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ESRC RESEARCH CENTRE ON MICRO-SOCIAL CHANGE

MICRO-SOCIAL CHANGE

IN BRITAIN

An Outline of the Role and Objectives of the British Household Panel Study

David Rose

with

Nick Buck, Joan Busfield, Louise Corti, Ivor Crewe, Michael Keen Gordon Kemp, Heather Laurie, Dennis Marsden, Simon Price, Elinor Scarbrough, Alison Scott, Jackie Scott, Tony Shorrocks and Oriel Sullivan

Working Papers of the ESRC Research Centre on Micro-social Change

Paper Number 1

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Centre's publications and other activities, contact The Information Officer, ESRC Research Centre on Micro-social Change, University of Essex, Colchester CO4 3SQ.

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MICRO-SOCIAL CHANGE IN BRITAIN

David Rose *et al*

Foreword

This paper presents an overview as at July 1989 of the role and objectives of the ESRC Research Centre on Micro-social Change at the University of Essex. Currently the Centre is finalising its plans for the panel study of households described below. These plans have been influenced by the advice the Centre has received from academics and policy-makers attached to the Centre's various Advisory Groups and their successor Advisory Board. In addition the Centre has consulted experienced panel study researchers in the United States and Europe. But in what follows we discuss the Centre's original aims in terms of both the substantive areas to be covered by the study and the design of the study itself. Of course, over the last two years since this paper was written the aims and design as set out below have had to be matched against the practicalities and costs of data collection and our growing perception of the particular strengths of panel studies. Priorities have also had to be established which take account of the relative importance of various academic and policy-making concerns and the benefits to be derived from addressing different issues within a longitudinal perspective. However, because we wished to maintain the original version of the paper as both a historical record and an acknowledgement of the work of the originators of the Study, within the main text we have not reflected the changes which have subsequently been made. Rather, we have provided a Postscript to furnish additional information on the development of the project.

The paper begins with a brief discussion of the role of the Research Centre and the rationale for the panel study it will be conducting over the next ten years. In the main body of the paper we discuss the objectives of the Centre in each of the main substantive areas it is intended to cover. The final section of the original paper discusses broad issues of research design and the guiding principles of the panel study. This is followed by the Postscript.

The Role of the ESRC Research Centre on Micro-social Change

The role of the Research Centre is to identify, explain, model and forecast changes at the level of the individual household and their causes and consequences in relation to a range of socio-economic variables (discussed below) for the period to the year 2000. The main tool to be used by the Centre will be a large-scale, multi-wave, national, longitudinal panel study. This will provide a unique database and national resource for social scientists and policy-makers in Britain. It will also provide the possibility of comparative analyses in relation to similar studies in the USA and Western Europe. The database for each year's panel will be made available expeditiously so that researchers can have immediate access to it. The first phase of the research programme to be conducted within the Centre will consist of five projects chosen from among the following topics: labour market behaviour; residential mobility; household formation and dissolution; economic decision-making within the household; income distribution; consumption behaviour; and socio-economic values. Each project will be conducted by an appropriate interdisciplinary team of researchers led by an experienced academic. We anticipate that many other projects using the panel data will be initiated by researchers elsewhere and we will offer training in its use within the Centre.

The need for this major research initiative can be simply stated. Academic social science has been ill-equipped to meet Britain's social research needs, whether basic, applied or, in particular, strategic. It has lacked an adequate major, national database and the requisite organisational structure to study social change and to anticipate the incipient policy problems which arise from changes in the social and economic structure. The Research Centre aims to remedy this weakness. Its purpose is to anticipate the social and policy concerns of the twenty-first century by monitoring trends, and collecting, analyzing and reporting relevant data in advance. Although the *precise* concerns of social scientists and policy-makers ten years hence cannot be predicted, the broad areas which are likely to be of concern can be anticipated. The panel will, in any event, have a flexible design which will allow new issues to be introduced at relatively short notice. The panel's accumulating socio-economic database will enable social scientists to respond flexibly and rapidly to the research demands of government, industry and the academic community.

The British Household Panel Study as a Dynamic Approach to Social Change

The central claim we would make for the proposed panel study is that it will allow us to describe and analyze how individuals, families and households experience changes in their socio-economic environment and how they act in relation to these changes, whether these are experienced as constraints or opportunities. A fundamental aspect of this environment is the need to make a living. In multi-person households this involves household decisions- perhaps strategies - as well as individual ones. To understand how people adjust to their circumstances and changes in them and the repercussions of change for both individuals and the environment, requires the situation to be examined as it develops in time (longitudinally) and in different areas of social life (latitudinally). From the viewpoint of the actors involved it is not possible to separate the individual from the household context when a change in the environment takes place. For example, if an individual changes jobs or becomes unemployed there will or may be changes in income, health, household composition, domestic organisation, socio-political attitudes and so on. Since such factors are dynamic and inter-related they must be studies using an appropriate methodology which is capable of comprehending the complexity of the relationships between individuals, households and socio-economic circumstances. Indeed, any analysis of individual behaviour needs to make reference to the family and household context because of the strong interdependencies between family and/or household members. Individual behaviour cannot be explained adequately without reference to other household members. Similarly, individual welfare depends on household and family contexts since income, wealth and welfare distribution are closely linked to family and household structures. At the same time many policy measures in fields such as taxation, transfer programmes and social policy in general depend on an understanding of these structures (cf Bernard *et al*, 1988; Galler, 1988).

In all respects, following a sample of households for a number of years, as well as the new households formed by members of the original sample, will offer a significant advance in understanding the complex relationships with which social scientists deal. By adding a biographical element to the first few waves of the panel, we can also begin to assess how our sample individuals and households arrived at their current situation. At the same time our biographical data will make possible a relatively rapid series of analyses which will offer initial approximations of the properly longitudinal research which will follow. Thus, the panel has an overall theoretical and methodological context for the study of micro-social change, but also offers a broad research potential for more discrete analyses of theoretical and policy problems in a range of substantive areas.

Objectives of the British Household Panel Study

The objectives of the Centre are to collect and analyze data on a broad range of socio-economic issues from a sample of about 5000 households from across Great Britain in which all adults will be interviewed annually. This should yield an initial sample of about 10-12,000 individuals. The data will be used to examine a variety of theoretical, empirical and public policy issues in the social sciences relevant to the theme of Change in Contemporary Britain and in particular to social change at the micro level. This work will be inter-disciplinary in nature, involving economists, political scientists, sociologists, social policy researchers, statisticians, demographers, geographers and computer and information scientists. The core data collected annually will include, *inter alia*, information on employment, income, education, health, family composition, household structure, housing, mobility and a range of socio-political and socio-economic attitudes and values. At less frequent intervals additional data will be collected on topics such as savings, consumption and asset holdings. In order to overcome the problems of left censored data the first few waves of the panel will be used to reconstruct household, family and employment histories.

Outline of the Panel Study

Many important research and policy issues could be examined using the Centre's panel data. In this main section of the paper we indicate the major research themes which it is hoped to pursue within each of the core substantive areas of the study, namely household dynamics, the labour market, the distribution of income and wealth, housing, health and socio-economic values.

Household Dynamics

There are three areas under the rubric of household dynamics which will be included in the Centre's remit. These are: (a) household structure and change; (b) household economic decision-making; and (c) consumption patterns.

(a) **Household Structure and Change:** There are, broadly speaking, three different levels at which we can consider household structure and changes in household structure, *viz*,

(i) There is the *demographic* level concerned with household composition which changes as a result of events such as births, deaths, marriages, divorces, children leaving home and so on. Information about the timing of such events and about current household compositions can be obtained from retrospective cross-sectional data since the salient events are usually well remembered. Panel studies can be of value in research on such household demographic structure and change for two main reasons. First, they can be used to provide accurate information on the circumstances which prevailed at the times of such events. Often such circumstances are very poorly remembered even after relatively short periods of time and so cannot be accurately determined from retrospective questions. Second, panel studies can track, and so link, individuals who once belonged to the same household but no longer do so, e.g. divorcees and children who have left home.

(ii) There is the *economic and sociological* level concerned with interactions within households and between households and individual members of different households. This level is reviewed in more detail under **Household Economic Decision-making**.

(iii) There is the *anthropological* level concerned with the cultural factors which support the existence of households as economic and social forms of organisation. On the surface panel studies do not seem the ideal method for obtaining information relevant to research at this level of household structure;

in-depth, unstructured interviews together with long term detailed observation seem more appropriate. Nevertheless, it may be possible to gain some information relevant to analysis at this level through questions relating to individuals' socio-economic values.

Possible research topics for the **Household Structure and Change** substantive area include: first, to document the changing patterns of household composition over time; second, to examine the causes of household composition changes; and, third, to examine the consequences of household compositional changes.

(b) **Household Economic Decision-Making**: This is concerned with how and why households allocate different resources and facilities in various ways. There are a number of separate areas in which allocation takes place. First, there is the allocation of a range of household tasks including, for example, making various different kinds of household purchases (e.g. food, clothing, etc) and managing household finances (e.g. bank accounts). Second, there is the allocation of decision-making and planning concerning various household activities and choices (e.g. in a family with children there might be choices over children's education). Third, there is the allocation of the time of different household members (e.g. decisions about labour force participation). Fourth, there is the allocation to members of households of consumption goods and services and of access to consumer durables (e.g. use of a car, if the household owns one). As well as investigating the outcomes of the allocation processes in these areas there is room for research on the social and cultural factors underlying and supporting the processes. The Centre has already begun some ethnographic work in these areas.

In any consideration of household economic decision-making, panel studies have at least two advantages over repeated cross-sectional surveys. First, panels are able to examine the consequences of household compositional change for household allocation processes. This includes the ability to examine the consequences of household compositional change for household allocation processes. This includes the ability to examine allocation processes between individuals who used to belong to the same household but no longer do so. Second,

panel studies can also examine the effects on allocative processes of other life events such as individual members of a household becoming unemployed.

Possible research topics for the **Household Economic Decision-Making** substantive area include the nature and extent of altruism between members of households; the determinants of household allocative systems (i.e. allocations of financial and money management in households), including power relationships between household members; and the extent to which household allocations of responsibilities for certain household tasks (e.g. purchasing food, running a car, etc.) reflect comparative skill advantages within households.

(c) **Household Consumption Patterns:** There are two broad ways in which we can interpret the term *household consumption patterns*. First, we might interpret it as referring to household purchasing patterns. Secondly, we might interpret it as referring to household usage patterns. In the context of a study of individuals within households the latter interpretation seems more appropriate since, if we look only at household purchasing, we are unlikely to obtain a very good idea of individual consumption. Nevertheless, the ways in which household purchasing patterns alter as household composition changes may be quite informative about how the individual consumption patterns are changing (e.g. the changes in the individual consumption patterns of couples after they split up). Household usage patterns would refer to the patterns of time use by individuals of the goods and services purchased by members of the household.

Panel studies suffer from a potential problem when it comes to collecting detailed consumption pattern data. The usual method for obtaining such data, namely self-completion diaries, may well lead to substantial increases in attrition rates. This is not a problem with cross-section studies. Hence the British Household Panel Study will have a specific disadvantage as compared to the Family Expenditure Survey. This is because it will be impossible to ask such comprehensive questions about the purchase and use of goods and services on a regular basis due to space limitations. Thus the British Household Panel Study will not be able to produce a detailed overview of purchasing patterns. The same difficulty pertains to collecting data on time usage. On the other hand a panel study can obtain information about patterns of change over time and about prevailing circumstances in the past more accurately than can a cross-section study. Furthermore, individual respondents may report their consumption with systematically persistent errors over time. A panel study may be able to obtain measurements of changes in consumption which are more accurate than the measurements of levels of consumption which can be obtained from a cross-section study.

Given these considerations, research topics in the area of **Household Consumption Patterns** are therefore going to have to focus on areas of consumption which are strongly indicative of the processes determining consumption patterns and allocations and where any measurement errors tend to be highly correlated over time. The processes determining household consumption patterns include the household allocative processes discussed previously but might also include determinants of underlying preferences, e.g. socio-economic values determining attitudes to private health care.

Possible research topics might be, first, to examine whether actual patterns of consumption within households can be well explained by the reported patterns of financial management within households; second, to determine how rapidly consumption of certain items adjust in response to various shocks; and, third, to examine the extent to which actual consumption behaviour matches household members' reported socio-economic values (especially when circumstances change).

As should be clear from the foregoing, the unifying concept for the Centre's work on household dynamics is that of the household allocative system. This concept has been the subject of a considerable amount of research in recent years (see, for example, Brannen and Wilson, 1987; J. Pahl, 1980; 1988; 1989). Our own work in this area (see Rose *et al* 1988) began from a model suggested by R.E. Pahl drawing on the work of J. Pahl and others. This model stresses that the earnings patterns of household members combining with the way in which money is allocated within the household can explain household spending. Economic accounts of household consumption focus on the relationship between household composition, income and expenditure, paying little attention to what happens inside the household. A number of ethnographic studies suggest that the ways in which households manage money constitute an intervening variable in modelling household consumption. While couples tend to explain how they manage money in personal and practical terms, research indicates,

however, that their socio-economic circumstances and norms they hold about the roles of men and women are more important in determining how they organise the household finances.

'Household allocative system' designates the arrangements made between couples for managing money: that is, who controls the distribution of income with the household, and who is responsible for different items of household expenditure. Using money as a tracer opens up the 'black box' of the household, and suggests that who makes which financial decision has effects for spending patterns. Four major allocative systems have been identified. Briefly described, they are:

Whole Wage System: one person, usually the woman, is responsible for managing all household expenditure;
Allowance System: partners have defined spheres of responsibility for expenditure with, usually, the woman being given 'housekeeping' money;
Shared Management: both partners have access to all income and share responsibilities for all expenditure decisions;
Independent Management: partners keep their incomes separate and each is responsible for different items of expenditure.

There are variations within these types (for example, shared management is sometimes divided into common or partial pooling arrangements) but studies in Britain, Australia and Israel bear out the validity of the taxonomy.

The allocative system is one element in a complex and dynamic process in which cause and effect are difficult to disentangle. However, it is clear that household income is important when that income is low: when money is short and managing it is a chore, it is typically women who are responsible for finances. At higher income levels, employment patterns become important. If only the husband is employed, he tends to control the household's money but delegates management of part of it to his wife. Where both are employed, the higher the proportion of household income contributed by the wife then the more likely it is that she will have a share in controlling household finances. Given the recent growth in women's employment, this suggests that there may be shifts afoot in the way households organise money, in particular a shift from the allowance system to share management.

We need to be aware, then, that allocative systems are not independent of what goes on outside the household. Who earns and how much count, as do social norms. For these kinds of reasons, the models we have developed see the allocative system as an emergent property rather than an independent variable, or, more strictly, an intervening variable between household structure and spending patterns (for more details see Rose *et al* 1988). Further research into these issues is being conducted by the Centre as part of its pre-survey research programme.

Labour Market Behaviour

Panel studies allow linkages to be made between a range of household and family variables and variables external to the household such as labour market behaviour. In this way it is possible, for example, to explore the nature of women's participation in the labour market, especially the conditions under which they enter or leave the market and, in the case of married women, the links between their labour market participation and that of their husbands. This would allow for an updating of the work of the *Women and Employment Survey* (Roberts and Martin, 1984). Indeed, it is more generally the case that questions of labour supply need to be related to household strategies. In a study of this kind, which will examine household allocative systems, provide data on individual and household income, employment histories and changes in all these during the life of the panel, it should become possible to estimate labour supply models for household members in relation to one another. More generally panels can be used to track people as they move between jobs and attempt to explain these moves by reference to the range of background variables routinely collected in the panel study. This procedure adds a dimension to labour market studies not normally available to social scientists. It is also important from a policy viewpoint because of the current concern with understanding labour market rigidities.

There are certain issues in relation to human capital theory that panel data could also be used to address. In particular, by collecting data on both employment histories and

education and training histories and then continuing to collect data on these and on income over the life of the panel, it will become possible to examine the effects of training on the age/earnings profile. Equally, it will be possible to see who gets training, what the nature of that training is and its effects. A wide range of other studies will also be possible with panel data of the type we propose to collect. As one example, it would be possible to gain a much clearer insight into the whole socio-economic context of part-time employment, where for the past fifteen years there has been a continuous expansion in most European countries. Key questions on the supply side of part-time employment, such as the household situation of part-time employees, could be investigated longitudinally.

Models of Labour Market Inequalities and Income Distribution

The panel study will permit analysis not only of the cross-sectional distribution of incomes in relation to individual participation in the labour market, but also how individuals' work incomes change over time as they make progress (or not) along any available career lines. A major theoretical, social and political issue is how far individuals have equal opportunity and choice to achieve better jobs and higher status work. The basic neoclassical theory of income distribution (challenged by economists as well as sociologists) is of human capital and marginal productivity (Becker 1975). Economic studies generally take the view (albeit heavily qualified) that education and training are investments in human capital which are then suitably rewarded. Much of the debate about labour market inequalities and income therefore centre on how labour markets depart from the simple model, by being segmented or divided into better-paid and more secure jobs in core or primary, internal labour markets to which there is limited access for certain groups only, with a periphery or secondary labour market of worse paid and insecure work largely occupied by women and various disadvantaged groups.

The major focus of labour market questions will be on exploring changes over time in the work which individuals perform. Such changes can then be analyzed (along with the other income and household variables measured in the study) in relation to the various models of labour market behaviour outlined above. In particular, the panel could make a major contribution to understanding the mechanics of internal labour markets (mobility within firms or occupational categories), and analysis would throw light on state dependency (in the sense of how particular current labour market states lead to later outcomes).

Apart from general models of labour market inequality, there are heated debates about whether work is being degraded, and the ways in which 'skills' and 'training' are defined and rewarded in different national cultures. An essential focus of the panel study questions will therefore be a detailed exploration of the skills exercised by individuals and their relationship to any education and training and economic rewards.

An Economic Model of Household Labour Supply and Participation

For economists, the panel study will provide the first British data for analysis using theoretical models and econometric methodology evolved for US panel data. These models emphasise intra-household interactions and dynamic choice in the intertemporal allocation of consumption and time. Households are seen as choosing which of their members work, when they do so, and for how long. There is scope for optimal specialisation within the household. The related decision on whether a member participates in the labour force is then jointly determined with the hours worked (in a week, a month or year). Retirement is conceptualised as the decision to cease participation, a balance of considerations of health, income and work opportunities.

Unemployment and the search for work are covered by the theory of search employment. Contrary to some opinion this does not necessarily imply that all unemployment is 'voluntary'. Nevertheless, public debate and some economic theory embodies a model which relates individuals' urgency and flexibility in the search for work to the gap between work and unemployment income. We know that past work history and repeated spells and duration of unemployment all have a large impact on the individual's current labour market state, but the panel study will make possible research which has hitherto not been feasible. In addition, attitudinal questions will cover values other than simple economism, such as a sense of duty or participation in the wider society.

Migration decisions rest on the interaction between opportunities in the labour market, housing prices and household values e.g. whether households do actually take decisions jointly, or whether they consist in practice of individuals whose lives are substantially separate. Finally, although research has tended to focus on family size and timing separately from labour supply, the panel study will permit study of how far the two are jointly determined, as in the economic model.

Income and Wealth

Cross-sectional data drawn from the Family Expenditure Survey (FES), the General Household Survey (GHS), the New Earnings Survey (NES) and the Inland Revenue's Survey of Personal Incomes (SPI) provide a rich source of information on income distribution in the UK. However, each of these data sets suffers from well known limitations. Perhaps three general problems stand out:

(i) An undersampling of **high income units**: Atkinson and Mickelwright (1983) cite an unpublished study by the Central Statistical Office suggesting that recipients in the top one per cent by taxable income are under-represented in the FES by around 30 per cent;
(ii) Grossed-up **self employment income** typically falls noticeably short of aggregate estimates from other sources: Atkinson and Mickelwright estimate that the shortfall of FES self employment income after adjustment, is in the order of 25 per cent;
(iii) There is a similar apparent understatement of **investment income**. For the FES, Atkinson and Mickelwright put this at around 50 per cent, with considerable year-to-year variation. There is also some evidence (for the US) that the understatement of investment income increases with the respondent's age.

The SPI is considerably less susceptible to the first two problems than other UK data sources (it over-samples higher rate tax payers, for instance) but remains subject to the third: the Inland Revenue need not know the investment incomes of basic rate tax payers from whom tax is withheld at source. These problems are not unique to the UK. The US Current Population Survey, for instance, is reckoned to understate self-employment and investment income - relative to administrative records - by about 15 and 50 per cent respectively.

There also already exists some longitudinal income data:

(a) Perhaps especially notable is the New Earnings Survey Panel dataset, providing information on employees' earnings, constructed by tracking individuals through their national insurance number;
(b) The 1974/5 repeat of the income part of the FES (in connection with the Layfield Committee on Local Government Finance) which seems to have been little used;
(c) The Family Finances and Family Resources Surveys of 1978-81 which provide two observations on about 600 families with low incomes in the first year.

In the area of wealth and savings, existing data is less copious. Apart from some specific items (such as mortgage interest payments), little information is provided by any of the surveys mentioned above. In particular, although the FES provides data on both income and expenditure, and so might seem to offer some hope of estimating savings as a residual, the uncertainties and ambiguities attached to both sides of the equation make such estimates extremely unreliable. Kemsley, Redpath and Holmes (1980, p.44) emphasise that "the FES is not intended to produce data on savings either directly or indirectly". The principal sources in this area are thus:

(a) The Oxford Savings Survey of the 1950s;
(b) More recently, NOP Market Research Limited has begun a series of six-monthly cross-sectional surveys of savings behaviour and portfolio composition. There has as yet been little work on the reliability of this data set.

Notwithstanding these other rich sources of data, the Centre's panel data offers new and exciting possibilities for examining income and wealth dynamics at the household level and how these changes are related to factors such as age, occupation, industry of employment, household circumstances, geographical mobility and job changes, including spells of unemployment. Among the major research themes which will be pursued are:

Transitions into and out of poverty: This is perhaps the area in which the potential pay-off from panel data has been most clearly established. The pioneering Michigan Panel Study of

Income Dynamics (PSID), in particular, documented both a striking rapidity of movements into and out of poverty and a close association between such transitions and changes in household composition. For instance, 46 per cent of the married male family heads who were poor (in the sense of being in the bottom quintile of the income distribution) in 1967 had become non-poor by 1973, while an unmarried female head who was poor in 1967 more than doubled her chances of leaving poverty by marrying (Duncan and Morgan, 1976). Such findings have implications for the way in which poverty is perceived, by both analysts and the poor themselves, and for the design of policies towards its alleviation.

Life cycle effects: The life cycle model remains the preferred analytical framework of many micro-economists. While much has been written on its compatibility (or otherwise) with observed behaviour, the panel - with the consequent ability to disentangle age, period and cohort effects and to control for unobserved heterogeneity - would provide the most promising data set for a more reliable investigation. Amongst the issues one might wish to address are: the extent to which individuals and households are able to reallocate resources across the lifetime in response to their changing needs; and the extent to which observed patterns of savings and wealth holdings are consistent with life cycle theories. Clearly, too, there are links with labour market and consumption behaviour to be explored. At the most fundamental level, the usefulness of life cycle paradigms is itself open to question. Might it be, for instance, that economic dynamics are driven more by discontinuous events - family splits, unemployment and so on - than by the smooth processes underlying the textbook economic theories?

Income and family composition: Changes in household structure are liable both to influence and be influenced by household income and its allocation within the family group. Children's decisions to form separate households, for instance, may be affected by their own earning capacity and their effective claim on any parental income. Such questions seem to have received comparatively little attention, largely as a result of data deficiencies.

Wealth accumulation and savings: Available cross sections cast little light on either the means by which individuals acquire wealth or the reasons for which they do so. The quantitative importance of intergenerational gifts and bequests, for instance, remain a matter of controversy. Nor is their magnitude all that matters. Different motives for such transfers - whether altruistic, for instance, or intended to affect the recipient's behaviour - can have contrasting implications for policies intending or involving intergenerational redistribution. Again, it is the collection of data on a longitudinal basis and in a context that recognises the complexity of interpersonal relationships (and the varied nature of the transfers people make) that analysis requires. The panel also enables savings behaviour to be analyzed in its inherently intertemporal context. At a general level, it provides the chance to disentangle the ways in which asset holdings respond to anticipated life cycle developments, unforeseen personal events and temporal effects common across households. Within this context more specific aspects of financial management and their relationship to other dimensions of behaviour, including for instance the way in which people cope with debt and the provision that they make for their retirement, are also best addressed in a multi-purpose panel.

Housing

Three areas concerned with housing will be explored by the panel study: housing costs, housing consumption and housing mobility. There are, of course, clear links between housing and the issues previously discussed concerning labour market behaviour, household dynamics and income and wealth. Moreover, there has been much recent discussion in the social sciences concerning social divisions arising from the consumption of housing (see Dunleavy 1979; Saunders 1984; Heath *et al* 1985; Sullivan 1989). This literature has suggested that the key division is that between different forms of tenure - owning versus renting - although housing specialists are beginning to doubt whether homeowners form any kind of unitary group. Indeed, some researchers have suggested that there has been an over-emphasis on homeownership as a unitary phenomenon and that too little attention has been paid to the fact that homeownership has changed in nature as it has grown and spread 'down market' (Murie 1989). Nevertheless, house price inflation has had considerable consequences for homeowners, since the return for housing can serve to counteract inequalities arising from other spheres of the market and production. There can be little doubt that homeownership has become extremely important in terms of wealth accumulation and distribution. However, because existing large data sets give insufficient detail on housing, it is difficult to produce a differentiated view of the effects of increasing homeownership for wealth accumulation,

social and political attitudes and values and so on. Hence, the panel study will seek to provide evidence which is currently lacking in these areas.

Health

In a panel study of this type there is a limit to the number of questions which can be included on health in the fixed component of the questionnaire. Nevertheless, health can be seen as important to several of our other interests, since health events are turning points in economic and family circumstances but have been largely ignored at both individual and longitudinal level. Equally, there has been some criticism of the adequacy of the health measures used in the GHS precisely because of its cross-sectional nature. The GHS is not longitudinal, contains no information on past history, contains difficulties in the health measures used which make interpretation of service use problematic and has never offered an easy way of associating individual variables with households. The unit of analysis has always been the individual or the household, never the individual ***within*** the household (see Blaxter 1987). The proposed panel study offers a solution to these problems. It is intended that four health-related issues will be covered by the panel study. These are (a) the impact of health and illness on household and individual behaviour; (b) the documentation of health and health inequalities in the 1990s; (c) patterns of health and illness; and (d) the use of health services. Each of these is examined briefly in turn below.

The impact of health and illness on household and individual behaviour is of obvious interest in a household panel study. Ill-health can have profound consequences for households and families. It can affect labour market participation, income, reliance on state benefits and family stability.

Information on patterns of health and health inequalities have been examined in a wide range of studies and in a detail which the panel study cannot march. However, there is relatively little information from large samples on the incidence and prevalence of psychiatric illness or its distribution by social class and nothing which offers the same possibilities for examining the individual-household link for health problems and inequalities in general.

In similar manner, the range of socio-economic information, the longitudinal design and the individual-household link all make the panel study an ideal vehicle for attempting to explain patterns of health and illness. For example, it should be possible to compare the explanatory power of production as against resource/consumption accounts of health; to examine the relationship between unemployment and health and so on.

Finally, there is the question of health service use. Some data on health service use is collected in cross-sectional surveys but service use has arguably been less thoroughly researched in longitudinal studies than other aspects of health. The panel study can provide us with important data on health service use over time and on the social and economic factors that will affect it in the 1990s and beyond. We can, for instance, try and assess the impact of changes in health service provision (such as the planned NHS reforms) on patterns of health service use. Clearly the public/private divide in health service use will be an important one; so, too, will the distinction between primary and hospital care and that between curative versus preventative medical interventions. Other issues of interest, which have been little researched and which the panel study's design characteristics will favour, are the relation between use of health services of individuals within the same household; the relation between patterns of informal health care and health service use; and the consistency of patterns of health service use over time. We can also look at the under-researched area of the impact of health service use on patterns of morbidity. The redistributive effects of health care provision, both public and private, can also be studied.

Socio-Economic Values

There is no generally agreed conception of what a 'value' is. Values are construed, varyingly, as shifting repertoires of justifications for action, as persisting goals, as moral symbols, as historical or universal phenomena. Values are not usefully understood as empirical entities, or packages, constituting some fixed dimension of individual profiles. Rather, values are assertions of abstract principles, typically with moral content, which constitute the 'common-place' or everyday language. Hence, questions about values amount to questions about the kinds of moral discourses in which people engage. This view of values has implications for a research strategy. To have a clear notion of people's values requires

qualitative data. As the research design of the panel study will use questionnaires as the main research instrument, the proposed research strategy is a compromise between a plausible but qualitative (or discursive) approach to values and a quantitative research design.

Individual behaviours are shaped within several contexts. For most people the immediate context is the household. Households are nested within wider contexts of intra-household networks and structured extra-household contacts. These contexts are imbued with values propounded by institutions and propagated by broad social movements, e.g. environmentalism and feminism. Context is significant for the values research in three ways. Firstly, people make choice, decisions, judgements within contexts; and it is in responses to situations that values are revealed. Secondly, although values are relatively stable, changes in the context of people's lives are a major source of value change - most immediately evident in life-cycle events, but the effects of wider contextual change can be anticipated over the course of the panel study. Thirdly, disjunctures between the values engaged in different contexts are major sources of value tension - and so of the potential for value change.

Researching values means investigating dilemmas - in two senses. Values are expressed in widely agreed statements of abstract principle with moral content, with everyday language containing a repertoire of values, constituting a common 'resource bank' from which individuals choose which values to engage. Resolving dilemmas is also central to what people do in their lives, and it is plausible that people can give an account of how they resolve dilemmas which reveals which values from the repertoire are prioritized.

However, this research strategy does not imply that people have open choices in conducting their lives. Contexts constrain; equally, constraints do not constitute fixed dichotomies - real life dilemmas are seldom about 'either/or' decisions. What is desirable is often balanced out against what is possible. This entails making choices from a range of options, however constrained they may be.

This thinking has implications for question design as questions about how people resolve everyday dilemmas have a higher priority than questions posing macro-level choices. In a panel study people's recourse to 'grand' values, such as freedom or equality, gives an insight into constraints - but, for the most part, the values questions will be designed to tap how people resolve problems. What values are revealed by what kinds of behaviours are to be inferred from the substantive underpinning of the questions.

The values research is focused on questions of justice as a matter of 'fairness' in the distribution of valued goods. The theme goes to the heart of what social life is about, both cohesion and conflict. As Walzer (1983) puts it: "Human society is a distributive community" but yet "Distribution is what social conflict is about". The theme is large enough to take in a range of specific issues, from micro-level questions about the allocation of resources within households through to broad public questions about the distribution of wealth and health. There is American literature and research around the theme, but little for Britain (however, see Goldthorpe, 1988; Marshall *et al* 1985; 1988; 1989). Contrary to the universality proposed in theoretical constructions, empirical studies support the contention that popular conceptions of justice vary across domains and institutional settings. That is, what values people engage is an empirical matter - about which, amongst the British public, we have only indirect evidence (e.g. British Social Attitudes Surveys, British Election Studies, the British Class Study and the British component of the European Values Survey). And it is a theme which can subsume several questions likely to be live issues well into the next century.

There are no good grounds for determining, *a priori*, what values are engaged in the behaviours being investigated by the panel study. Exploring values relating to household organisation, health, wealth, work and consumption - as separate activities - promises to yield an overly fragmented and disparate picture of individual value sets. On the other hand, behaviours in the several settings raise common questions; in particular, whether such activities are matters of individual performances, market exchanges or state intervention, and what kinds of values are engaged. That is, we draw together the diversity of household-related behaviours by looking to the underlying distributional principles; we pursue our substantive interest in distributive justice by focusing on household and household-related behaviour.

Research Design

In this section we discuss briefly the main design issues and the guiding principles we have tried to follow. A fuller account of the research design is available in a separate paper (Corti and Rose, 1989).

Some Guiding Principles of the British Household Panel Study

1. It is a mistake to attempt to optimise simultaneously both the cross-sectional and longitudinal opportunities afforded by our survey. A choice has to be made. Priority should always be given to the longitudinal dimension of the survey. This means, first, resisting the temptation to treat the panel study as just another, albeit large, cross-sectional survey. One should be very wary of accepting once-only cross-sectional supplements to the questionnaire, even if they are specially funded. Such supplements can rarely be justified on either academic or financial grounds. They seldom add much of analytic value in the context of a panel and the extra funds get swallowed by the supplement. Indeed, the sponsors of special supplements generally expect to receive their data and/or analysis rapidly, thus distorting the procedures and resource allocation for data processing. It is far better to educate sponsors about the analytic opportunities of a panel, e.g. the panel history of their sub-group.

2. Secondly, it means that resources should be heavily concentrated on maintaining the panel, i.e. pursuing movers, persuading refusers to cooperate, tracing addresses etc. If sufficient effort is put into panel maintenance, differential panel attrition rates between sub-groups should turn out to be minimal. The maintenance of the panel, combined with the interviewing of new entrants into households, should produce an overall sample that is as representative as a fresh cross-sectional survey.

3. It is essential to design the Wave 1 fieldwork in such a way that the re-interview rate of Wave 2 is maximised. Evidence from other panel surveys clearly suggests that the long-term attrition rate is strongly determined by the response rate in Wave 1 and, even more, Wave 2; after Wave 2 re-interview rates tend to be 95 to 99 per cent. It is therefore very important not to alienate Wave 1 respondents with too long an interview. Our aim should be to make Wave 1 short and sweet.

4. A good rule of thumb is that however long the interview one rarely gets more than 50 minutes' worth of good information. A 45 minute individual interview would be ideal, a 60 minute interview still just feasible, but anything longer could be very dangerous for subsequent response rates. Most respondents are likely to find the interviews fairly boring because, even though the questions are about their personal lives, the answers do not change that much from one year to the next.

5. While the questionnaire will have 'core' and 'variable' components, as large a proportion of the questionnaire as possible should be reserved for core questions, i.e. identically worded questions asked annually, or at least regularly. In the medium to long term, core questions tend to be the most useful for academics and policy-makers. For 'stock' as opposed to 'flow' variables, requiring 'difference analysis' rather than dynamic modelling (e.g. wealth), core questions should be asked but not every year: annual data would produce more noise than signal.

6. The 'dead hand of history' is - and should be - very powerful in panel surveys. The wording of core questions should only be changed if very strong reasons can be found. It is therefore crucial to do extensive pre-testing and piloting before Wave 1 on the working of the core questions. Much of what goes into the 1991 questionnaire will and should still be there in 1999.

Type of Panel Design

There are a number of alternative basic designs which could be employed and which are discussed in the literature. Duncan and Kalton (1987) distinguish three types. First, there are rotating panel surveys in which some fraction of sample households is replaced at each wave, thus combining elements of cross-sectional design with those of a panel. Second, there are panel surveys such as the American Panel Study of Income Dynamics (PSID) which incorporate following rules which allow for new members to enter the panel. Finally, there are split panel surveys which combine features of the other two types. The Centre favours the PSID design.

Sampling Issues

So far as a choice of **sampling frame** is concerned the Postcode Address File seems to offer the best choice. Compared with the Electoral Register it is more comprehensive and more up-to-date. It is computerised and can more readily be used for purposes of spatial referencing. It seems to us that the more difficult sampling problems concern other issues - especially stratification, clustering, over-sampling and coverage. These are still under discussion. We are concerned that the final sample design should ensure maximum possibility for us to link the panel data with other data sets. We are also concerned that separate analyses could be made of some sub-samples and we are, therefore, prepared to examine the issue of coverage and over-sampling. However, over-sampling should only be considered in the case of exogenous, (relatively) invariant, independent variables such as race and region. Any decision to over-sample should be linked to some assessment of the theoretical and policy relevance of the group concerned over the next ten years. We should add that the most requests have been made for over-sampling in relation to (a) Scotland and (b) race. If resources allow, we may, in some waves, add booster samples. This could be done in the case of the wealthy when the core contains questions on wealth, for example.

Non-Response

Apart from the normal problems in surveys of non-contact and refusal to participate, panel studies face the additional major problem of attrition. Research in both the USA and the UK suggests that interviewer quality is the key weapon in the fight against non-response of all forms. Hence, every effort will be made to ensure that the study has high quality, well-motivated and well-trained interviewers. In addition a well-organised programme of panel maintenance will be necessary, as suggested earlier. Other measures which are being considered in order to counteract attrition are incentive payments, use of the same interviewer for the same household in wave after wave whenever possible and regular reports on the study to panel households.

Data Collection and Data Quality

As we indicated earlier, it is our intention to conduct face-to-face interviews with each eligible sample member in the 5000 selected households. This is a very ambitious task, of course. German experience is that the survey instrument needs to be sufficiently flexible and well-designed that it could be self-administered and interviewer-checked or, in the final resort, used for a telephone interview. Clearly, we would expect interviewers to be more persistent in call-back than would be normal in a cross-sectional survey but there are bound to be households (especially large ones) where there will be difficulties in obtaining a full set of face-to-face interviews. For this reasons we must consider not only self-completion and telephone interviews as alternatives *in extremis* but also the question of proxy data.

With regard to telephone interviews, we have been advised by the Co-Director of PSID that we could offer such interviews to respondents as an alternative to face-to-face interviews from Wave II. However, it may be that the length of interview (an hour compared with PSID's 30 minutes) would make this option difficult.

Proxy data is obtained regularly by other panel studies. This is routinely done in the case of those sample members who become institutionalised or incapacitated in order to carry them along. Equally, reliable proxy data for certain types of variable can be obtained when there is no other alternative. Obviously a compromise has to be made between no data and possibly unreliable proxy data. Whilst every effort will be made to interview the designated respondent, there will be contingency plans in the cases both of the absence of the respondent who normally supplies household information and to cover the absence of any other individual member of the household. PSID's respondent rules have been devised in relation to the quality of data and level of non-response. They give a hierarchy of proxy informants thus: (1) spouse; (2) adult who was previous proxy; (3) individual who was proxy at any other interview; (4) other first-time proxy. However, proxy data is always a last resort.

We have had many requests to consider the periodic collection of complementary qualitative and other types of data. The use of depth interviews, life histories and diaries have all been mooted. Our fear is that an increase in the burden on respondents may lead to

high rates of attrition. We are, however, sympathetic to requests for extra data. While we would be cautious about the use of other data collection techniques, it has been suggested that the use of a 'pilot panel', while more costly, could allow for experiments to be made without any harm being done to the panel itself. One other type of data which could conceivably be collected in relation to the panel is administrative record data. Since there will be (we hope) a Government Consortium partly funding the panel, we may be allowed to have access to administrative records. This raises very serious issues, of course. Members of the panel would have to be informed of any intention to collect such data and this could have deleterious effects on response rates. Even if this were not the case, on purely ethical grounds we are not convinced that we should even try to obtain such data other than as an aid to tracking the panel.

Panel Maintenance

As we noted earlier, we are aware that substantial resources need to be devoted to panel maintenance. At least one person on the Centre's staff will have responsibility for this task. We have taken advice from other panel teams on this issue and we know the type of information we need to collect at first interview for the purposes of tracking. We may also follow PSID practice of paying households for the return of an annual address card.

Conclusion

This paper has provided an overview of the intended work of the Research Centre in the design, collection and analysis of its panel data. However, much more remains to be done in the months to come and, no doubt, hard choices will have to be made. Nevertheless, the British Household Panel Study will allow, as we have indicated, new research opportunities for fundamental and applied research in the social sciences. It will permit the testing of theories for which only longitudinal data are appropriate. It will provide social scientists in Britain with a data set which will help them to retain a leading position in the world social science research community. Policy-makers and researchers will gain a greater insight into the dynamics of British society. Moreover, the Centre has already begun and will continue to facilitate an interchange of ideas across the boundaries of the various social science disciplines. Those who do not normally communicate their ideas to one another, because of the barriers which operate between disciplines, are now beginning to do so. Equally importantly, the panel study data should lead to further communication between academics and policy-makers in areas of mutual interest.

POSTSCRIPT

David Rose, Nick Buck, Heather Laurie and Jackie Scott

Introduction

Micro-social Change in Britain was written two years ago, at the very beginning of the Centre's existence. It represented the work done to date by the applicants for the Centre, Ivor Crewe and David Rose, two of their (part-time, temporary) research assistants, the staff at the University of Essex who, with them, formed the Socio-economic Panel Working Group and the generous contributions of members of the Centre's original Advisory Groups. The Guiding Principles enunciated in the paper were the product of discussions in Luxembourg with Greg Duncan (PSID), John Coder (Survey of Income and Program Participation [SIPP], US Bureau of the Census), Jean-Claude Ray (Lorraine Panel Study) and Gaston Schaber and Pierre Hausman (Panel Study of Life in Luxembourg, CEPS/INSTEAD). However, the practice of designing and implementing a large scale household panel study had barely begun at the time the paper was written. The Centre then comprised Ivor Crewe, David Rose, a secretary and three temporary researchers. In the intervening time much work has been necessary to turn the vision of the application for the Centre and of the paper into a reality. In this Postscript we review some of the Centre's accomplishments which have stemmed from the paper, as well as discussing how the Study has evolved and changed as a result of continuing consultations, reflections, practical experience and the inevitable exigencies of real time and budgetary constraints.[1]

Micro-social Change in Britain (hereafter *MSCB*) is a historical document of great value because it serves as a benchmark of research and other objectives against which the Centre's accomplishments can be measured. Of course, many of these objectives still lie in the future. A few more years will need to pass before we can live up to the promise of "providing a major national database and requisite organisational structure to study social change and to anticipate the incipient policy problems which arise from changes in the social and economic structure". Indeed, we are struck by the rather grand claims made in the first few sections of the paper (themselves stemming from our application to ESRC) and which represent the euphoria of the early days. While we have not abandoned that vision, we probably would no longer express it in quite such bold, almost intrepid terms! Nevertheless, although it will be another two years before we have any longitudinal panel data to analyze, a great deal of the complex work involved in organising and launching such a large scale study has been completed and numerous issues have been resolved concerning, for example, sample design (see Coxon and Corti 1991), the selection of a fieldwork agency (Noble forthcoming), questionnaire content and format, the development of editing and coding procedures, the design of panel maintenance operations, the design of databases and so on. We have also organised and conducted three major pre-tests and two dress-rehearsal pilot studies with combined samples amounting to well in excess of 1500 persons; and we have undertaken a substantial project on household finances.

In addition to these survey-related tasks, the Centre has been established as an organisation which ensures that data can be collected, processed, analyzed and disseminated to the wider academic and policy research community within a reasonable period of time and to high quality standards. Here the Centre's Corporate Plan (itself another major undertaking) acts as a guide to our activities. Beyond this the Centre's staff have been involved in all the normal activities of researchers - writing papers, undertaking other associated research projects, attending conferences, organising workshops and seminars, giving presentations of their work and now producing the Working Paper series of which this is the inaugural paper. Yet the lead time for a project such as the BHPS seems interminable to researchers outside the Centre whose main interest is in having panel data to analyze. Two and a half years from the opening of the Centre to the first Wave is apparently a long time. This Postscript may help to explain not only how the Study has evolved but also why its gestation period has been necessarily prolonged. In what follows we discuss mainly the issues of research objectives and research design, concentrating on an explanation of the Study's evolution but also elaborating on some matters raised in the original paper.

Research Objectives and the Design of the BHPS Questionnaires

Probably the most time consuming activity of the last two years has been the production of the questionnaire for the first wave. Alongside the substantial programme of pre-testing, referred to above, this involved an extensive effort to reduce to a manageable

questionnaire the many excellent and compelling proposals for research themes which the Advisory Groups generated. In many ways this has been a continuing learning process in relation to both household panel studies and the uses of longitudinal data. In attempting to refine a research instrument we have had to work with a number of selection criteria, including the research priorities of the different disciplines and policy areas involved in the study and the pertinence and centrality of suggested contents to our overall theme of micro-social change. However the criterion which became increasingly compelling was the degree to which proposed research themes demanded longitudinal data.

This required us to come to a closer understanding of the uses to which data from existing household panel studies were put. Central to this effort has been involvement in the newly created European Science Foundation Network on Household Panel Studies, for which David Rose and Ivor Crewe prepared the successful application. This has enabled us to learn from close contact with researchers from panel studies in Europe. We have also had continuing and fruitful contacts with the PSID and SIPP in the USA. Two of the authors of this Postscript have also begun a research project using data from the PSID (Buck and Scott, 1991) which has provided invaluable lessons in the priorities of longitudinal research design; and another colleague has been working on the third Youth Cohort Study. In this Postscript we give some indication of the ways in which this focus on longitudinal research has shaped the way the questionnaires (outlined below) developed.

The design of the BHPS questionnaires has been influenced by a number of distinctive features and opportunities of longitudinal research design. First, research can be focused on change at the level of the individual or the household. In comparison, research on successive cross-sectional surveys focuses on change at the population level. This type of longitudinal research may well focus on similar variables and use similar questions to those used in cross-sectional surveys. It is important, however, that questions are selected with a clear focus on characteristics, behaviour or values which are either expected to be subject to change, or are significant factors affecting the likelihood of change.

The second (and more distinctive) feature of longitudinal research is that it allows an analysis of individuals over time. The research instrument should therefore permit the construction of continuous measures of, for example, income, employment histories and labour market participation, household structure and residential mobility over the life-cycle. These data are collected much more reliably in a panel study than in long term retrospective history surveys, but it does imply that many questions in a panel survey will be concerned with events in the period between interviews, rather than with the current situation at the time of interview. A further use of panel data collection is to compare expectations about change in the subsequent period between interviews with change which actually takes place. Important areas in this context are occupational change and residential mobility.

A further feature which has influenced the BHPS design is the way it can be related to other data sets. The BHPS is designed to complement a number of relevant and widely-used, major datasets familiar to many researchers and policy-makers. As far as possible the questionnaire has been designed so as to ensure comparability with these datasets but clearly it will have its own particular strengths. For example, a major focus of the income section will be to allow the construction of measures of annual income, in contrast to what is possible using the Family Expenditure Survey, since panel data are necessary both for the analysis of lifetime earnings and for movements into and out of poverty. Similarly it will contain greater longitudinal depth of information on labour market mobility than the Labour Force Survey (LFS) can provide. Perhaps the closest model is the General Household Survey, but here again the BHPS will provide unique information on change over time, as well as covering subjects not included in the GHS, such as intra-household decision making and socio-economic values. The extent of attitudinal data will be less than in the British Social Attitudes Survey but the BHPS will allow analysis of how attitude and value change relates to life events and behaviour. The first wave of the BHPS will be at approximately the same time as the fifth wave of the National Child Development Study and so there may be possibilities of comparative research based on these two longitudinal datasets. The BHPS also follows shortly after the 1991 Population Census, providing the opportunity for the data to be related to a population baseline, while also allowing comparative work with data from the OPCS Longitudinal Study.

Of course the breadth of coverage of the BHPS means that on individual subjects the depth of coverage cannot be as great as it is in these other surveys. Moreover, because the

sample size is significantly smaller than the LFS and GHS, analysis of small population groups or of the smaller regions will be limited. It is, however, intended to provide some information on the characteristics of the area of residence so that analysis of the impact of change in local contexts can be undertaken.

In terms of sample size, the BHPS remains a study of 5000 households containing between them an expected 10000 adult individuals. This may seem a trivial point to make but, in the face of budgetary constraints and other pressures, we have had to fight both long and hard to retain this original aim. The principal sacrifice we have had to make in order to maintain sample size has been in terms of questionnaire length (although intended staffing levels and other proposed expenditures have also been cut). The individual questionnaire has been reduced from 60 to 40 minutes. Inevitably this has meant adjustments to our research plans in some areas so far as the core (annual) questions are concerned. The principal areas affected are consumption, household economic decision-making and socio-economic values. However, the difficulties we encountered in trying to operationalize some of our ideas in these domains had already proved either insuperable or incapable of resolution in time for Wave 1, even within the constraints of our original questionnaire length. We indicate the nature of the changes made to the Study's six domains in the next few sections.

Labour Market: The labour market component is shaped by two main agenda. First, it is concerned to allow research focused on patterns of individual mobility, either by comparing jobs and labour market position at successive waves or by analyzing the detailed work histories collected over the course of the panel. Career patterns can clearly be related to other components of panel data, such as education, income, health or household organisation. To facilitate this type of analysis the Study will collect relatively detailed information on job characteristics, covering issues of promotion within jobs, job security, training and fringe benefits.

The second part of the labour market agenda is concerned with collecting data on how individual labour market participation decisions relate to the household context and thus, for example, support research on household labour supply models and sociological research on married women's involvement in the labour market. This connects to our work on allocative systems, of course (see below). Hence, there is a particular emphasis on the collection of data dealing with *transitions*, and the questionnaire contains a detailed history of employment transitions and job characteristics over the previous year so that a continuous history will be built up over time.

Income and Wealth: While the BHPS will be as susceptible to data limitations as the cross-sectional studies discussed in *MSCB*, nevertheless the links between income and wealth dynamics and household and individual changes in other domains will provide one of the most distinctive contributions of the BHPS to research in this area. *MSCB* notes the importance of this domain to discussions of transitions into and out of poverty, to the relationship between income change and family composition change and to analysis of life time patterns of wealth accumulation and savings. All these issues imply a focus in the questionnaire on income levels over the year and occasional supplements on wealth and savings.

While nothing has altered in terms of our conception of this area, much time has been taken over the design (and the impact on respondents) of income and wealth questions. Our major design decision in this area has been to collect data which will allow annual measures of income to be calculated, as well as data on the way household and individual incomes change over the course of the year between interviews. This is necessary for the proper analysis of income dynamics. For this reason it is also the way in which income information is collected in most of the other household panel studies. We will still be collecting data on current income, in the manner more familiar in other British surveys. However, no serious questioning on wealth will take place in the first few waves of the panel and certain related questions on investment income, as well as questions on credit and debt have been kept to a minimum in Wave 1. These areas were thought to be particularly sensitive, and we did not wish to address them until the panel was fully established.

Household Economic Decision-Making: The household dynamics section of *MSCB* listed a wide range of possible research issues, some of which were acknowledged to be problematic in terms of survey research. In an effort both to refine research issues capable of being addressed in a survey and to undertake research more suited to qualitative

approaches, the Centre established a sub-project on household finances in the summer of 1989 (see Laurie 1991; Rose and Laurie 1991). Data from this project continue to be analyzed and will eventually be reported in a book. However, it became clear from the project that a satisfactory set of survey questions, sufficient to obtain details on the more intricate aspects of household finances, would take too long to administer as part of the core questionnaire. This did not greatly surprise us (although, as one result of this project, we do now have a draft of questions which could be pre-tested for possible use in variable components of the individual questionnaire in future years).

The core questionnaire uses both of the questions developed as a measure of household allocative systems for ESRC's Social Change and Economic Life Initiative (see Vogler 1989) plus other questions about use of bank accounts, division of household labour, internal and external financial transfers, as well as measures of household income. Supplemented by judicious use of variable questionnaire components and other methods such as diaries (see below), valuable contributions to research in this area will be possible. Certainly the concept of household allocative systems remains central to our work on household dynamics, although we have extended its use beyond the couple situation to include transfers between all household members (see Rose and Laurie 1991). The Centre has organised one workshop on this topic (with the Social Statistics Research Unit, City University) and another is intended. In our planned book on household finances (and elsewhere in our research programme) we are seeking to extend the utility of the concept by using it as a way of linking the 'private' world of the household with the 'public' world of paid employment (see Rose *et al* 1988; Laurie 1991; Rose and Laurie 1991; cf Morris 1988; 1989a and b; Vogler 1989). We are also engaged in some cross national work in this area with researchers in France and Ireland (see Rottman *et al* 1991).

Consumption: In the area of consumption, less is being asked in the core questionnaires than we had originally hoped. The household questionnaire includes questions on the possession and purchase of a range of consumer durables and expenditures on housing, fuel and power. In addition the individual questionnaire has a question concerning ownership of and access to motor vehicles. The Centre remains committed to increasing its coverage of consumption issues and is seeking to develop new questions for variable components.

However, as *MSCB* acknowledges, the best way of collecting accurate consumption (and time use on household tasks) data is via diaries. From the outset the Centre has been interested in developing the diary method in relation to the panel and, with this end in view, has established a Diaries Working Group to create a forum for the exchange of information on the use of diaries in social research. The Group has organised one workshop and more are expected to follow. Nonetheless, we remain concerned that adding to the burdens we impose on respondents could increase attrition rates. Thus it is unlikely that we would add diaries to our data collection instruments for some years and it is certain that the experiment would be tried first on our pilot panel (see below). Hence, the extent to which the BHPS may be utilised for research on consumption is by no means finally determined. Moreover, in the areas of consumption and household dynamics, we continue to be interested in combining different methods as a means of improving the quality of our analyses (see Laurie and Sullivan 1991; Laurie 1991).

Housing: The housing component of the questionnaire will collect basic information on housing costs and conditions and other features of housing consumption, as well as data on aspirations and intentions to move. Not only will data on these issues be of use in housing research but also in relation to other research domains. However, the most distinctively longitudinal concerns are those which deal with housing and tenure mobility and the accumulation of wealth through housing (see, for example, Forrest *et al* 1990; Murie 1989). The BHPS will be an especially valuable resource for the analysis of migration and migration decisions, and questions will be added at Wave 2 for those who have moved in the previous year.

Health: The principal features of the health component remain as envisaged in *MSCB*. Questions in the health section cover caring as well as chronic conditions, and a self-completion questionnaire is used to administer the General Health Questionnaire (GHQ). The health component also contains some attitudinal items concerning health services, which will allow researchers to relate individual attitudinal change to household health service usage. This will be especially relevant to current and (we would expect) future concerns about changes in the National Health Service.

Socio-Economic Values: This area of the BHPS has been much the most problematic to design. The reasons for this are fairly obvious. Not only is the study of values difficult under any circumstances but there are particular problems which arise in the framework of studying values in the decontextualised situation of a social survey. The discussion in *MSCB* makes some of these points evident. We do, however, intend to pre-test for Wave 2 a more open-ended probing of respondents' own views concerning what have been the major changes in their lives over the last year. This will allow analysts to examine the respondents' own subjective perceptions against 'factual' changes recorded in the different substantive domains.

After much debate, it has been decided that the BHPS focus on socio-economic values should be largely related to the other domains of the Study. The aim will be to provide data which will allow an exploration of how value change is (or is not) affected by changing individual and household situations; of how values themselves can be seen to influence behaviour; and also how stable values appear to be over time. In addition there will be a more specific concentration upon aspects of citizenship (in joint research with Bryan Turner, University of Essex), social justice, political values and social participation (relevant to ongoing work by Ivor Crewe, University of Essex, Tony Heath, Nuffield College and Roger Jowell, Social and Community Planning Research). This strategy thus complements existing work from other sources such as the British Social Attitudes Surveys, the British Election Study (Heath *et al* 1985), the Essex class project (Marshall *et al* 1985, 1988, 1989) and the Bath social justice project. (See Marshall and Swift, forthcoming.)

Methodological Research: More generally, the Centre's research programme now also includes methodological research related to the design of panel surveys and the collection and analysis of panel data. In the latter context the requirement to analyze information on the dynamic interactions in households between two or more persons demands significant advances in statistical methodology. Equally, the surveys will produce data suitable for event history and related analyses. The Centre's researchers, in collaboration with others, will seek to make further advances in the development of these methods and their relation to other techniques. In this connection, the pilot panel (presaged in *MSCB*) has a crucial role to play. This is a panel of 450 households and 900 individuals which is being used to test new questions and panel procedures, as well as providing the test bed for methodological experiments.

Policy Related Research

The Centre's remit covers policy as well as scientific concerns. Hence, in the past two years members of the Centre have had many discussions with research personnel in government departments and the private sector, both of which are represented on our Policy (i.e. Management) Committee. The Centre has already received funding from the Department of Social Security to assist in the development of policy-related research, as well as two grants from the Training Agency for work in connection with their third Youth Cohort Study. Although *MSCB* had little to say on policy research *per se*, the policy relevance of the BHPS is quite evident. The Study will address key policy issues in a number of areas which have been endorsed by both policy researchers and government departments and agencies as relevant to their present and expected future research interests. The following areas of research have been identified as being of particular concern:

1. **Income dynamics** in relation to measuring the amounts and types of benefits received. In addition the Department of Social Security has noted the distinct limitation of current sources of information on income dynamics, especially in terms of mobility into and out of poverty. A panel study is, of course, an excellent source of continuing data in this area.
2. **Savings and asset holding:** The Treasury has indicated a demand for information on savings and asset holding because of the interaction of tax and funding policy as well as in relation to the conduct of macroeconomic policy. Because of its longitudinal dimension, the Study should provide a much richer set of dynamic information on these topics than can be obtained from static surveys such as the FES and GHS and the panel data should be generally more robust. Life cycle behaviour is an area of interest on which it should be possible to obtain particularly valuable information. Similarly the DSS is interested in longer term acquisition of assets through, for example, the accumulation of occupational and private pension rights.
3. **Benefit distribution,** in particular the incidence of benefit take-up, is a third area of concern where panel data should be useful. The collection of monthly data on benefit receipt

will allow investigation of the frequency with which people move in and out of benefit, and the periods for which benefit is taken up, as well as an identification of long-term and short-term benefit groups.
4. **Household and family dynamics** and the effect of household formation and dissolution on income have considerable policy relevance. Both conventional families and non-traditional families are of interest. The DSS, for example, is interested in the processes by which one parent families are formed and the choices which lone parents make with regard to the labour market, child care and their relation to the social security provisions impinging upon them.
5. **Housing decisions** and how the receipt of benefit influences decisions on housing and mobility would inform discussions on the restructuring of housing benefit. Equally the panel evidence on income dynamics can illuminate areas important to housing policy. For example, the Department of the Environment is interested in whether the poor (in the sense of people with continuing low incomes) are a large or small fraction of those with low incomes at a particular survey date. The answer is important for any judgement of how best to use the public funds available for assisting people with their housing costs when their incomes are too low to afford adequate housing unaided. The Department is also concerned more generally with the relationship between housing and poverty; in housing mobility, its causes and consequences; exploration of the thesis that there is a 'housing ladder' for owner occupiers; attitudes to housing; and various types of housing career.
6. **The allocation of resources within households** and its relationship to consumption patterns and labour market participation is another area of interest for policy researchers. We have already noted the DSS interest in respect of single parent families and the labour market. Other aspects such as choices about shared or separate accommodation and income transfers within households would also be of direct policy relevance.
7. **Ageing,** in particular monitoring the living standards of the retired, and examining the mix of income sources including pensions, inheritance, lump-sum payments and the realisation of assets, is a topic of increasing concern, and relevant to the activities of many Departments, including Health and the DSS. The Department of the Environment has expressed an interest in data on housing and the elderly, including the housing implications for caring relatives and how new community care arrangements are operating.

8. **Health** and its relationship to socio-economic opportunity, including the use of private or public health services, is an almost perennial issue. The BHPS offers a unique opportunity to link health data to wider social and economic data within a dynamic context.

9. **Labour market participation** and the degree of economic mobility over time provides our final example of policy relevance. We have already noted that the panel will track movements in and out of the labour market and provide data on, for example, the factors influencing women's re-entry into the labour market after a period caring for small children or elderly dependents.

These areas are but some of those which the Study could illuminate. We believe the BHPS will be a unique strategic data resource for both policy researchers and policy-makers for the next decade. The longer the study lasts, the more valuable and indispensable it will become.

Research Design [2]

When *MSCB* was written, the key design decisions were still to be made. Much of the Centre's effort in the past two years has been devoted to panel design and the need to match our resources to that design. As we noted earlier, the Centre is, in fact, now organising two panels. The pilot panel is also a national sample but drawn from only 25 primary sampling units (PSUs). The main panel - the real BHPS - is a stratified, clustered random sample of households drawn from the Postcode Address File and having 250 PSUs drawn from the whole of Great Britain south of the Caledonian Canal. We hope a further, complementary panel will be conducted in Northern Ireland.

Our aim is to interview all adult members (age 16+) of the sample households; to bring into the sample children from original households after they reach the age of 16; to follow all original members of the households when they split from Wave 1 households; and to bring into the panel all adult members of the new households to which our original sample members move. For the respondents the BHPS has adopted the guise of the Living in Britain Survey (LIB). The LIB title allows us greater potential than 'British Household Panel Study' for explaining the purposes of our work to a wide range of people in a variety of different

circumstances and thereby aids in the maximisation of response across the range of age, class, ethnicity and so on.

There are a number of basic data collection instruments, as follows:

1. An **individual questionnaire** for each adult member of sampled households;
2. A short individual **self-completion questionnaire**;
3. A **household composition schedule**, including a tracking questionnaire.
4. A **household questionnaire**; and
5. A **proxy questionnaire** for individuals who cannot be interviewed for whatever reason other than refusal.

The average time per person for administering this package is 62 minutes. The individual interview is of approximately 40 minutes mean length. The household level data is collected from a Household Reference Person (HRP) or his/her spouse/partner. The HRP can refer the interviewer to another person in the household for any of the information required. The household composition data must be collected before individual interviews can proceed. These data may, therefore, be collected initially from another household member, although they must subsequently be checked with the HRP. The HRP is defined as : (a) the person who owns the accommodation; or (b) is legally responsible for the rent; or (c) has the accommodation by virtue of his/her job; or (d) has the accommodation by virtue of some relationship to the owner or lessee where the latter is not a member of the household. If more than one person qualifies under these rules, we take the older/eldest. Household is defined conventionally as a single person or group of people who have the address as their only or main residence and who share either living accommodation or one meal a day.

The Coverage of the BHPS Questionnaires

The Individual Questionnaire is the main instrument of data collection and covers the following topics:

Individual demographics
Residential mobility
Health and caring
Employment and Employment History

Income
Values and Opinions
Household Finances and Organisation

The Self Completion Questionnaire contains not only a shortened version of the General Health Questionnaire but also further questions on values. The Household Questionnaire includes accommodation details in similar fashion to the GHS, rent and mortgage payments and some consumption items. The Household Composition Schedule contains a complete enumeration of the household members, together with their relationship to each other and to the Household Reference Person. It also contains tracking questions, necessary for re-contacting respondents when they move. The Proxy Questionnaire is a shortened version of the individual questionnaire.

The Individual Questionnaire has core and variable components. We are aiming at a 75:25 split between the two. The variable component is for items which do not need to be included each year; for retrospective data relating to initial conditions; and for so far unanticipated questions which we may wish to include in future years. To a lesser degree, the same is true of the household questionnaire.

A longitudinal dataset such as the BHPS will inevitably have a relatively more complex data structure than a cross-sectional survey, since simple hierarchical relationships of individuals belonging to households do not exist over time. Moreover, some special analysis opportunities, for example, the comparative investigation of the circumstances of divorced partners, will demand complex patterns of data retrieval. Decisions about the form in which data will be disseminated still have to be finalised. It is probable that analysis of individual or household level change will be relatively simple using packages such as SPSS or SAS, but more complex analyses, such as those of changes in household organisation or composition are likely to involve the use of SIR and other specialized software. We intend to run training seminars on using the data once it is available.

The first wave of the survey will begin in September 1991, with fieldwork lasting three months in the first year. (Fieldwork is likely to take six months in subsequent waves

in order to allow time to trace movers). After an extensive process of data checking, deposit with the ESRC Data Archive will take place twelve months after the end of fieldwork.[3]

Conclusion

As might be imagined from the contents of this paper, one of the difficulties we always face when asked what problems the BHPS is designed to tackle is to know precisely how to answer this. The BHPS is quite deliberately a general, multi-purpose survey which is designed to focus on a wide range of issues relevant to micro-social change. While we are clear about some of the issues which the BHPS could address, our research agenda by no means exhausts the Study's possibilities. Of course, we recognise that it is impossible to cover any of the BHPS' substantive areas in the depth which specialists in those areas would ideally wish. Rather our attempt is to provide a longitudinal data set which is sufficiently comprehensive to allow researchers to add the power of longitudinal analysis to their existing armoury. As part of that endeavour the Centre has, from its inception, canvassed widely in the social science community. Indeed there has probably been more consultation over the content of the BHPS than any other major British social scientific survey - and rightly so because the Study is a national resource.

Experience with socio-economic panel studies in other countries suggests that they constitute a major research resource which allow types of analysis which are impossible with cross-sectional data (*cf* Kemp 1991). In particular it will be possible to analyze the incidence of conditions and events such as poverty or unemployment over time, something which cannot be undertaken with cross-sectional data. Secondly, it will allow an analysis of how conditions, life events, behaviour and values are linked with each other dynamically over time. Thirdly, it will allow researchers to control for unobserved heterogeneity in cross-sectional models through difference analysis. Fourthly, because all household members will be interviewed, the effects of the interaction of changes at the individual level can be analyzed for the whole household, or for other individuals. Finally, because sample members will be followed as they leave their original households, the panel study will provide unique information on the processes of household formation and dissolution.

To summarise, over its ten-year life the Centre will seek to make significant contributions to the following areas of research and policy significance:

1. **Income and Wealth:** measurement and explanations of life time and life-cycle variations in income, savings and assets;
2. **Labour market behaviour:** testing of labour supply models and human capital theory, with particular reference to occupational mobility, part-time employment and the labour market profile;
3. **Consumption:** dynamic models of household consumption with particular reference to resource allocation and consumption decisions within households;
4. **Household structures:** the rate, causes and consequences of household formation and dissolution and the classifications of household structures;
5. **Residential mobility:** the rate, causes and consequences of residential mobility;
6. **Health:** the relationship of health to household economic behaviour; the consumption of health services; patterns of health and illness; psychological well-being;
7. **Socio-economic values:** the relationship between socio-economic position, values and behaviour; and
8. **Methodological research:** contributions to the design and analysis of panel studies and the collection of panel data.

Finally, particular emphasis will be given to measurement, forecasting, statistical modelling, responsiveness to the needs of both policy-makers and the research community and the rapid dissemination of results.[4]

Notes

1. Establishing a major new research centre and its associated programme of research is a complex process in any circumstances. In the particular circumstances of the ESRC Research Centre on Micro-social Change the very short lead time between the opening of the Centre, the recruitment of staff and the collection of the first wave of panel data has made the task of those responsible that much more difficult. We are therefore even more than usually grateful to those policy-makers and fellow researchers who have given so freely of their time and expertise to the Policy Committee, the various Advisory Groups and the Advisory Board. Especial thanks are due to Sir Terence Beckett (Chairman of the Policy Committee), Tom Griffin (Vice-Chairman and Chair of the Advisory Board), Patrick Hennessy, Denise Lievesley, Ray Pahl, Roger Jowell, Bob Barnes, Roger Thomas, Colm O'Muircheartaigh, Greg Duncan, Gaston Schaber and Graham Kalton. We are also grateful to the many other individuals, far too numerous to name individually, whose advice we have sought both inside and outside the formal framework of the Centre's advisory structure. The ideas of our constituencies - social scientists and policy-makers - as much as those of the staff and research associates of the Research Centre, have been very influential in shaping the agenda of the Centre and are duly acknowledged. The support of the Vice-Chancellor, Registrar and many colleagues, administrative as well as academic, at the University of Essex is also sincerely and gratefully acknowledged, as is that of various officers and committee members of the Economic and Social Research Council and especially Chris Caswill, John Beaumont, Patti Watterson and members of the Research Resources Advisory Group.

2. A number of papers have been produced by the Centre which focus on various design and methodological issues. For accounts of the design of the BHPS and issues related to it see Corti and Rose (1989); Rose *et al* (1991 and forthcoming); and Coxon and Corti (1991). For a discussion of issues related to the analysis of panel data see Kemp (1991). The papers by Rose *et al* and Kemp each have extensive bibliographies. However, for a comprehensive guide to the literature on panel design, methodology and analysis see Corti *et al* (forthcoming). The BHPS questionnaires will be published in the Centre's Technical Paper series.

3. Data will be available to the European research community through CESDA (the Committee of European Social Science Data Archives). The Research Centre is actively seeking to strengthen its ties with European research institutions. Part of this initiative involves participation in the newly-created European Science Foundation Scientific Network on Household Panel Studies, for which the BHPS prepared the successful application. The purpose of the network is (i) to pool operational knowledge and expertise; (ii) to harmonise research strategies; (iii) to coordinate research output; and (iv) to provide training opportunities through the involvement of young scholars in staff exchanges. Further information on the ESF Network may be obtained from

the Network Secretary and Deputy Director of the Research Centre, David Rose.

4. The Centre is interested in hearing from any researchers who think they may have an interest in developing research in relation to the BHPS. In the first instance contact should be made with Dr Jackie Scott, the Centre's Research Director. The Centre already has Research Associates in a number of other Universities but is keen to extend such contacts.

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