	Concentration	df
Model	830.523	723.343	19
Residual	3474.044	2347.826	6370
Total	4304.567	3071.169	6389

a Model: Multinomial Logit

b Design: Constant + MajOcc2 + MajOcc2 * Agebands + MajOcc2 * fdpch19 + MajOcc2 * industrysector + MajOcc2 * mardy6 + MajOcc2 * publicr + MajOcc2 * sex + MajOcc2 * shorterhourslesspay + MajOcc2 * totalhrs48

Measure of Association(a,b)

Entropy	.193
Concentration	.236

a Model: Multinomial Logit

b Design: Constant + MajOcc2 + MajOcc2 * Agebands + MajOcc2 * fdpch19 + MajOcc2 * industrysector + MajOcc2 * mardy6 + MajOcc2 * publicr + MajOcc2 * sex + MajOcc2 * shorterhourslesspay + MajOcc2 * totalhrs48

Parameter Estimate (e^{λ}) Summary

	Estimate (e^)		
Parameter	Manager	Professional	
Preference for shorter hours			
Prefer shorter hours, even if less pay (Yes)	-0.215 (0.807)	0(1)	
Prefer shorter hours, even if less pay (No)	0(1)	0(1)	
Total usual hours			
Total usual hours over 48 hours	0.137 (1.147)	0(1)	
Total usual hours under 48 hours	0(1)	0(1)	
Gender			
Male	-0.354 (0.702)	0(1)	
Female	0(1)	0(1)	
Age			
16-24	-1.067 (0.344)	0(1)	
25-34	-0.576 (0.562)	0(1)	
35-44	0.075 (1.078)	0(1)	
45-54	0.131 (1.140)	0(1)	
55+	0(1)	0(1)	
No. of dependent children under 19	0.211 (1.235)	0(1)	
Married/Cohabiting			
Married/Cohabiting	0.066 (1.068)	0(1)	
Not Married	0(1)	0(1)	
Public/Private Sector			
Private Sector	0.965 (2.625)	0(1)	
Public Sector	0(1)	0(1)	
Industry Sector			
Agriculture and Fishing	1.239 (3.452)	0(1)	
Energy and Water	-0.632 (0.532)	0(1)	
Manufacturing	-0.118 (0.889)	0(1)	
Construction	-0.078 (0.925)	0(1)	
Distribution, Hotels, Restaurants	1.688 (5.409)	0(1)	
Transport and Communications	0.434 (1.543)	0(1)	
Banking, Finance and Insurance	-0.771 (0.463)	0(1)	
Public Admin. Education and Health	-1.258 (0.284)	0(1)	
Other Services	0(1)	0(1)	

10 Preferences for Reductions in Hours: Binary Logistic Regression (Nottingham, 2006)

Case Processing Summary

Unweighted Cases(a)		Ν	Percent
Selected Cases	Included in Analysis	118	82.5
	Missing Cases	25	17.5
	Total	143	100.0
Unselected Cases		0	.0
Total		143	100.0

a If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value			
No	0			
Yes	1			

Categorical Variables Codings

		Frequency	Parameter coding			
		(1)	(2)	(3)	(4)	(1)
Age bands	16-24	5	1.000	.000	.000	.000
	25-34	25	.000	1.000	.000	.000
	35-44	39	.000	.000	1.000	.000
	45-54	34	.000	.000	.000	1.000
	55+	15	.000	.000	.000	.000
Major Occupation (grouped 4+)	Managers and senior officials	59	.000	.000	.000	
	Professionals	44	1.000	.000	.000	
	Associate Professional and Technical	8	.000	1.000	.000	
	All other occupations	7	.000	.000	1.000	
Income (3 bands)	0-19999	24	1.000	.000		
	20000-39999	68	.000	1.000		
	40000+	26	.000	.000		
Public/Private Sector (voluntary in private)	Public	80	1.000			
1 /	Private including Voluntary	38	.000			
Do you provide care to any persons?	Yes	37	1.000			
•	No	81	.000			
Gender	Female	55	1.000			
	Male	63	.000			
Block 0: Beginning Block Classification Table(a,b)

	Observed		Predicted Would you prefer to work shorter hours than at present? Percenta			
			No	Yes	Correct	
Step 0 Wo wor than	Would you prefer to	No	0	44	.0	
	than at present?	Yes	0	74	100.0	
	Overall Percentage				62.7	

a Constant is included in the model.

b The cut value is .500

Variables in the Equation

		В	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	.520	.190	7.458	1	.006	1.682

Block 1: Method = Enter Omnibus Tests of Model Coefficients

	-	Chi-square	df	Sig.
Step 1	Step	32.663	14	.003
	Block	32.663	14	.003
	Model	32.663	14	.003

Model Summary_____

	-2 Log	Cox & Snell	Nagelkerke R
Step	likelihood	R Square	Square
1	123.208(a)	.242	.330

a Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	5.066	8	.750

Classification Table(a)

Observed		Predicted Would you prefer to work shorter hours than at present? Percentage Correct			
Step 1	Would you prefer to	No	No	Yes	No
work shorter hours than at present?	Yes	22	22 62	50.0 83.8	
_	Overall Percentage		12	02	71.2

a The cut value is .500

11 Modelling Mobility: Two-Step Cluster Analysis (LFS, 2008)

Auto-Clustering						
Number of Clusters	Schwarz's Bayesian Criterion (BIC)	BIC Change(a)	Ratio of BIC Changes(b)	Ratio of Distance Measures(c)		
1	132746.309					
2	121229.944	-11516.365	1.000	1.342		
3	112696.038	-8533.906	.741	1.116		
4	105064.443	-7631.595	.663	1.354		
5	99476.073	-5588.371	.485	1.243		
6	95015.269	-4460.803	.387	1.055		

Auto-Clustering

a The changes are from the previous number of clusters in the table.

b The ratios of changes are relative to the change for the two cluster solution.

c The ratios of distance measures are based on the current number of clusters against the previous number of clusters.

Cluster Distribution

			% of	-
		Ν	Combined	% of Total
Cluster	1	2471	22.3%	2.0%
	2	1963	17.8%	1.6%
	3	3210	29.0%	2.7%
	4	3412	30.9%	2.8%
	Combined	11056	100.0%	9.2%
Excluded Cases		109773		90.8%
Total		120829		100.0%

12 Modelling Mobility: Two-Step Cluster Analysis (Nottingham, 2006)

Auto-Clustering

Number of Clusters	Schwarz's Bayesian Criterion (BIC)	BIC Change(a)	Ratio of BIC Changes(b)	Ratio of Distance Measures(c)
1	1593.283		-	
2	1534.098	-59.185	1.000	1.392
3	1521.414	-12.684	.214	1.308
4	1536.659	15.245	258	1.084
5	1558.936	22.277	376	1.175
6	1593.654	34.718	587	1.356
7	1647.059	53.404	902	1.004
8	1700.688	53.629	906	1.270
9	1765.412	64.724	-1.094	1.071
10	1832.848	67.436	-1.139	1.063
11	1902.563	69.714	-1.178	1.098
12	1975.515	72.952	-1.233	1.235
13	2054.730	79.215	-1.338	1.074
14	2135.775	81.044	-1.369	1.013
15	2217.134	81.359	-1.375	1.020

a The changes are from the previous number of clusters in the table.b The ratios of changes are relative to the change for the two cluster solution.

c The ratios of distance measures are based on the current number of clusters against the previous number of clusters.

Cluster Distribution

		Ν	% of Combined	% of Total
Cluster	1	45	36.6%	31.5%
	2	47	38.2%	32.9%
	3	31	25.2%	21.7%
	Combined	123	100.0%	86.0%
Excluded Cases		20		14.0%
Total		143		100.0%

Centroids

	Cluster				
	1	2	3	Combined	
Length of time at address	4.8	4.0	4.1	4.3	
Length of time in current employment	10.5	7.5	8.4	8.8	
Total usual hours of work	35.2	43.5	42.7	40.3	
Average home to work travel time (minutes)	28.4	49.9	31.8	37.4	
Distance of travel from home to work (km)	8.2	33.6	12.7	19.1	
No. of People in Household	2.6	2.4	2.2	2.4	
Age	43.1	41.1	41.5	41.9	
n	45	47	31	123	

Two-step cluster analysis continuous variable means (Primary data)

	Cluster (Percentage)			
	1	2	3	Combined
Major Occupation (grouped 4+)				
Managers and senior officials	60.0	31.9	64.5	50.4
Professionals	17.8	63.8	19.4	35.8
Associate Professional and Technical	13.3	4.3	3.2	7.3
All other occupations	8.9	0.0	12.9	6.5
Public or Private Sector				
Private including voluntary	11.1	14.9	100.0	35.0
Full-time or Part-time				
Full-time	73.3	100.0	100.0	90.2
Method of Transport to Work				
Car/Van/Motorbike	42.2	63.8	96.8	64.2
Public Transport	24.5	31.9	0.0	21.1
Manual (Walk, Bicycle)	33.3	4.3	3.2	14.6
Gender				
Male	11.1	74.5	58.1	47.2
n	45	47	31	123

Two-step cluster analysis categorical variable groupings (Primary data)

13 Modelling Mobility: Binary Logistic Regression Model (LFS, 2008)

Case Processing Summary

Unweighted Cases(a	u)	Ν	Percent
Selected Cases	Included in Analysis	32984	27.3
	Missing Cases	87845	72.7
	Total	120829	100.0
Unselected Cases		0	.0
Total		120829	100.0

a If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
No	0
Yes	1

Categorical Variables Codings

		Freq.	Parameter coding							
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)
Industry sectors in	A-B: Agriculture &	260	.000	.000	.000	.000	.000	.000	.000	.000
main job	C.E: Energy & water	387	1.000	.000	.000	.000	.000	.000	.000	.000
	D: Manufacturing	5209	.000	1.000	.000	.000	.000	.000	.000	.000
	F: Construction	2080	.000	.000	1.000	.000	.000	.000	.000	.000
	G-H: Distribution, hotels & restaurants	7037	.000	.000	.000	1.000	.000	.000	.000	.000
	I: Transport & communication	2506	.000	.000	.000	.000	1.000	.000	.000	.000
	J-K: Banking, finance & insurance etc	5438	.000	.000	.000	.000	.000	1.000	.000	.000
	L-N: Public admin, educ & health	11767	.000	.000	.000	.000	.000	.000	1.000	.000
	O-Q: Other services	1864	.000	.000	.000	.000	.000	.000	.000	1.000
Age (bands)	16-24	4236	1.000	.000	.000	.000				
	25-34	7506	.000	1.000	.000	.000				
	35-44	9903	.000	.000	1.000	.000				
	45-54	8608	.000	.000	.000	1.000				
	55+	6295	.000	.000	.000	.000				
Major Occup. Group	Managers and senior officials	5774	.000	.000	.000					
	Professionals	4878	1.000	.000	.000					
	Associate Professional and Technical	5225	.000	1.000	.000					
	All other Occupations	20671	.000	.000	1.000					
Usual Method of Transport to Work	Car, Van, Motorbike	26752	.000	.000						
•	Public Transport	4869	1.000	.000						
	Manual (Walk, Bicycle)	4927	.000	1.000						
Prefer shorter hours than at present model	Yes	16760	1.000							
1	No	19788	.000							
Full-time or part- time in main job	Full-time	27754	1.000							
	Part-time	8794	.000							
Prefer shorter hours than at present	Yes	16760	1.000							
-	No	19788	.000							
Married/co-habiting	Married/Cohabiting	25554	1.000							
a	Non married	10994	.000							
Sex	Male	18284	.000							
	remale	18264	1.000							

Block 0: Beginning Block Classification Table(a,b)

	Observed		Predicted			
			Live and V LA	Vork in same D edit	Percentage Correct	
			No	Yes	No	
Step 0	Live and Work in same LAD edit	No	0	15045	.0	
		Yes	0	17939	100.0	
	Overall Percentage				54.4	

a Constant is included in the model.

b The cut value is .500

Variables in the Equation

		В	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	.176	.011	253.264	1	.000	1.192

Block 1: Method = Enter Omnibus Tests of Model Coefficients

	-	Chi-square	df	Sig.
Step 1	Step	12754.425	26	.000
	Block	12754.425	26	.000
	Model	12754.425	26	.000

Model Summary

Step	-2 Log	Cox & Snell	Nagelkerke R
	likelihood	R Square	Square
1	32716.863(a)	.321	.429

a Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Classification Table(a)

Observed		Live and W LAD	Predicted Live and Work in same Percent LAD edit Corre		
Step 1	Live and Work in	No	No 10264	Yes 4781	No 68.2
	Overall Percentage	Yes	2847	15092	84.1 76.9

a The cut value is .500