

Institute for Social and Economic Research



Taking the long view:
the ISER Report 2004/5

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About ISER

The Institute for Social and Economic Research (ISER) specialises in the production and analysis of large and often complex datasets. It collects and uses longitudinal data – evidence that tracks changes in the lives of the same individuals over time – household and other panel studies, as well as diary studies, and cross-national and historical comparative materials.

ISER is an interdisciplinary institute, with economists, sociologists, demographers and social statisticians. It is an independent department of the University of Essex and is core-funded by the university and the UK's Economic and Social Research Council (ESRC). ISER is organised as two divisions: a research centre; and a resource centre.

The research centre: MiSoC

ISER's research activities have developed out of the Research Centre for Micro-social Change (MiSoC), which was founded in 1989. MiSoC designed the British Household Panel Survey (BHPS), the first wave of which collected data on more than 10,000 respondents from 5,000 UK households in 1991. ISER researchers have continued to follow this group – and their descendents and household co-residents – ever since.

The resource centre: ULSC

The UK Longitudinal Studies Centre (ULSC) is the national resource centre for promoting longitudinal research and for the design, management and support of longitudinal surveys. It was established by ESRC as an independent centre in 1999. ULSC activities include collecting the BHPS and its extensions in Scotland, Wales and Northern Ireland; and running a methodological research programme to improve longitudinal survey and analysis methods.

International links

Through extensive collaboration with other specialist longitudinal research groups in Europe and North America, ISER has built up a unique collection of cross-national comparative data sets. These are generally available without restriction to all academic researchers. ISER also hosts visits from researchers and research groups on the Essex campus, giving them access to longitudinal data as well as cross-national data sets from all over Europe.

Director's introduction

The Institute for Social and Economic Research (ISER) has two core tasks: providing longitudinal data resources and support for their collection and analysis; and undertaking a major programme of sociological, economic and demographic research using the data. ISER has a diverse pattern of funding, provided by the UK's Economic and Social Research Council (ESRC), the University of Essex, the European Union (EU), UK government departments, research foundations and a small amount of commercial work.

ISER includes two major ESRC centres, the Research Centre for Micro-social Change (MiSoC) and the UK Longitudinal Studies Centre (ULSC). Less than half of ISER's total funding now comes through these centres – but this core funding source is still of vital importance. In the last year, we have won new five-year contracts for both centres. MiSoC's 2004-9 research theme is *The Dynamics of Social Position: Life chances within and between generations*. The refunded ULSC quinquennial programme includes continued responsibility for the British Household Panel Survey, as well as for the provision of generic support to the UK's longitudinal research community.

These two large grants, awarded respectively by ESRC's Strategic Research Board and Research Resources Board, together with a large award to support ISER's new four-year research programme on time use from ESRC's Research Grants Board (see pages 8-9), add up to well in excess of £17 million. We believe this to be by far the largest sum that ESRC has ever awarded to an individual university department in a single year. In addition to these funds, we also have leading roles in three multimillion euro EU sixth framework research programmes awarded during 2004.

As a result of these new funds, ISER is currently experiencing some expansion. The year has seen a number of new appointments. Stephen Pudney was appointed to a chair in ISER; new research on youth and risky and deviant behaviour arrives with him. Holly Sutherland has also taken a chair in ISER – bringing the Microsimulation Unit with her from Cambridge – to lead a new cross-national comparative programme in tax and benefit modelling. Arnie Aassve and Alasdair Crockett (from the Data Archive) have been appointed as a chief research officers; and Eric Harrison and Man-Yee Kan as senior research officers. More research appointments are in the pipeline.

We have also had three departures. Elena Bardasi joined the World Bank in Washington as a senior economist; Marco Francesconi became a reader in the economics department at Essex (though remaining an ISER research associate); and Karen Robson was appointed as an assistant professor at York University, Toronto.

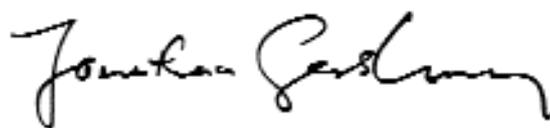
ISER researchers have maintained their high level of publication in leading international journals. Twenty-seven articles covering a wide range of subjects appeared this year in *The Economic Journal*, *British Journal of Sociology*, *Journal of Social Policy*, *Journal of the Royal Statistical Society* and *Journal of Applied Econometrics* among others.

Seven books and major reports were published during the year, including *Social Europe: Living standards and welfare states* edited by Richard Berthoud and Maria Iacovou, which describes an ISER-led programme of research using the European Community Household Panel (ECHP) survey (see pages 6-7).

Seven new PhD students started in 2004, bringing our total to 16. Our visitor programme has continued to make a major contribution to the intellectual life of the institute, with 24 non-UK visitors staying with us for more than two days, of whom eight made visits of between two weeks and eight months.

We have also continued the biannual pattern of conferences shared with our counterpart institute, the German Socio-Economic Panel at the German Institute for Economic Research (DIW) in Berlin. This past year, we organised an international conference for users of the ECHP in Berlin, with more than 200 participants from at least 15 countries.

In short, ISER enters its sixteenth year in good shape, with a number of major new research initiatives.



Jonathan Gershuny
Director

ISER and the family

ISER researchers have been mining a rich seam of longitudinal data to study changing patterns of family life over the past quarter century



ISER researchers have been studying the family throughout the institute's 15-year life. In the initial design of the British Household Panel Survey (BHPS), production of data on the family was a key goal. Not only do we now have data for every year since 1991 on all the adults in each family and their relationships with one another; we also have their birth and partnership histories, which were collected in the second wave of the BHPS (1992) and in the third wave (2001) of the Scottish and Welsh extensions (1999-2004).

The annual data and the histories have provided the foundation for research on a range of topics, including patterns of leaving home; the rise of cohabiting unions and their duration; the dramatic increase in childbearing outside marriage; divorce and union dissolution; 'repartnering'; and the long-term consequences of teenage childbearing.

As the BHPS matured, young adults were matched with their parents, thereby allowing parents' partnership status and employment status to be assigned to each month of a child's life. These 'intergenerational samples' have been used to study the longer-term effects of parents' partnership dissolution and employment patterns on their children.

In 1994, the British Youth Panel was started, collecting annual data on a sample of 12-15 year olds who are children of BHPS panel members. Linking these data with the BHPS has made it possible to investigate the effects of family background on aspects of youth attitudes and behaviour, such as the intention to leave school at 16. These young people have been followed into adulthood through the BHPS, thereby enriching studies of the impact of family background on children's lives as young adults.

ISER research on the family has not been confined to BHPS data. Other work has used the National Child Development Study (the '1958 birth cohort'), the 1970 British Cohort Study, the Family and Children Study, the German Socio-Economic Panel (GSOEP) and the European Community Household Panel, which permits cross-European comparisons of family structures and dynamics. ISER researchers have been mining a rich seam of longitudinal data to study contemporary family behaviour and how the family has changed over the past quarter century.

In response to demand from the research community, each wave of the BHPS features a 'variable component', which collects data on a particular aspect of family life. In 1998,

questions addressed to single and cohabiting people permitted analysis of 'non-resident partnerships', young people's marriage expectations, why people in cohabiting unions choose to cohabit rather than get married and their expectations about the outcome of their union. These questions were repeated in 2003, and questions were also asked about each respondent's number of siblings and their parents' education.

Motivated by concern that poor children become poor adults, ISER researchers are exploring the relationships between family background and socio-economic attainment

In 2001, the BHPS asked respondents whose parents did not live with them about frequency of contact with their parents. They were also asked about help given to and received from parents, and how far away they lived. Similar questions were asked of parents whose adult children lived elsewhere. These data are being used to study how economic resources and other attributes affect the relationships between parents and adult children. ISER researchers are studying similar issues with the GSOEP and the American Survey of Families and Households.

Each wave of the BHPS collects information on child support paid and received. In addition, in 2002, the BHPS identified parents with dependent biological children living elsewhere and parents with children whose other parent lives elsewhere to collect data on frequency of contact between non-resident parents and their children. These data – together with similar information collected from mothers in the Family and Children Study – are being used by ISER researchers to study the interaction between child support and the frequency of divorced fathers' contact with their children.

New findings on family life

During the past year, a number of family studies have been completed or are nearing completion. A paper by David Pevalin and John Ermisch finds that poor mental health increases the risk of dissolving a cohabiting union, and poor mental health immediately after the dissolution of a cohabiting union reduces the chances of repartnering. Other factors such as age and parental status also have significant effects on these events.

In another paper, these authors find that home-owning parents who had their first child when the mother was aged under 22 have house values when aged 30-50 that are 25% lower than those who started their families later. This suggests that the additional expenditure on children among those who started childbearing early works to reduce housing consumption – particularly of 'housing quality' – when the couple is older.

In a forthcoming article in *The Economic Journal*, Ermisch, together with Marco Francesconi and Thomas Siedler, uses data from the BHPS and the GSOEP to estimate the extent to which intergenerational economic mobility is affected by marriage choices. They find that, in both Britain and Germany, the tendency for people to marry someone with similar educational qualifications accounts for 40-50% of the correlation between their parents' and their own family income.

Motivated by concern that poor children become poor adults, ISER researchers have had a continuing interest in the relationships between family background and socio-economic attainment. A paper by Ermisch, Francesconi and Pevalin estimates the effects of living in poverty and in a one-parent family during childhood on outcomes in later life. Stephen Jenkins, together with Francesconi and Siedler, is studying these relationships in Germany and making comparisons with Britain.

Cheti Nicoletti has been assessing the significance of women's education and work experience in accounting for the variation in the timing of motherhood across Europe. She finds that in most countries, higher levels of education have a double effect on the age at which women have their first child, both postponing motherhood and reducing the probability of it happening at all.

The family continues to be high on the research agenda at ISER. New departures include a novel approach to a longstanding issue: the link between population growth and poverty in developing countries. A study by Arnstein Aassve and Stephen Pudney is using micro-data from Albania, Ethiopia and Vietnam to investigate the effects in both directions between poverty and fertility. In collaboration with colleagues at St Andrews, ISER is also attempting to explain why fertility in Scotland is lower than in England.

Work-life balance

Evidence that many people cannot work their preferred number of hours is important for policies intended to improve the balance between work and home life



In a number of projects using data from the British Household Panel Survey, ISER researchers are investigating the relationship between work and home life – the hours people put in (or are required to put in) at work; whether they take second jobs; and the division of labour between husbands and wives in both paid work and domestic chores.

Working hours

Research by René Böheim and Mark Taylor has examined the extent to which workers in Britain are free to choose their working hours. They find that although the majority are satisfied with the hours they work in a typical week, 40% of employees would prefer to work different hours. Of these, the majority would prefer to reduce their hours.

The results show that women who would like to reduce their working hours are more likely than other employed women to leave work, perhaps indicating that there are too few employers offering jobs that require relatively short hours. And although these constraints on hours persist over time, changing jobs or employer helps to reduce them.

Research by Mark Bryan takes a snapshot of weekly working hours across Britain, looking at differences between employers as well as variation in hours within employers. The results show that about a third of the total variation in hours can be attributed to firm-level factors, so that people with the same occupation, qualifications, age and family characteristics, who work in different firms, can be doing very different hours.

In fact, after netting out the various individual effects, there is a gap of over six hours a week between the quarter of firms working the longest hours and the quarter working the shortest hours. These large differences imply that workers should be able to overcome restrictions on hours by changing jobs.

But there is also evidence that relatively few workers move jobs based on their hours preferences, suggesting that moving jobs can be difficult and costly. A separate study by Bryan finds evidence that the hours of workers who want to change their working time are linked to conditions in the local labour market. It seems that these workers are limited in the options for different working hours in their local labour market.

The snapshot of hours also reveals variation in working hours within employers, often associated with differing family circumstances. Within firms, married men work more hours (by about half an hour) and married women work fewer hours (by about an hour). The largest effects are for mothers: the average woman with a child under 12 works six hours less a week than a comparable woman in the same firm with no children. This suggests that there is some flexibility within firms though, since it co-exists with worker dissatisfaction about hours, many workers clearly cannot adjust fully to their preferred number of hours.

Moving home repeatedly for work reasons may be a major contributor to the differences in economic and occupational status between men and women

Overall, the studies by Böheim and Taylor and by Bryan indicate that restrictions on working hours within jobs and within employers are important, and these rigidities need to be addressed if work-life balance policies are to help workers determine their own working hours. Work in progress by Bryan is examining trends in flexible working in the light of the newly introduced right for parents of young and disabled children to request such working patterns.

Second jobs

Workers who would like to increase their hours can also overcome within-job or within-employer constraints on the number of hours they can work by taking a second job. A further study by Böheim and Taylor examines second jobholding in Britain and tests a number of different hypotheses as to why workers choose to work in two jobs.

The research finds that second jobholding is not a temporary adjustment to changes in people's preferences on working hours, but rather that it persists over time. What's more, constraints on hours in the main job are a strong motivation for second jobholding among both men and women. Other reasons for having a second job include low wages or insecurity in the main job and an unexpected deterioration in an individual's financial situation.

Household negotiations

Many decisions affecting work and home life involve some degree of household negotiation. Husbands and wives do not typically make decisions that affect the whole household in isolation, but will discuss how to respond to new job opportunities or changing circumstances. Couples have to make decisions about whether the careers of both partners should be pursued equally and, if not, whose should take precedence. Such decisions inevitably involve compromise.

Work in progress by Mark Taylor is shedding new light on the sacrifices that husbands and wives make to benefit their partner's career by examining the impact of moving home – particularly moving for reasons associated with their partner's job – on subsequent labour market outcomes. Preliminary findings indicate that 'trailing wives' – wives who move because of their husband's career – have higher probabilities of leaving employment and becoming economically inactive than otherwise similar people who do not move. No such effects are found for trailing husbands.

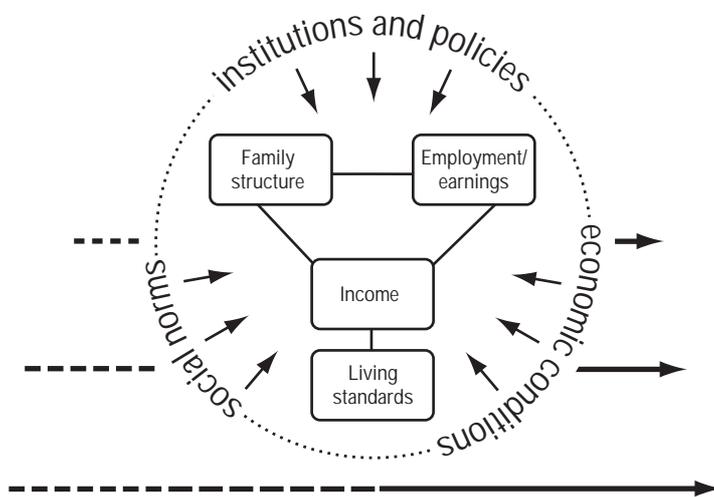
The cumulative effect of repeated moves may be a major contributor to the differences in economic and occupational status between men and women. Ultimately, these differences explain much of the gender differential in pension rights and financial well-being in retirement.

A paper by Elena Bardasi and Mark Taylor indicates that married men also benefit from the division of domestic chores within the household. They find that married men earn more than otherwise similar single men, and that this is largely explained by the domestic division of labour. For example, a married man whose wife is not in paid work – but who is instead mainly responsible for grocery shopping, cooking, laundry and cleaning – earns on average 4% more than an otherwise similar single man. But this wage differential almost disappears if the wife works full-time.

The economic intuition behind this finding is that men whose wives contribute to the domestic chores rather than going out to work are able to spend more time developing the skills and contacts that increase their labour market productivity.

Welfare regimes

Do differences in welfare regimes – ‘social-democratic’, ‘liberal’, ‘corporatist’ or ‘residual’ – provide a useful framework for comparing European countries?



Many of the studies that ISER undertakes with international collaborators involve making comparisons between countries, especially within western Europe. If individuals' life trajectories vary systematically depending on the country they live in, that may reveal much about the nature of social and economic processes – or about the influence of policy. But drawing inferences about these processes is not always easy. At the conclusion of a four-year programme funded by the European Commission, a book by Richard Berthoud and Maria Iacovou reflects on issues arising from cross-country comparative research.

The programme's central research agenda is illustrated in the diagram. In three linked areas – the family, employment and incomes – people may be thought of as making choices in the context of a range of external influences: social norms, economic conditions and institutions/policies. All these things change over time – from the short-term fluctuations in individuals' circumstances to the slower pace of institutional and cultural change – and this dynamic dimension formed a major focus of the programme.

With the exception of some clearly defined policy shifts, it is hard to identify the roles that different social and economic factors play within any single country. These difficulties are multiplied when considering the same questions in the context of international comparisons – especially since the relatively small number of countries available for inclusion in most cross-European comparisons (hitherto confined to the 15 pre-2004 members of the European Union) limits the inferences that can be drawn about the factors behind cross-country variations. However sophisticated the quantitative techniques for analysing large surveys of people in each country, judgements about the reasons behind the variations observed between countries are essentially qualitative.

Variations in outcomes across Europe have two basic components: variations between individuals *within* countries; and variations *between* countries. Key questions then are (a) what is the size of the 'country effect' in comparison with the overall range of differences between individuals; and (b) what factors explain these country effects?

Once the range of variation between countries has been identified, a subsequent question is how far the observable characteristics of countries – political traditions, economic prosperity, religious background and so on – can be used to explain the cross-country differences.

Perhaps the most useful way of trying to make sense of country-level data is to organise countries into categories that are hypothesised to have some underlying similarity. The aim is to provide a theoretical basis for explaining the differences between these categories. The most common means for classifying countries has been on the basis of characteristics of their welfare regimes. Much of ISER's research in this area has used an amended version of the typology proposed by Gosta Esping-Andersen, identifying the following regime types:

- The 'social-democratic' regime type, with an emphasis on entitlement to support from the state and universal benefits. This group is typified by the Scandinavian countries, with the Netherlands also falling into this category in many respects.
- The 'liberal' regime type, with an emphasis on the market as the dominant means of support. Benefits are heavily means-tested to target those most in need. This is most strongly typified by the United States – with Ireland and the UK falling into this category in Europe.
- The 'corporatist' regime type, with a predominance of insurance-based benefits. Austria, Belgium, France, Germany and Luxembourg are members of this group.
- The 'residual' welfare regime type, with poorly developed state provision and heavy reliance on family support, typified in Europe by Greece, Italy, Portugal and Spain.

But welfare regime is not the only way of classifying countries. At least two alternative classifications are possible, which produce very similar groupings:

- *Geography*: The hypothesis here is that neighbouring countries are likely to have close social links and similar economic conditions. Within western Europe, a north/south divide is most commonly identified, with the Scandinavian countries at one end and the southern (often erroneously referred to as Mediterranean) countries at the other. There is no consensus about how the large group of countries in between should be ordered.
- *Religion*: The hypothesis here is that a country's historical religious affiliation will have such an important effect on other areas of social and economic life as to be a primary criterion for comparison. Within Europe, a ranking based on the proportion of the population reported to be Catholics (or Orthodox in Greece) is often useful in explaining variations in family patterns between countries.

All of these approaches have value and their applications are illustrated in ISER's research. There are two main difficulties. One is that there is a strong overlap between the classification systems. The three Scandinavian and the four southern countries appear at the opposite ends of the scale on all three typologies. So it is not possible to say whether differences between these groups of countries are attributable to social policy regime, geographical position, religious affiliation or some other variable. It is only among the remaining eight countries that the ordering varies from model to model, and these are therefore crucial to the interpretation of processes.

Substantial differences between countries should not blind us to the important similarities in the processes that determine people's lives across Europe

The second difficulty is that researchers do not always establish that all the countries in one group are distinct from all the countries in another group in the outcome under consideration – or, if not, how effective the categories are at distinguishing between country outcomes. It is not uncommon for analysts to choose three or four countries each as 'representative' of their hypothesised group; or for data to be pooled across all the countries in a group so that within-group differences are masked. Both of these approaches help analysts to find differences between groups, but discourage them from testing the validity of the classification system as an explanatory model.

Sometimes, a welfare regime typology is a helpful way of comparing country outcomes; sometimes, an alternative framework seems more appropriate; and sometimes, the differences between countries defy generalisation.

In any case, the fact that there are substantial differences between countries should not blind us to the important similarities and uniformities in the underlying processes that determine people's lives across Europe.

Time use

ISER complements its research into the long-term activity sequences of the life course with the study of short-term activity sequences through the day and week

There is an interdependency between, on the one hand, the short-term sequences of people's work and leisure activity, and on the other, the processes of accumulation of production and consumption skills and social connections. Things that we do with our time, regularly and repeatedly, on a daily, weekly or monthly cycle, may add to our stock of personal capacities to participate effectively in work (and leisure), and hence to the resources that determine our life chances in the long term.

Time use influences social and economic position through the accumulation of different sorts of embodied 'capitals' – human, cultural and social. Social position reflects those past experiences that contribute to current capital. What we have done determines whom we become.

For society as a whole, total work time must be sufficient to produce the goods and services required for society's consumption time: the distribution of occupations in the economy must mirror the pattern of consumption. Time-use indicators thus describe both labour supply and (through consumption) demand for labour. They have implications for national accounting practice, and for understanding class (since class structures reflect occupational patterns), gender differentiation and the distribution, dynamics and transmission of social advantage or disadvantage.

With these theoretical perspectives in mind, ISER complements its research into the longer-scale activity sequences of the life course with the study of short-term activity sequences through the day and week. The institute has the best collection of harmonised national time diary studies available anywhere in the world. The Multinational Time Use Study based at ISER comprises 50 surveys from 25 countries, covering the period from the early 1960s to the

present – in all more than a quarter of a million days of detailed activity accounts, organised to enable cross-national historical comparisons (<http://www.iser.essex.ac.uk/mtus/>).

As an illustration of the peculiar power of these data to illuminate social change, the charts draw on just two of the surveys in ISER's collection – the UK in 1961 and in 2001 – to reveal dramatic changes in daily activity patterns. The first two pairs show how Sunday has changed for nationally representative samples of young adults. The vertical axes show the percentage of the sample engaged in each of the eight activities; the horizontal axes indicate the time of day, from 6.30am to midnight.

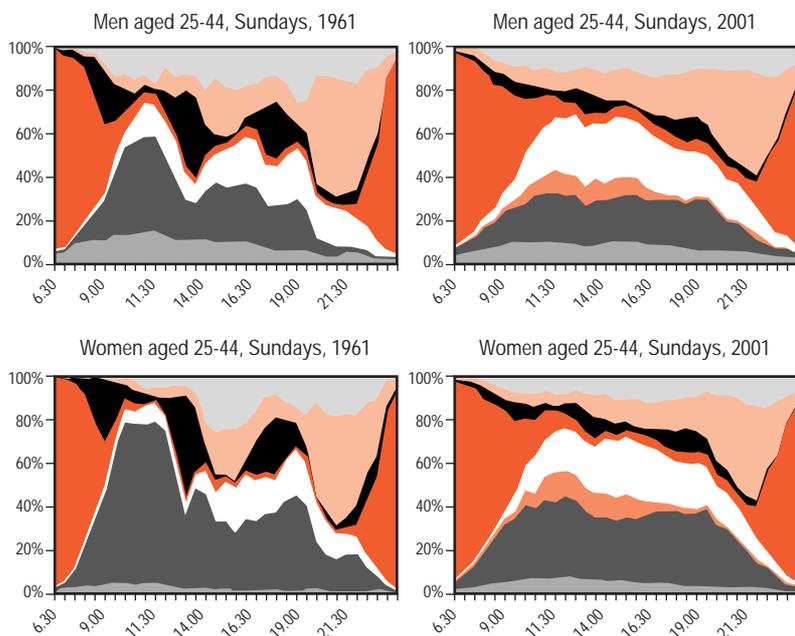
Reading from the left of the top two charts first indicates the virtual disappearance of breakfast, indeed of most meals (once the day was organised around meals, but 40 years on, no longer). Men now stay in bed longer, and get up not as previously to work around the house, but rather to shop (an activity completely absent on Sundays in 1961) or to pursue other outside leisure activities.

The Sunday morning hump of unpaid work around the home is substantially diminished, but with some increases later in the day, and overall the volume of unpaid work through the day is not much changed. And despite the approximately 50% of households without TVs in 1961, the overall volume of media time has hardly changed – since people listened to radio as a 'primary' activity in 1961, devoting at least as much attention to this as we now do to TV.

In 1961, in terms of the sequence of their daily activities, men and women were pretty much different species; now they look at least as if they are related

The next two charts show the equivalent patterns for women. Many of the same features are here: the virtual disappearance of meals as a structuring event for the day, the roughly unchanged volume of media time, the loss of the morning hump of unpaid work, the emergence of shopping as a major Sunday activity, the growth of leisure time and the extra sleep. Unlike men, there does seem to be a substantial reduction in the overall volume of unpaid work.

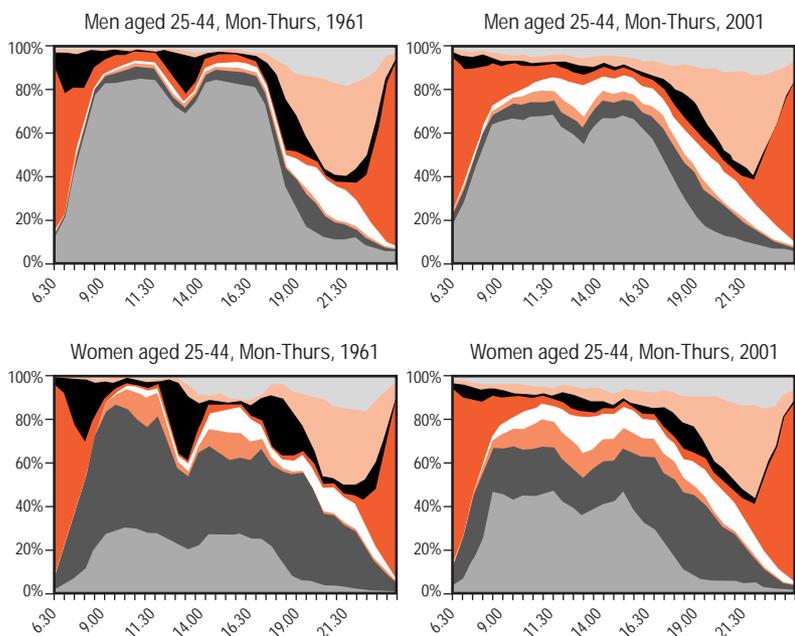
Changing UK Sundays over 40 years



But the most dramatic change emerges when comparing the gender differences in 1961 and 2001. Forty years ago, the basic shapes of the day were different for men and women. Substantial proportions of men were taking out of home leisure throughout Sunday; for women, leisure happened only in the afternoon. But by 2001, the shapes of men and women’s Sundays were much more similar. Does this mean that couples increasingly spend their time together? Diary data for whole households rather than individuals will reveal – and this is a topic for future ISER research.

The second two pairs show Mondays-to-Thursdays for the same four groups. Many of the same features are in evidence: the disappearance of mealtimes, later rising – and while some now stay up late to watch TV, more seem to go to bed slightly earlier – and overall the same approximate constancy of volume of media penetration.

Changing UK weekdays over 40 years



But what is most striking is the gradual convergence between men and women’s patterns. It is not yet by any means complete. But what were, in 1961, pretty much segregated work roles throughout the weekday, are very much less so now, with men doing a lot less paid work, and a little more (though proportionately a great deal more) unpaid work, and women doing a great deal more paid work and a lot less unpaid.

Further pictures would show the disappearance of the half-day of paid work on Saturday that was still prevalent in 1961, so that Saturday gets to look more like a modern Sunday, as well as Fridays, for both men and women, now seeming part-way (from 3pm) changed into a modern Saturday.

But overall the most striking change is the gender convergence. In 1961, in terms of the sequence of primary activities out of which their days were constructed, men and women were pretty much different species. Now they look at least as if they are related.

- other home leisure
- tv,radio, video
- eating at home
- sleeping/personal
- leisure out of home
- shopping, travel
- work in/around home
- work out of home

Socio-economic classifications and social inequalities

ISER researchers played a leading role in developing the National Statistics Socio-economic Classification, now the official UK measure of social class



Social inequalities reflect differential exposure to the risks of unemployment, redundancy, poverty, ill health and early death associated with socio-economic position or where people sit in the social hierarchy. There are many ways of measuring socio-economic position, including income, education and occupation. But in the UK, the traditional way has been via a socio-economic classification.

The UK tradition of using class as a measure of the social hierarchy dates back to 1913 with the creation of the Registrar General's Social Classes (RGSC). This brought together occupations of similar 'social standing' into one of six classes. It was used by researchers in both government and universities to analyse inequalities in areas such as mortality, morbidity, educational opportunities and employment outcomes. The point of these analyses was to show that social inequalities are the outcome of processes that are inextricably linked with the basic structure of society.

For example, researchers showed that there was a 'health gradient': people in classes I and II – professionals and managers – had consistently better health and longer lives than people in classes IV and V – partly skilled and unskilled occupations. Even as everyone's overall health improved during the twentieth century, the class gradient in health remained and even began to widen after the 1980s.

The RGSC was modified many times, but eventually it became difficult to maintain because of uncertainties about how best to allocate different occupations to its classes. Useful as it was empirically, it was unclear what it was actually measuring and, indeed, whether it was still necessary for government to produce this type of classification. So in 1994, the government commissioned ESRC to review its social classifications and make recommendations for their revision or replacement. In turn, ESRC appointed ISER sociologists David Lockwood and David Rose to take responsibility for the work.

The result was the creation of a new government classification, the National Statistics Socio-economic Classification (NS-SEC). The NS-SEC became the official UK measure of social class from 2001 and is used in the analysis of all government social surveys including the 2001 census. Like the RGSC, the NS-SEC is an occupationally based classification but it has rules to provide coverage of the whole adult population. It comprises eight classes, the first of which is subdivided. The basic information required

to create the NS-SEC is occupation (present or past) and details of employment status.

The National Statistics Socio-economic Classification	
1	Higher managerial and professional occupations
	1.1 Large employers and higher managerial occupations
	1.2 Higher professional occupations
2	Lower managerial and professional occupations
3	Intermediate occupations
4	Small employers and own account workers
5	Lower supervisory and technical occupations
6	Semi-routine occupations
7	Routine occupations
8	Never worked and long-term unemployed

The NS-SEC distinguishes four basic employment positions: employers; the self-employed; employees; and those involuntarily excluded from paid employment. Within the category of employers, a further distinction is made between large and small employers according to the number of employees they have.

Employees are sub-divided into classes according to the type of contract they have with their employer: a labour contract or a service relationship. Labour contracts, which encompass the whole working class, involve a relatively short-term and specific exchange between employers and employees of money (a wage) for effort. Service relationships, which are typical for managerial, professional and senior administrative positions, involve a longer-term and more diffuse exchange in which employees render service in return for both immediate and future compensation.

The excluded comprise those who have never worked but wish to and the long-term unemployed. Other non-employed people, such as those who look after the home, the retired, the short-term unemployed and the sick and disabled are classified according to their last main occupation. In this way, it is possible to classify most of the adult population.

The NS-SEC has been shown to be a good discriminator in terms of earnings, unemployment experience and duration, smoking behaviour, morbidity, mortality and subjective health. For example, in terms of the major causes of early death, men in class 7 are two and a half times more likely than men in class 1 to die early from heart disease, three and a half times more likely to die from a stroke, twice as likely to die from cancer and more than four times more likely to commit suicide. Findings such as these are of great concern to the present

government and are featured in recent government commissioned reports on health inequalities and public health.

Classifications like the NS-SEC are very useful for indicating both the extent and the causes of inequalities within the UK. But it is equally important to make comparisons between countries. How does the UK pattern of, say, health inequality compare with that of other European Union (EU) countries? What might we learn from using the same basic social classification in cross-national research? For this, we need a European Socio-economic Classification (ESeC).

In 2004, the EU commissioned a research team from across Europe to develop an ESeC. The team is led by the UK's Office for National Statistics and includes researchers from ISER and the University of Warwick as well as from France, Germany, Ireland, Italy, the Netherlands and Sweden. The ESeC will be very similar to the NS-SEC, with the same conceptual basis in employment relations. But the classes that can be distinguished in a comparative context will be slightly different because of variation in the employment relations of occupations across 25 countries.

Development of a European socio-economic classification will make it possible to analyse social inequalities in areas like health in a comparative context

Over the next two years, the research team will first define the ESeC and then test it against a range of European data in areas such as health, employment and education. The ESeC is likely to be a useful tool for policy-makers and researchers who wish to understand social inequalities in a comparative context. For example, most EU countries have adopted targets to reduce health inequalities between different social groups. ESeC will provide one way of assessing how countries compare in these terms.

History suggests that reducing health inequalities will be no easy task. As the UK health statistics show, the inequalities of class are not easily eroded. Whatever we may think to the contrary, there is a class destiny that shapes our ends. The ESeC will show us how this pattern varies across Europe (see <http://www.iser.essex.ac.uk/esecc/>).

Improving survey measurement of income and employment

ISER's programme of methodological research has been assessing the nature of measurement error in survey data and exploring ways of reducing that error



ISER researchers have completed a major methodological project aimed at improving the ways in which surveys ask questions about income and employment. The Improving Survey Measurement of Income and Employment (ISMIE) project was funded for two years by ESRC's research methods programme. The ISER team of Stephen Jenkins, Peter Lynn, Annette Jäckle and Emanuela Sala aimed to assess the nature of measurement error in survey data and to explore ways of reducing that error. The project objectives were:

- to develop and assess methods of collecting validation data with respect to key survey items;
- to assess the validity of survey measures by contrasting them with those derived from administrative record data;
- to assess alternative dependent interviewing strategies and compare them with traditional independent interviewing;
- and to provide guidance on data collection methods for longitudinal and follow-up surveys.

The ISMIE survey interviewed more than 1,000 adults who had previously been interviewed 18 months earlier. For validation, responses were matched with administrative records on benefits and tax credits held by the Department for Work and Pensions (DWP). A second component of validation involved making contact with respondents' employers to obtain information on occupation, industry, pay, work hours, etc.

To examine and compare interview strategies, the team developed proactive dependent interviewing, reactive dependent interviewing and standard independent interviewing versions of questions on income and employment. Dependent interviewing involves feeding forward data collected at a previous interview and using it in the current interview, either in the wording of questions (proactive) or in response to information given by the respondent (reactive). One third of the sample was randomly allocated to each experimental group.

Record linkage and informed consent

Linkage of ISMIE survey respondents to DWP records using a non-hierarchical matching strategy was as successful when based on sex, date of birth and postcode or on sex, date of birth, first name and family name as when made using matches on self-reported National Insurance numbers (NINOs). That high linkage rates can be achieved without

using NINO matching is of value for future linkage design strategies, given the additional burdens involved with collecting NINOs. ISER Working Paper 2004-23 discusses ways in which linkages between survey responses and administrative records might be improved.

Another study (WP 2004-27) assesses the extent to which respondents who provided consent for data matching were representative of the sample as a whole. The paper also explores methodology for assessing non-representativeness ('consent bias') and finds that traditional independent estimates – which ignore the differential selections induced by consent question routings – can lead to biased results. In addition, the correlation between the unobservable individual factors affecting consent to DWP record linkage and those affecting consent to employer record linkage is large, suggestive of a latent individual propensity to provide consent.

Dependent interviewing

When comparing respondents' reports of receipt of the most prevalent non-wage income sources, there are significant differences in responses between independent and dependent interviewing (WP 2004-16). This is mainly due to greater under-reporting with the former. There are few differences between the two fundamentally different forms of dependent interviewing. The effects of dependent interviewing differ across income sources, appearing to be strongest for housing benefit and council tax benefit, followed by child benefit.

There is evidence that under-reporting of income sources is reduced with dependent interviewing (WP 2004-28). It may be possible to reduce under-reporting further by targeting questions at particular subgroups. For example, respondents aged under 60 and not living with a spouse or partner, or registered disabled, are particular likely to be sensitive to interviewing method. Eligibility criteria for specific benefits could also be used to target questions.

The team also examined the potential of dependent interviewing for reducing the concentration of labour market status transitions at the 'seam' between waves (WP 2004-24). They find that proactive methods reduce seam effects, especially for job-to-job transitions. Proactive dependent interviewing also reduces bias in estimates of monthly transition rates and spell durations. Estimates of cumulative experience, however, are comparable across interviewing methods.

Measures of change in employment characteristics between waves are often used to define job change and hence to form the basis for studies of job mobility. High levels of change implied by independent interviewing data are greatly reduced by proactive dependent interviewing, especially for occupation, industry and establishment size (WP 2004-26).

Reactive dependent interviewing seems to produce a more modest reduction in the levels of change, and not for all measures. By restricting analysis to respondents who appear to be in the same job at both waves, the researchers demonstrate that the differences between the independent and proactive dependent interviewing results are mainly due to measurement error in the independent interviewing data rather than spurious stability induced by proactive dependent interviewing.

In current work, the team is exploring additional dependent interviews issues, and also analysing the validity of the survey data in greater detail, in particular making use of the DWP data on benefits (amounts received in addition to receipt per se).

The project team also organised two workshops, successfully engaging with research users and data collectors from statistical agencies and government departments. Details of the workshop on dependent interviewing are available at <http://iserwww.essex.ac.uk/home/plynn/ismie/Workshop.htm>; details of the workshop on linking survey responses and administrative records are available at <http://www.ccsr.ac.uk/methods/events/linkage/index.htm>

MOLS 2006 Conference

ISER is organising and hosting the first international conference devoted to the methodology of longitudinal surveys (MOLS). It will take place at Essex in July 2006 and there are expected to be more than 100 presentations and 300 participants. A set of monograph papers has been commissioned and will appear in an edited volume published by John Wiley. There will also be an opportunity for contributed papers to be considered for a special issue of a leading journal.

The MOLS conference promises to be an exciting and important event for anyone involved in surveys that take observations repeatedly over time from the same sample of units. For further details, see <http://www.iser.essex.ac.uk/ulsc/mols2006/>

Promoting and supporting longitudinal research

The newly refunded UK Longitudinal Studies Centre will ensure the collection of longitudinal data of the highest quality and promote its widest and most effective use



The UK Longitudinal Studies Centre (ULSC) was refunded by ESRC from October 2004 to September 2009 as a national resource centre for promoting longitudinal research and for the design, management and support of longitudinal surveys. The UK's unique portfolio of longitudinal studies has made a major contribution to understanding society and to advances in the social sciences. The goal of the ULSC is to ensure the collection of longitudinal data of the highest quality to meet UK social research needs and to promote its widest and most effective use.

The new funding includes support for British Household Panel Survey (BHPS) data collection and dissemination for waves 14 to 18. This will support the collection of data from around 9,000 households each year, including additional samples in Scotland, Wales and Northern Ireland. In addition to the core data collected each year on income, labour market behaviour, health, housing and consumption, social and political values, education and training and household organisation, there are plans for special data collections in each year. The topics for these will include wealth and debt, ageing and retirement, children and parenting, neighbourhoods and social capital.

The refunding of ULSC involves a greater focus on the promotion and support of longitudinal research. Here we briefly describe how we are building on our portfolio of activities and services covering all aspects of longitudinal survey research.

Promoting effective use of longitudinal surveys

The methods used to analyse longitudinal data can be complex. They often require more sophisticated statistical techniques in order to exploit their advantages over cross-sectional data. A substantial part of the leading edge of innovation in statistical analysis methods makes use of longitudinal data. It is also important that analysis takes proper statistical account of the study design.

Many researchers need to be introduced to these issues. This makes training and support for data users an important element in ensuring the widest use of these data. The ULSC collaborates with others to ensure the existence of appropriate training to meet the needs of researchers at different levels. The ULSC also provides training resources directly.

In addition to short induction courses in the use of BHPS data, the ULSC runs training courses in longitudinal research and analysis methods, including specialist courses, for example on the use of life history data. Some of these take place as part of the Essex Summer School, some as freestanding short courses. We also produce training materials such as web-based course notes, teaching data subsets, user guides and other training texts.

Finding out about longitudinal research

The ULSC is developing its range of resources to support researchers and those who want to find out about longitudinal research, including academic researchers, those involved in teaching and training, and researchers and policy-makers in central and local government and the public and private sectors more generally.

With the Office for National Statistics, the ULSC has developed *Keeping Track*, a web-based database of information about longitudinal surveys (<http://www.iser.essex.ac.uk/ulsc/keeptrack>). This contains more than 300 studies and is now the leading international resource in this field.

We offer information, advice and bibliographic resources to help researchers to identify related work and for policy researchers to identify relevant evidence. We will provide materials that explain the distinctive character and importance of longitudinal research, and a regular *Monitor* series summarising research findings and providing new analyses.

We also organise and contribute to seminars and conferences that help to promote longitudinal research. These include the biennial BHPS research conferences, seminars focused on policy applications of longitudinal data, special sessions in discipline-specific conferences and other events.

Improving longitudinal survey methods

The ULSC has responsibility for improving the quality, relevance and accessibility of longitudinal survey data. This involves the promotion of best practice as well as original methodological research to extend our knowledge of what constitutes best practice. Examples of ULSC methodological research aimed at improving longitudinal surveys includes work on:

- the effects of dependent interviewing where previous data is fed forward to respondents;
- the use of administrative data for validation of survey responses;
- the effectiveness of strategies aimed at minimising non-response;
- and strategies for adjustments for missing data through weighting and imputation.

The ULSC promotes best practice in longitudinal surveys through publications, presentations and direct advice. We have published guidelines for the production of quality profiles for longitudinal surveys, guidelines for standardisation of response rate information and research on ways of collecting data on non-respondents. We will disseminate this work through presentations, seminars, newsletter articles, website information and a dedicated methodological conference.

The ULSC is internationally recognised as one of the foremost centres of expertise in the design and management of longitudinal surveys. We regularly provide advice, training and consultancy services covering all aspects of longitudinal survey design, data collection and research to many different organisations within the UK, as well as in Europe, Asia, North America and Australasia.

Making data easier to use

The ULSC disseminates data resources that are both transparent to use and efficient for the data user. We devote significant resources to the transformation of the raw data that emerge from survey fieldwork into a user-friendly form appropriate to the complexities of longitudinal research and supported by high quality documentation.

The ULSC has set high standards in the web-based documentation of datasets, establishing quality standards for all longitudinal survey procedures and producing quality profile standards for longitudinal surveys. We intend to develop these standards in other areas and to promote their application across surveys.

Our aim is to set standards for the usability of data made available to researchers through data archives and to collaborate with producers in ensuring the standards are met. We collaborate with the UK Data Archive in the specialist longitudinal service of the Economic and Social Data Service to achieve this.

Further information

Details of the research discussed in this report may be found in the following publications, many of which are available free of charge on the ISER website (www.iser.essex.ac.uk) or from ISER's Communications Adviser Romesh Vaitilingam (iserpress@essex.ac.uk):

Research on the family

Parental Partnership and Joblessness in Childhood and their Influence on Young People's Outcomes by John Ermisch, Marco Francesconi and David Pevalin, *Journal of the Royal Statistical Society*, January 2004

Early Childbearing and Housing Choices by John Ermisch and David Pevalin, *Journal of Housing Economics*, September 2004

Cohabiting Unions, Repartnering and Mental Health by John Ermisch and David Pevalin, *Psychological Medicine*, November 2004

Differences in Delaying Motherhood across European Countries: Empirical evidence from the ECHP by Cheti Nicoletti and Maria Letizia Tanturri, ISER Working Paper 2005-04, March 2005

Research on work-life balance

Marriage and Wages by Elena Bardasi and Mark Taylor, ISER Working Paper 2005-01, February 2005

Option or Obligation? The determinants of labour supply preferences in Britain by René Böheim and Mark Taylor, *The Manchester School*, March 2003

Actual and Preferred Working Hours by René Böheim and Mark Taylor, *British Journal of Industrial Relations*, March 2004

And in the Evening She's a Singer with the Band: Second jobs – plight or pleasure? by René Böheim and Mark Taylor, ISER Working Paper 2004-03, March 2004

Free to Choose? Differences in the hours determination of constrained and unconstrained workers by Mark Bryan, ISER Working Paper 2002-28, December 2002

Workers, Workplaces and Working Hours by Mark Bryan, ISER Working Paper 2004-25, December 2004

Research on European welfare regimes

Social Europe: Living standards and welfare states edited by Richard Berthoud and Maria Iacovou, Edward Elgar Publishing, 2004

Research on time use

Multinational Time Use Study home page: <http://www.iser.essex.ac.uk/mtus/>

Research on socio-economic classifications

A Researcher's Guide to the National Statistics Socio-economic Classification by David Pevalin and David Rose, Sage Publications, 2003

European Socio-economic Classification homepage: <http://www.iser.essex.ac.uk/esecc/>

Research on improving survey measurement

Validation of Survey Data on Income and Employment: The ISMIE experience by Annette Jäckle, Emanuela Sala, Stephen Jenkins and Peter Lynn, ISER Working Paper 2004-14, August 2004

Six further ISER Working Papers published in 2004: 16, 23, 24, 26, 27 and 28

BHPS data is released through the Data Archive at the University of Essex: <http://www.data-archive.ac.uk/>

BHPS documentation is available at: <http://www.iser.essex.ac.uk/ulsc/bhps/doc/>

Keeping Track: A guide to longitudinal resources edited by Kimberly Fisher et al:
<http://www.iser.essex.ac.uk/ulsc/keeptrack/index.php>

For details of the UK birth cohort surveys, see <http://www.cls.ioe.ac.uk/>

For details of training on using longitudinal data provided by ULSC, see <http://www.iser.essex.ac.uk/ulsc/training/>

ISER staff

Director: Jonathan Gershuny
Associate Director: Nick Buck

ESRC Research Centre on Micro-Social Change

Centre Director: Jonathan Gershuny
Associate Director: John Ermisch

The dynamics of social position: Richard Berthoud, John Ermisch, Stephen Jenkins, Stephen Pudney, Holly Sutherland, Arnstein Aassve, Mark Bryan, Malcolm Brynin, Alasdair Crockett, Maria Iacovou, Cheti Nicoletti, Thomas Siedler, Simonetta Longhi, Mark Taylor, Noah Uhrig

Time use: Jonathan Gershuny
Muriel Egerton, Kimberly Fisher, Man-Yee Kan, Laurent Lesnard

European Socio-economic Classification: David Rose
Eric Harrison, David Pevalin

Social comparisons and social order: David Rose
Eric Harrison, David Lockwood, Ray Pahl, Liz Spencer

ESRC UK Longitudinal Studies Centre

Director: Nick Buck

Survey design and methodological research: Peter Lynn, Heather Laurie
Nick Buck, Jonathan Burton, Jonathan Gershuny, Annette Jäckle, Mike Merrett, Cheti Nicoletti, Emanuela Sala

Survey applications: Randy Banks
John Fildes, Elaine Prentice-Lane, Catherine Yuen, Fran Williams

Fieldwork and coding: Heather Laurie
Anitra Baxter, Ann Farncombe, Sandra Jones

Administrative and technical staff

Administration: Helen FitzGerald
Annick Collins-Leyssen, Perpetua Flint, Kate Tucker, Janice Webb

Business manager: Eileen Clucas

Dissemination: Judi Egerton, Marcia Taylor, Romesh Vaitilingam
John Brice, Mary Gentile, Jane Rooney

IT support: Randy Banks
Tom Butler, Paul Siddall, Jenifer Tucker

ISER research associates

Ben Anderson, Martin Biewen, Lorenzo Cappellari, Marco Francesconi, Ruth Hancock, Monica Hernandez, Abbi Kedir, John Micklewright, Lucinda Platt, Philippe Van Kerm

Institute for Social and Economic Research
University of Essex
Wivenhoe Park
Colchester CO4 3SQ
United Kingdom

Phone: +44 (0) 1206 872957
Fax: +44 (0) 1206 873151
E-mail: iser@essex.ac.uk
Web: www.iser.essex.ac.uk



University of Essex

