

State of the Art Report

Contract No: HPSE-CT-2002 50028

CHANGEQUAL: Economic Change, Unequal Life Chances and Quality of Life.

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March 5th 2004

Foreword

Explanation of this document

This Document is laid out as follows:

1. A General Table of Contents
2. Introduction to the work carried out in each theme
3. The State of the Art Report; divided into themes as have been described in the introduction. Each theme has its own, detailed table of contents.

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Introduction to the State of the Art Report

Theme 1: Income Inequality, Poverty, Life style Deprivation

Prof. Brian Nolan, ESRI

Introduction

It is now widely appreciated – at least among researchers – that simply observing individuals or households to be on low income at a point in time is seriously inadequate as a measure of their economic status, and can mislead as to the nature and causes of long-term disadvantage. The way income evolves over time, the dynamics of income from one period to the next, the relationship between income observed at a point and longer-term or ‘permanent’ income have come to be seen as critically important. While the distinction between permanent and transitory income has been employed in economics for half a century,¹ it is only with the availability of longitudinal data from panel surveys and administrative sources that income dynamics have been studied empirically on a broad front. Research on the dynamics of low incomes form an important but underdeveloped sub-set of this broader literature.

The first question a focus on dynamics highlights is whether those identified as low paid or below an income poverty threshold at a point in time are in that situation persistently, move in and out of low pay/poverty, or are in that state only for a short period and then escape entirely. It is easy to see why this matters so much. Suppose that the low pay or poverty rate is stable at 10% each year over a ten-year period. This could represent the same one-tenth trapped in low pay/poverty for the whole decade, or at the other end of the spectrum everyone experiences low pay or poverty but for no more than one year. The nature of the phenomena and their consequences for the welfare of those affected would surely be very different.

¹ In an earnings context it goes back to Friedman and Kuznets’ (1954) landmark study of incomes from professional practice.

While low pay and poverty constitute central themes in research on low income dynamics, they have spawned different research streams, with the overlap often being surprisingly limited. Here we first discuss low pay before turning to the broader topic of low income and poverty dynamics. In a brief review we can only touch on some key themes in research across a broad canvas, and have to be selective rather than comprehensive. Rather than re-stating what we know, a key aim is to point to topics where data now available is ripe for further exploitation, and where potential linkages across research areas have been neglected. While much can be learned from a methodological perspective from research using US data, the value of a comparative perspective within the EU is also a common thread through the discussion.

Theme 2: Comparative Analyses of Intergenerational “Inheritance”.

Prof. Walter Müller, MZES

Introduction

When sociologists talk about intergenerational “inheritance”, they relate to the fact, that individual’s unequal prospects to obtain access to more or less advantageous social positions to a considerable extent depend on the conditions of their social origin and on the resources commanded in the family of their upbringing. Using the term “inheritance” is a loose way to describe the common observation and regular research finding, that “sons follow their fathers footsteps or they tend to “inherit” their fathers social position. In general, these phenomena are studied in the context of research on social mobility, that investigate the extent to which the social position individuals reach in life are associated with the social position held by their parents. The social position is usually conceived in terms of social class or in terms of some measure of social status.

There are at least two more general interests behind the study of these phenomena. Classical authors have seen and studied social mobility primarily as a mechanism of *class or status group formation*. The basic assumption is that classes, status groups or other collectivities with some form of socio-cultural or socio-political identity can only emerge and eventually provide a basis for collective action under the condition of achieving a sufficient degree of “demographic identity” (Goldthorpe) in their membership, that is, when they include a kernel of members stable over time (families across generations or individuals along their working lives).

In its later development, research on so social mobility has largely turned into the study of *social opportunity*. It studies the extent of inequality of opportunity depending on individual’s social background and it is interested in the mechanisms that produce inequality of opportunity. In a more macro-sociological perspective the intention is to determine the relative fluidity or rigidity of a society’s class structure and to specify the individual, institutional and societal factors responsible for it. The more the positions

persons hold are conditioned by their social provenance, the more rigid and closed is the class structure; the more mobility occurs between social origin and eventual destination the more open or fluid it is.

Given these general research questions it was inevitable to address the research issues in a comparative framework, comparing either different national societies or societies in the course of their development, and for this reason, the present reports also have a strong comparative orientation.

Evidently, the “inheritance” analogy should not be taken to literally. In modern societies, indeed, social positions are only rarely inherited; the son of a farmer may inherit his father’s farm and sons and daughters of parents who run their own business may inherit it. But if the son of the president of a big state later becomes president of the same state himself, he did probably not inherit the job. The issue is, which social mechanisms instead produce the strong association between background and destination under modern conditions. The reports collected here are attempts to elaborate the state of research on some of these mechanisms.

The first report “The Comparative Study of Social Mobility” elaborates the general research questions, concepts and methods used; it sketches the history of comparative research on social mobility and it summarizes the main results of core studies, emphasizing similarities and differences between national societies and trends over time in the extent and in the pattern of social mobility. The report concentrates on the gross association found in intergenerational mobility tables between parents social class and the respondents social class. It is thus a good starting point for the more detailed studies of the social mechanisms that produce this association and that are looked at in the succeeding reports.

In modern societies the core intervening mechanism is education. Children in families of different social classes invest in different kinds, amounts and levels of education and they differ in schooling success, leading to substantial stratification of educational attainment

by children's social background. Educational qualifications on the other hand crucially shape access to more or less advantageous positions in the labor market. The second report therefore summarizes the "State of the Art and Current Issues in Comparative Educational Stratification Research". The third report then concentrates on school leavers transition into work positions and on the role different educational qualifications play for the gradual integration of school leavers in the labour market and for the allocation of them to different kinds of jobs and class positions. The report gives particular attention to describe and partly explain how and why different national educational systems shape in partly different ways the labour market outcomes of education.

Issues related to social mobility are often object of normative and political discourse and are then often interpreted ideologically, for instance in ways to legitimate social inequalities. At the extreme, unequal rewards are reckoned as deserved as they are assumed to be distributed according to contributions made for the efficient functioning of society. Or it is held that access to class positions of different advantage is merited because it depends on different investments in education, on the acquisition of different qualifications and productive capacities as well as on different effort people invest in work. The fourth report on "Education and Meritocracy" summarizes the discussion on this issue and shows how other than educational qualifications affect people's class destination and how in particular social background resources significantly intervene in this process independent of their impact on educational qualifications.

All these processes are not gender neutral. In particular choices of field of study are strongly gendered and labour markets are gender segmented. The fifth report on "Gender, Education and Labour Market Outcomes" therefore is focused on these issues and how they affect gender differences in intergenerational inheritance.

Disadvantages may accumulate through vicious circles or by the accumulation of adverse conditions in different dimensions of social life. In recent debates such accumulation has been discussed under the notion of social exclusion and its study has been promoted as a contrast to the mainstream class theory and social stratification research. The report on

“Cumulative Disadvantage” describes variants of this alternative approach and critically evaluates it on the basis of recent empirical evidence.

Theme 3: Implications of the Changing Quality of Work

Prof. Duncan Gallie, Nuffield College

Introduction

In recent decades, the notion of the 'quality of work' has come to have steadily wider reference. The major studies between the late 1940s and the 1970s focused primarily on the issue of changes in skills and task quality. In the main, they regarded the work task as the crucial factor that conditioned people's experiences of the quality of their working lives. But from the 1980s, with the greater turbulence of labour markets, there was an increasing concern with the stability of employment. This in turn gave greater salience to the opportunities that jobs provided for updating skills so that employees were less vulnerable in periods of economic restructuring. Finally, in the 1990s, in part reflecting the growth of women's employment, the concept of job quality was extended further to include the extent to which jobs facilitated or made more difficult the reconciliation of work and family life.

There has been sustained debate in the literature on whether or not there have been clear trends with respect to each of these aspects of job quality. Arguably, by the late 1990s, however, a certain convergence was occurring about the broad outlines of the main direction of change. This combined aspects of the rival optimistic and pessimistic interpretations of the evolution of work that had been dominant earlier. In general, the view was that economic and technological change tended to favour a continuing increase in levels of skill in the workforce. This partly reflected structural change, with the expansion of more highly skilled occupations and partly 'content' change, that is to say a raising of the skill levels of existing jobs. There were thought to be two important implications of the trend to upskilling. The first was that it would lead to an improvement in task quality. In particular, employees would have greater discretion to take decisions at work and work tasks would become more varied and interesting. The second was that, given the rapid changes in technology and the continuous nature of skill change, there would be a marked expansion of in-career training.

However, there was also a dark side to the scenario. Rapid change and the need for more flexible forms of work organisation were thought to be undercutting job security. At the best employers would now offer assistance to ensure 'employability' rather than long-term guarantees of job security. At the same time, the combination of increased competitive pressure and new forms of work organisation, were held to have serious negative consequences in terms of intensifying work. Greater work pressures would take their toll partly in individual work stress. But they also accentuated the problems of managing the interface between work and family life, at a time when the increased labour force participation of women was raising new issues about how the two could be combined.

The long-term perspective in this scenario was then double-edged. While developments in skill and job interest were improving the quality of work tasks, employment insecurity, work intensification and changes in family structure were markedly raising the level of stress associated with both work and family life.

Our aim in this paper is to take a first look at whether there is serious evidence from research in the countries involved in the project that such developments have been occurring. Discussion of trends about the quality of work life often tends to be highly speculative, extrapolating from unsystematic case studies. But a number of countries have begun to develop data sets that provide better grounded indicators with some consistency over time. The European Union has also begun to develop comparative data for member states. An important issue is whether these different studies provide a consistent picture of the pattern of change across countries or whether it varies substantially from one country to another, perhaps reflecting differences in patterns of economic development, in national institutional structures and in the policy preferences of the government and economic elites.

We start in Section 1 with the issue of whether there has been a tendency for skills increase and, if so, whether changes in the skill requirements of jobs and the skill requirements of individuals have developed in step or rather have led to potentially

serious problems of skill mismatch. We continue in Section 2 with an examination of the evidence for change in task quality with respect to task discretion, job interest and work pressure. Section 3 seeks to assess whether or not there has been an increase in in-career training and, if so, its consequences for employees work lives. Section 4 examines the argument that there has been a marked growth in employment security and, finally, Section 5 examines the evidence about the changing problems of reconciling work and family life.

Theme 4: Changes in Family Life

Prof. Jan O. Jonsson, SOFI

Introduction

It could be argued that the quality of life, or living conditions, of most people center around some important social institutions. The family, the school, the labour market, and the welfare state are the most prominent in modern western societies. The role of the family is comprehensive. If we see it in a life-course perspective, the family is the crucial environment during the first years; the influence of the family on socialization and the continuous interaction during childhood and adolescence is of great relevance for the formation of an identity as well as for educational attainment and hence labour market opportunities; as adults, most form their own family with responsibilities towards a spouse, children and ageing parents – responsibilities that often have to be negotiated with the need and wish for gainful employment; and finally many rely on the family during their own old age. The functions of the family are, among other things, to provide social and economic support, intimacy, and socialization of children (though other institutions are also important in these respects).

Given the importance of the family for individual's resources and well-being, much attention has been drawn to questions about changes in the family institution. They range from pure demographic changes – such as the long-term decrease in fertility and thus sibship size – to changes of the social and economic role of the family, roles that have been taken over partly by other institutions such as the school and the welfare state. If we concentrate on the post-war period, the major changes that are of concern for social scientists have been:

- Decreasing fertility and sibship sizes
- Increasing schooling
- Increasing use of pre-schools
- Increasing support by the welfare state to families
- Decreasing economic dependency and division of labour between spouses, mostly due to increasing labour market attachment of women
- Increasing divorce rates and increasing family reconstitution rates

- Decreasing marriage rates and increasing cohabitation rates
- The rise of new family forms (also besides cohabitation)
- Changing patterns of nest-leaving
- Changing role of family for (social and economic) support (e.g. during old age)

These changes have of course been different in different countries with some “taking the lead” on some dimensions. For example, schooling increased perhaps most strikingly in the U.S., day-care in France and Sweden, divorce rates in the U.S., while cohabitation first boosted in Denmark and Sweden. Other countries are more prominent for being exceptions to the general trends, such as Ireland which only recently has witnessed dramatically decreasing birth rates and Ireland and Italy in which divorce rates have stayed very low. Though there are hardly any paths that countries are predestined to travel, the commonality of changes has been impressive when it comes to, e.g., increased schooling and decreasing fertility.

Comparative studies show, however, that there is a great divide among European countries when it comes to family arrangements, a divide which to a large extent, though not entirely, overlaps with the religious divide between Catholic and Protestant countries. To put it simple, it appears that in Catholic countries there is “more family”. Thus, household composition is remarkably different with early nest-leaving being the rule in the Nordic countries, single-person households being common in most of northern and central Europe while three-generation households are much more common in the Mediterranean countries.

While family arrangements look different around Europe, it is still possible that much in family lives are basically the same. For example, it is very likely that the family is the absolutely most important base for socialization all over Europe (and probably the rest of the world), and it is not unlikely that the social support is similar (while the economic role of the welfare state has superceded that of family in some countries, e.g., via extensive pension coverage during old age). It is also possible that the consequences of family changes – such as divorce – are much the same across countries.

The current report will highlight some of the issues of “family change” in Europe and point to both similarities and differences. Most importantly, however, we will point to areas where there is little research, or inconclusive evidence, and questions which still need reliable answers. The report is in two parts. The first show descriptive statistics of major family changes, such as changes in divorce rates, in a comparative perspective (and already there we shall see that there are differences between countries in the degree to which we know about family structures). The second will review the research in a number of well-defined areas, concentrating on more analytical issues, such as causal effects of family changes. The areas we have covered must be seen only as a sample of a population of areas that is both indefinite and undefined; though we have aimed at treating the most important issues.

Theme 5: Social Cohesion and Social Integration

Prof. Tony Fahey, ESRI

Basic concepts

In everyday language, the terms social integration and social cohesion might seem more or less synonymous but in the social sciences, particularly those areas of the social sciences which take their cues from social and economic policy debates within the European Union, they have acquired something close to mutually exclusive technical meanings. This is particularly true of the concept of 'social cohesion' which is a key element in the conceptual architecture of EU integration policy. Used in that context, the term 'social cohesion' has an overarching core meaning which defines it as the antithesis of social inequality. But it also has two distinct sub-meanings in that two different kinds of inequality are referred to. One is *equality between countries and regions within the EU*, particularly in regard to level of economic development, the other is the *inequality experienced by vulnerable groups within each national state, with reference especially to vulnerability in the labour market*.

The former, which we could call the regional dimension of social cohesion, is measured by the degree to which key economic indicators at the national or regional level, such as GDP per capita, converge towards an EU-wide mean. A socially cohesive EU, in this sense, is one where no country or region is much poorer or less economically developed than the norm for the EU as a whole. The second dimension of social cohesion, which, if it were not so terminologically confusing could be referred to as the social dimension of social cohesion, is measured primarily by labour market and employment indicators (such as the unemployment rate, the long-term unemployment rate, and indicators of poor job conditions such as low pay, insecure contracts, etc.). A social cohesive EU in the latter sense is one where economic development is structured so as to avoid a worsening of the position of vulnerable groups in society, particularly as far as their job security and job quality are concerned.

Though in formal EU language, these two types of inequality are both brought under the concept of social cohesion, in practice they tend to be spoken of separately and to be dealt with under distinct policy headings. Regional policy has been created to deal with regional social cohesion and it has its own Directorate General in the European Commission and its own budget programmes (such as the European Regional Development Fund). The second type of social cohesion is dealt with under the heading of social policy, and it too has its own DG, budgets and spending programmes. As the 'social' concept of social cohesion and the related concept of social policy evolved in the EU system, an effort was made to broaden it beyond labour market and employment aspects of social vulnerability to include wider aspects of living conditions. A new concept – that of 'social exclusion' and its opposite, 'social inclusion' – emerged to refer to this somewhat broader construct. One feature which was thought of as justifying this new concept was that it was capable of embracing not just workers (who were the main, not to say exclusive, focus of the original social version of the social cohesion concept) but all social categories (including, for example, old people, children and women in the home, ethnic minorities, etc.). At the same time, the concept remained simplistic in that it did not take account of the full range of the social distribution within countries but focused on a dichotomy between the living conditions of those at the bottom tail of the distribution – the socially excluded minority who are 'cut off' – and the rest, who assumed to constitute an included 'mainstream'. A socially inclusive society, in this sense, is one where no individuals or households fall below the threshold of living conditions which is thought to provide the minimum necessary basis for participation in the normal life of a society.

Neither social cohesion nor social inclusion makes direct reference to social bonds between individuals or communities, nor to a sense of common belonging which some might hope to see emerge among citizens of Europe as a whole. The sociological concept of social integration can be thought of as referring to just such connectedness, social bonding and solidarity among groups and individuals in society. As such, it is a Durkheimian concept which carries echoes of the concern with 'loss of community', 'anomie' and the decline of 'social capital' which, in one form or another, has run

through certain strands of sociology since the nineteenth century. Its recurrent theme is that modern society is in danger of shrivelling up or falling apart because people have become so individualised, privatised or non-engaged in their relationships with each other that social life atrophies. An image of this shrivelled up social world which has become well-known in recent years is presented in David Putnam's study of social capital, *Bowling Alone: The Collapse and Revival of American Community* (2000). The image advanced in this study is that of the typical middle American who goes bowling alone, or who sits at home in isolation watching television, because he lacks the bonds with neighbours, friends and family members which he would require to do these things in the company of others. The problem here is not social exclusion, since the people affected are not poor or cut off by lack of material resources, but a straightforward lack of social engagement, or 'social capital', which is said to permeate all levels of society.

The EU's social cohesion concept, the social inclusion/exclusion framework and the Durkheimian social integration concept are not wholly detached from each other. There is sometimes a link, albeit implicit, between the three in that material inequalities (whether between individuals or households within countries or between countries) may be considered as impediments to social integration. Generally, however, links across these concepts domains concepts are less the focus of research than the nature and dynamics of each of the concept domains on its own. Within sociology, the regional concept of social cohesion is given especially little attention. Sociologists rarely investigate whether social integration at the trans-national level (as in the case of the EU) is likely to be hampered by inequalities between regions, or if so, what the precise hampering mechanisms might be.

The *Changequal* papers

The set of papers produced for the 'Social Integration and Social Cohesion' theme within the Changequal network reflect the diversity of meanings which can be attached to those terms and in consequence are not grounded in single theoretical framework, nor do they focus on a common set of questions. Rather, they provide an indication of the diversity of topics which can be brought within the range of the Social Integration and Social Cohesion heading.

The EU's regional version of the social cohesion concept is represented least, in that none of the papers takes cross-country inequalities as its main theme. Frank Kalter's contribution on migration comes closest to this issue, since cross-national economic inequalities are at the heart of many models of migration behaviour. Anthony Heath's piece on migrant integration in host societies, which is included in the same document as Frank Kalter's, contains elements of both the social exclusion perspective and of the Durkheimian integrationist perspective. The Whelan-Layte-Maître paper on multiple deprivation falls within the poverty/social exclusion tradition of research, and Fahey's paper on urban spatial segregation looks at a spatial dimension of the same set of concerns. The Degenne-Forsé paper deals with social capital and so might be placed within the Durkheimian social integration tradition. However, apart from challenging the empirical validity of Putnam's declining social capital thesis, it also demonstrates the diversity of levels at which the concept of social capital might be defined and so indicates how many-sided the question of social integration can be. Richard Sinnott's paper deals with what many would see as the archetypal symptom of social disengagement in today's developed societies – the growing disinclination to vote. However, his account is more concerned with how voting turnout might be explained than with anxieties about its significance for the social integration in democratic societies. Taken individually, each of the papers points to a rich field of research. Taken collectively, the papers point to the challenge of integrating diverse research perspectives within a single coherent framework.

Theme 1 Income Inequality, Poverty and Lifestyle Deprivation

Theme Co-ordinator- Prof Brian Nolan

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Low Income Dynamics

Brian Nolan, ESRI

Introduction

It is now widely appreciated – at least among researchers – that simply observing individuals or households to be on low income at a point in time is seriously inadequate as a measure of their economic status, and can mislead as to the nature and causes of long-term disadvantage. The way income evolves over time, the dynamics of income from one period to the next, the relationship between income observed at a point and longer-term or ‘permanent’ income have come to be seen as critically important. While the distinction between permanent and transitory income has been employed in economics for half a century,¹ it is only with the availability of longitudinal data from panel surveys and administrative sources that income dynamics have been studied empirically on a broad front. Research on the dynamics of low incomes form an important but underdeveloped sub-set of this broader literature.

The first question a focus on dynamics highlights is whether those identified as low paid or below an income poverty threshold at a point in time are in that situation persistently, move in and out of low pay/poverty, or are in that state only for a short period and then escape entirely. It is easy to see why this matters so much. Suppose that the low pay or poverty rate is stable at 10% each year over a ten-year period. This could represent the same one-tenth trapped in low pay/poverty for the whole decade, or at the other end of the spectrum everyone experiences low pay or poverty but for no more than one year. The nature of the phenomena and their consequences for the welfare of those affected would surely be very different.

While low pay and poverty constitute central themes in research on low income dynamics, they have spawned different research streams, with the overlap often being surprisingly limited. Here we first discuss low pay before turning to the broader topic

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of low income and poverty dynamics. In a brief review we can only touch on some key themes in research across a broad canvas, and have to be selective rather than comprehensive. Rather than re-stating what we know, a key aim is to point to topics where data now available is ripe for further exploitation, and where potential linkages across research areas have been neglected. While much can be learned from a methodological perspective from research using US data, the value of a comparative perspective within the EU is also a common thread through the discussion.

The Dynamics of Low Pay

We now have a reasonably good picture of the numbers of earners falling below conventional low pay thresholds, and how the types of people affected differ across countries. The OECD in particular has put a good deal of effort into bringing together low pay statistics for different countries, showing how low pay varies across countries and over time (see for example OECD 1996, Keese *et al* 1998, Nolan, Salverda *et al* 2000). But we know much less about the chances of these individuals still being low paid one, five or ten years later, how much change there is from one year to the next in their earnings and how much of that can be considered transitory, how these dynamic aspects of low pay differ across EU countries, and why. Studies of the dynamics of individual earnings throughout the earnings range confirm the presence of a sizable transitory component at all levels.² However, studies focused specifically on mobility/persistence in terms of low pay are much less numerous, and most have focused on a particular country (for example Stewart and Swaffield 1997, 1998 and Sloane and Theodossiou 1996, 1998 on Britain, Asplund *et al* 1998 on Denmark and Finland, Contini *et al* 1998 and Lucifora 1998 on Italy). Studies bringing out the processes involved are even more limited, even though an understanding of the dynamics of low pay is critical to how we think about policies aimed at improving skills through training and education, and direct interventions in low pay such as minimum wages.

² The share of the transitory component in the variance of the logarithm of earnings in studies reviewed by Atkinson, Bourguignon and Morrison (1992) ranges from 15-20% for homogeneous highly-educated groups to around 35% for much more heterogeneous groups.

Some comparative results on earnings mobility of low-paid workers have been produced from longitudinal data for selected countries, notably by Keese et al (1998) for the OECD for seven countries and by Salverda, Bazen, Gregory *et al* (2001) comparing four EU countries and the USA. The OECD study looks at earnings changes over a five-year period from 1986 to 1991 in Denmark, France, Germany, Italy, Sweden, the UK and the USA. When focusing on those in full-time work in both years, it finds considerable movement out of low pay when that is defined as being in the bottom earnings quintile in 1986 – between 50 and 60% had moved to a higher quintile in the earnings distribution by 1991. The study by Salverda *et al* looks at the dynamics of low pay over a two-year rather than five-year horizon for France, Germany, the Netherlands, the UK and the USA. It shows for example that in France and Germany about 40% of earners in the bottom decile in the mid-1990s had risen to a higher decile the next year. In the UK the corresponding figure was 50%, while in the Netherlands it was almost two-thirds. The common stereotype of the USA as displaying more mobility was not borne out by these two studies.

Studies of earnings mobility often look at movements between deciles, and studies of low pay dynamics often carry over that approach and look at movement into or out of the bottom 10 or 20% of the earnings distribution. However, low pay in a cross-sectional context is most often assessed vis-à-vis thresholds derived as a percentage of median earnings, most often 50% or 60%. While the appropriate approach depends on question being asked, the logic of using median-based thresholds seems as valid in a dynamic as in a cross-sectional context. It introduces the complication that the size of the low-paid group then differs across countries and over time, but that is a feature of the real world one surely wants to incorporate into the analysis. The OECD results show the dramatic difference this makes to the extent of cross-country differences in mobility out of low pay, which are modest when quintile/decile rankings are used. When low pay was measured as falling below two-thirds of median earnings, however, in Denmark only 8% of those below that threshold in 1986 (and in work in 1991) were still there by 1991 compared with 39% in the UK and 58% in the USA.

Research on low pay dynamics also understandably often concentrates on individuals in employment at each observation point, but this misses the fact that the risk of unemployment and inactivity may also be greatest for those who experience low pay,

or at least a sub-set of them - the “low pay-no pay” cycle. Even over a short period this may matter: of those in the bottom 30% of the earnings distribution in 1995 in the four EU countries studied by Salverda *et al*, between 12% and 20% were not employed the next year. Similarly in the OECD study a significant proportion of earners in the bottom quintile in 1986 were not be in full-time employment by 1991, and this varied a good deal across countries.³ A focus on how many of those still in employment have moved up the earnings distribution is thus partial and may mislead as to the fate of those originally identified as low paid and the nature of cross-country differences.

So available studies suggest that only a minority of low-paid workers in a given year remain so for an extended, consecutive period of time, but this does not mean that all the rest are on a career trajectory up the earnings distribution. Movement in and out of low pay, and in and out of employment, is the pattern for many, and certain types of workers have particular difficulty moving up the earnings distribution in a sustained way. These studies have been based on different longitudinal datasets for different countries, and there is clearly much to be learned from application of this comparatively perspective using the European Community Household Panel (ECHP). Cross-sectional analysis of the extent and incidence of low pay from this source shows the same broad variation across countries as the figures from national data sources brought together by the OECD (Nolan, Salverda *et al* 2001). The dynamics of low pay, including movements in and out of employment, are now ripe for investigation in a harmonised way across all the participating EU countries.

The focus of such research clearly has to be not just on the extent of mobility out of and into low pay and who is affected, but on underlying causal processes. The broader income mobility literature has progressed from testing theories predicting/explaining differences between individuals in earnings at a point in time to how earnings grow over time, with human capital models in particular emphasising life-cycle earnings profiles and how these vary with education and training. The modelling of low pay dynamics is still under-developed, and linkages with that broader literature need to be

³ In Germany, for example, 39% of those in the bottom quintile in 1986 were not in full-time employment in 1991 compared with 27% in Denmark.

strengthened. Econometric modelling of the probability of escaping low pay from one year to the next, applied consistently across different countries using the ECHP, seems an obvious place to start.

In that context it may be questioned whether the low paid/not dichotomy is helpful, or simply throws away valuable information. In focusing on low pay we are implicitly or explicitly assuming that being (persistently) below some threshold matters substantively, and that transition across this threshold is “different” to other earnings changes. Of course it would be valuable to try to empirically verify this – that outcomes we care about are worse for those below, or persistently below, some low pay threshold than for others, including those not far above it. However, it does seem likely to be a productive working assumption at this stage. This does not mean that we need concentrate purely on a dichotomous dependent variable: both the size of shortfalls below the low pay threshold and how much “escapers” rise above it can be included in the analysis.

Application of variants of the human capital model to low pay dynamics will put the emphasis on individual characteristics and on how earnings change over time with age and experience depending on education and those characteristics. Segmented labour market theories and models on the other hand stress sectoral/market characteristics and stability in earnings differentials. They see primary sector workers enjoying a relatively stable career on job ladders moving up over time, while secondary sector ones are exposed to sizeable fluctuations and little earnings growth with tenure. Whereas sociologists seem more willing to embrace segmented labour market theories, even economists who do not reject them outright often seem uncomfortable with the approach which is nonetheless strongly advocated by a minority. To break that log-jam, formulating hypotheses about how segmented labour markets would differ across countries based on an understanding of causal factors creating barriers between primary and secondary labour markets, and testing these empirically, would be particularly valuable.

Much of the focus in research on low pay dynamics is focused on distinguishing those on “good” career trajectories from those stuck in low paid jobs. Sociologists spend a lot of time investigating occupation and occupational transitions, and better linkage

with their work would shed light on the extent to which observed mobility out of (and into) low pay is related to occupation or at least job change. And for those who display no mobility out of low pay, is that because they are stuck in the same job or same occupation, or are they moving around from one bad job within a given occupation to another, or indeed across bad jobs in different occupational categories? Are their skills readily transferable across occupations but just not very valuable in any of them, or are they “trapped” in a particular occupation? Are they trapped in a particular job where the employer has market power? These are questions on which some evidence is beginning to emerge but much remains to be learned.⁴

Another priority would be to relate research on low pay dynamics more directly to the extensive literature on why overall earnings inequality has risen sharply in certain countries – notably the USA and the UK – over the past quarter-century. Much of that literature has emphasised the role of increasing premia to education and skills, but the implications of the competing explanations for these trends for the persistence of low pay have often been left unstated or casually assumed, rather than formulated and investigated. Similarly those arguing for the inadequacies of trends in supply and demand for skills to fully explain observed changes in earnings dispersion and differentials – such as Snower’s emphasis on new forms of organisation – have not brought out and investigated the implications for low pay dynamics.

Particular aspects of the low pay-no pay cycle have been researched in some depth - the relationship between income in versus out of work has been a major preoccupation of economists, reflecting what some might regard as an obsession with the possible work disincentive effects of welfare systems. So there has been significant work on how earnings change for those who stay in employment, on the relationship between income in versus out of work, and on labour market transitions and duration of welfare receipt. But there is rarely an effort to get an overall picture of income mobility for individuals when all income sources are included and the person is tracked over time. That might well be a useful way to frame in-depth investigation of the factors combining to produce income change or stability – of which earnings dynamics is only one element - at the level of the individual.

⁴ See for example Arai et al (1998).

Income Poverty Dynamics

The link between low pay and poverty in a cross-section context is rather weaker than often assumed – many low-paid individuals are not in “poor” households.⁵ This may mask important longer-term relationships, as we will bring out, but also reflects the differences between the two concepts/measures. Low pay of course applies at the level of the individual earner, whereas poverty is conventionally measured on the assumption that of extensive resource-sharing within households. In addition, although income from employment dominates household income in aggregate, income from sources other than earnings play a critical role for many low-income households in particular. Poverty is most often assessed by comparing total household income from all sources with an income threshold, making some adjustment to take differences across households in their size and composition into account.

The study of low income dynamics at the level of the household thus has to encompass how income from pay or self-employment, from social security, from occupational pensions and from investments - received by each household member - all change over time. In addition, even if a household’s income remains unchanged from one period to the next its status vis-à-vis an income poverty threshold may not be the same because the composition of the household itself has changed. So understanding low income dynamics for households requires us to study not only earnings dynamics and labour market and welfare transitions but also patterns of fertility, changing family structures, and household formation and dissolution – a rather challenging agenda.

While longitudinal survey data have been available for many years in the USA (notably through the Panel Study of Income Dynamics), this type of data has been coming on stream only more recently in Europe, with national longitudinal surveys in for example Germany, The Netherlands and the UK. We are also beginning to get some sense of the overall scale of low income persistence versus change in Europe, from the European Community Household survey. Figures on income poverty dynamics from the ECHP have recently been produced by Eurostat, the OECD, and a

⁵ See for example Nolan and Marx (2000).

number of studies (for example Whelan *et al* 2001, Layte and Whelan 2002)). These show what the OECD has summarised as the seeming paradox that poverty is simultaneously fluid and characterised by long-term traps. This can be illustrated by results from the first three waves of the ECHP, assessing the poverty status of individuals on the basis of their household income adjusted for size and composition, and using a conventional poverty threshold of 60% of median disposable income.

Figure 1 shows the percentage of persons below that threshold in all three years in each country (then) participating in the ECHP, compared with the average cross-sectional annual poverty rate over the same period.⁶ On average across the ECHP, about 18% were below this relative income threshold in a given year but only about 8% were below it in all three years, that is 40% of the average cross-sectional poverty rate. The percentage poor throughout varies from only 3% in Denmark and the Netherlands up to 10-12% in Greece, Italy and Portugal. While the ranking of countries in terms of cross-sectional and persistent poverty rates is similar, the relationship does vary across countries: in Denmark and the Netherlands the percentage always poor is a smaller proportion of the cross-sectional rate than elsewhere, while in Greece and Italy it is a considerably larger proportion.

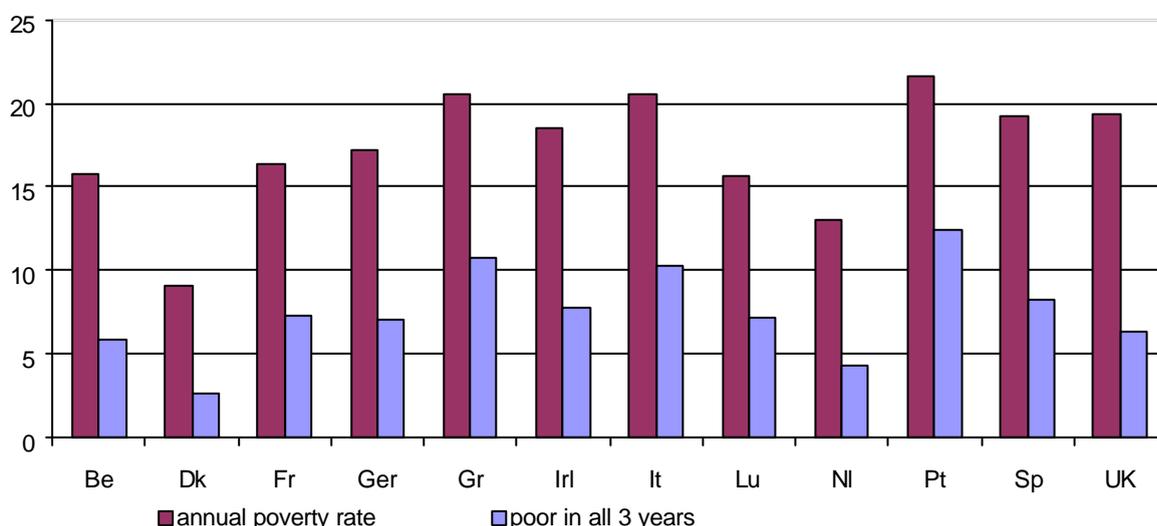


Figure 1: Persistent Income Poverty in the European Union, 1993-1995

⁶ These draw on OECD (2001); similar results are in Eurostat (2000) and Whelan *et al* (2001).

The fact that many of those below the income threshold in one year are not below it the next means that significantly more people experience low income at some point than in any one year. In the ECHP as a whole, about 27% of the sample fell below the 60% threshold in one of the three years. So, on average, not much more than one-quarter of those who experienced income poverty (the “ever-poor”) during the three years were below the threshold in all three years (“always poor”). Does this mean that cross-sectional poverty rates simply over-state the scale of the problem? An alternative indicator of income poverty persistence is less reassuring. This counts those with average income over the three years below the (average) income threshold as “permanent-income poor”, and turns out to be significantly higher than the number “always poor”: about half those poor at some point over the three years in the ECHP countries are “permanent-income poor”.

So these and other analyses suggest that many spells in poverty are short and represent only transitory set-backs, and that considerably fewer people are continually poor for an extended period of time than are observed in poverty at a point in time. On the other hand, the typical year spent in poverty is lived by someone who experiences multiple years of poverty and whose longer-term income is below the income poverty threshold on average. Repeat spells help to explain the apparent paradox of fluidity combined with persistence, since many of those whose exit poverty in a given year re-enter it within a short time. Another element in the explanation is that much of the time spent by such people above the poverty threshold is not very far above it.

The role of poverty persistence versus mobility is now much more widely recognised not only in research but also in policy circles, as illustrated by the inclusion among the EU social inclusion indicators adopted at the Laeken Council in 2001 of both cross-sectional and persistent income poverty rates.⁷ Capture the full picture is however particularly important, since the mere presence of mobility in and out of poverty can be used to down-play scale of problem, or to argue in a cross-country context that more mobility offsets higher poverty. The evidence suggests that there is extensive persistence, and that this is greater than just looking at spell exits would suggest. It also suggests that countries with higher cross-sectional poverty rates do not generally

⁷ See Atkinson et al (2001) for a discussion.

have higher mobility and lower poverty persistence. The OECD study already quoted is particularly valuable in that it presents similar figures derived from panel data for Canada and the USA. The USA is seen to be an outlier not just in terms of its very high cross-sectional poverty rate, but also because almost half of the “ever poor” were poor in all three years and even more – almost 70% - were “permanent income poor”. So high cross-sectional poverty is in that instance associated with high rather than low persistence, a pattern that can also to some extent be seen in comparisons among EU countries.

A focus on poverty dynamics helps us to understand the underlying causal processes, but care must be exercised in how that perspective is applied and in interpreting the results. It is easy to accept the logic of the argument put forward by David Ellwood, one of the leading US advocates and proponents of a dynamic perspective, that

“Dynamic analysis gets us closer to treating causes, where static analysis often leads us towards treating symptoms. If for example we ask who are the poor today, we are led to questions about the socio-economic identity of the existing poverty population. Looking to policy, we then typically emphasise income supplementation strategies. The obvious static solution to poverty is to give the poor more money. If instead, we ask what leads people into poverty, we are drawn to events and structures, and our focus shifts to looking for ways to ensure people escape poverty” (1998, p. 49).

However, we also have to be aware that looking simply at poverty escapes can mislead about the extent of persistence, and that sometimes the obvious dynamic solution to poverty is to give the poor more money! There are also methodological reasons for thinking that a focus on low income persistence as well as on escapes from poverty is critical, as developed below.

As well as measuring poverty persistence and the frequency of transitions into and out of poverty, econometric modelling of poverty dynamics has also been investigated for some countries, for by example Jarvis and Jenkins (1997) and Jenkins and Rigg (2001) for the UK, Canto Sanchez (2001) with Spanish data, Muffels *et al* (1992) and Leewen and Pannekoek (1998) for the Netherlands, Schluter (1997) for Germany and van Kerm (1998) for Belgium. Comparative analysis of poverty dynamics was pioneered by Duncan *et al* (1993, 1995), comparing the USA and Canada with

selected European countries for which panel data was available. Results from the application of such methods to data from the ECHP are now beginning to come on stream— notably the OECD study already mentioned, Whelan *et al* (2000), Layte and Whelan (2002), Fouarge and Layte (2003).

Such studies generally attempt to link observed changes in poverty status to changes in the earnings, labour force participation and composition of the household. The key distinction made is between income “events”, such as changes in earnings, benefits, investment income – often linked in turn to labour market changes for one or more household member - and demographic “events” such as the arrival of a new child, partnership formation, death, marital dissolution, or adult offspring leaving home. Their results suggest that labour market changes are more important and household structure changes less important in EU countries than in USA. However, the latter cannot be ignored and this has important implications for the choice of samples to be studied: if we concentrate only on those in households not experiencing compositional change, which is temptingly convenient from an analytical perspective, a significant selection bias may be introduced. The results also bring out the role that changes in the earnings of “secondary” earners as well as the “head” or main earner can play.

The most popular approach to modelling poverty dynamics follows Bane and Ellwood’s (1986) influential US study in analysing the duration of single spells. Event history/hazard rate models are estimated in order to relate spell exit or entry to income and demographic “events”. These can indeed highlight factors associated with poverty transitions, though not without problems. One relates to what counts as an escape in the light of measurement error in income; Jenkins for example in his British study treats only those who fall from above 100% to below 90% of the poverty threshold as poverty entries. (This is fairly typical, with both Bane and Ellwood and Duncan *et al* making similar adjustments). The rationale is easily grasped but raises very real problems – since an increase of 10% in benefit levels would be very welcome but have no impact on poverty! There are also serious problems in distinguishing a mutually exclusive categorisation of income and demographic events, and in the fact that such events may in fact be endogenous to each other.

Perhaps the core issue though is whether this approach can adequately capture individuals' experience of poverty over a period of time. Spell repetition is a significant empirical phenomenon, as already noted, but most of these models either examine single poverty spells or, if they have estimated models of poverty re-entry probabilities as well, have not combined the model outputs to examine the implications for total poverty experienced over some period. A study by Stevens (1995) with US data shows how this might be done, but Jenkins points out that this has not been more widely applied and that one explanation is that the derivations are technically demanding.⁸

A simple alternative is to focus on a dependent variable defined in terms of "chronic" poverty, and related to characteristics which are either fixed by nature or held constant at their initial values rather than changing over time. Jenkins, in reviewing alternative modelling strategies, is somewhat dismissive of this approach, seeing them as "primarily multivariate descriptive devices", but this may undervalue their potential contribution. Properly capturing and incorporating poverty incidence, prevalence and spell repetition requires quite long observation periods, but even with relatively short panels we can learn a lot by focusing on the characteristics of those persistently poor. There are dangers associated with focusing all our attention on transitions, the characteristics of those persistently poor have a lot to tell us about causal mechanisms.

A much more ambitious modelling strategy seeks to build structural models of the underlying dynamic processes which determine income – marriage, fertility, and labour force participation – and derive family income and poverty status from them. Burgess and Propper (1998) provide one example, applied to US data. This can be very helpful in explicitly setting out what the researcher believes to be the key underlying relationships, and exploring the implications of alternative parameter values for those relationships and counterfactual simulations for poverty. However, trying to capture key features for even a sub-set of the population (such as the 20-35 year old women on whom Burgess and Propper focus) is challenging, extension

⁸ Jenkins suggests an alternative approach employing two-state first order Markov transition models, from which it is much easier to derive multi-spell predictions (e.g. van Kerm 1998). However, this builds in the assumption that there is no duration dependence in either the exit or entry transition rate.

across the full age range and incorporating the earnings of all household members is even more difficult. The econometric assumptions required about correlations across processes and over time are also quite strong, and the usual problems in interpreting the results of complex structural models where “everything depends on everything else” have to be faced (see Jenkins 2000). Despite this, there is a clear need to forge stronger links between research on low income mobility and the distinct research streams on what seem to be the key processes producing it - earnings mobility, labour market participation behaviour of various household members, fertility, lone parenthood, the choice by the elderly to live alone versus with family.

The availability of information on individual and household characteristics in panel surveys can lead to a bias towards concentrating on those factors in studying low income dynamics, to the neglect of institutional and macro-economic factors. A cross-country comparative perspective can help to bring institutional differences into sharper focus. Capturing the possible impact of “conjunctural” factors means we also need to look at the extent to which the correlation of earnings or household income varies from one year to next over the economic cycle as well as across countries. This links in to whether one’s chances of being trapped in low pay or poverty long-term are also affected by, for example, the macroeconomic situation as one comes onto the labour market.⁹

Data and Methods

Finally, some points about data and methods which apply both to the study of low pay and poverty dynamics may be made. The first is that we have pointed to various areas where data from the European Community Household Panel will be enormously valuable in allowing dynamics to be investigated in a harmonised way across countries. It is important to be aware that the ECHP has now been discontinued, the last wave having been carried out in 2001. It is to be replaced by a rather different approach to producing data across all the Member States, known as the EU *Statistics on Income and Living Conditions* (EU-SILC), which is to become the EU reference source for income and social exclusion statistics. This will allow Member States to use both surveys and administrative registers provided that this data can be linked at

⁹ Thus is examined in relation to future unemployment rather than pay by De Vraayer *et al* (2000).

the individual/ household level. Member States will also be allowed to separate the cross-sectional element from the longitudinal, panel element if they so wish. The objective is to “anchor” EU-SILC in the different national statistical systems. Problems relating to harmonisation and non-comparability may arise, but the even more serious issue from a longitudinal perspective is that only a four-year observation window will be required in order to meet Eurostat’s specifications. There is a pressing need to strategise on how best to proceed in the future from a research perspective given that constraint – while fully exploiting the ECHP.

On data it should also be emphasised that much has been learned about dynamics from register data in the Scandinavian countries in particular, which has not been discussed here. While elsewhere household income may not be captured by administrative data, earnings quite often is as social security contributions are collected, and there is considerable potential for exploiting such data as a complement to survey-based research.

Finally, the measurement problems associated with longitudinal data need to be highlighted and researched. Issues relating to representativeness and coverage, attrition, non-response in surveys, incompleteness of records over time, sample size and length of panels, accuracy of information all loom large in researching low income dynamics. In the ECHP, for example, attrition appears to be related to income poverty status in some countries, and the scale of attrition has been particularly high in some. As well as improving data sources, methods of analysis need to be improved to take account of such problems with the basic data. Econometric techniques for correction for attrition bias and measurement error have progressed substantially, but this is also clearly a key area for methodological development.

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Intergenerational income mobility: A survey of recent empirical research and suggestions for future research

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1. Background

The intergenerational association between parents' and offspring's socio-economic success has always fascinated social scientists. Within sociology there is a long tradition to study such associations using social class or occupational prestige as measures of socio-economic success. More recently, economists have entered this field of research using labour earnings or income as success indicators. Economists' interest in this field of research got a spurt in 1992 when two US studies by Gary Solon and David Zimmermann were published in the same issue of the most prestigious economics journal, the *American Economic Review*. Solon and Zimmermann used two different data sets but both estimated father-son earnings correlations above 0.4, a markedly higher number than in previous studies.

This new literature has focused on long-run earnings. The reason is that annual earnings are affected by transitory factors, so the intergenerational association of annual earnings would be misleadingly low. Most research has focused on fathers and sons. This is a most unfortunate gender bias in the literature. But, due to mothers' intermittent labour force behaviour up to the 1960s, it is quite problematic to measure their long-run earnings in a reliable way. Finally, we note that these intergenerational associations should not necessarily be given a causal explanation. They only measure the degree of association between outcomes in two generations.

The purpose of this paper is twofold. First, I summarize what has been learnt from recent research in this field. Second, I conclude with a discussion about promising routes from future research.

2. The parameters of interest

This literature has focused on a very simple statistical regression model that relates the logarithm of offspring's earnings to the logarithm of parents' earnings.¹⁰ The prototypical model is the following:

¹⁰ See Solon (1999) for a survey.

$$\ln Y_i^{\text{CHILD}} = \alpha + \beta \ln Y_i^{\text{PARENT}} \quad (1)$$

where Y is a measure of long-run earnings.

The coefficient of parent's earnings in such an equation, β , is interpreted as the elasticity of offspring's earnings with respect to parents' earnings. The elasticity provides an answer to questions like, if parents' earnings are 50 percent above the average of in his generation, what percentage above should we predict the offspring's earnings will be in the own generation. But if the variances in the logarithmic earnings variables are about the same in the parents' and offspring's generations, the elasticity will approximately equal the correlation between the log variables in the two generations. The correlation in turn provides the answer to a slightly different question: if parent's earnings are a standard deviation unit higher than average, how many standard deviation units will the offspring's earnings deviate from the average in the next generation.

Although model (1) has been the prototypical model in most research, it has also been recognized that the intergenerational earnings association might display various non-linear patterns that require a more elaborate analysis than (1). For example, Solon (1992) who used a rather small data set, tested whether a squared parental earnings term would improve the fit of the equation but found that this was not the case. We return to issue of non-linearities in the earnings association in section 5.5 below.

3. Data and estimations issues

Although seemingly straightforward, even estimation of a simple equation like (1) involves a number of complications.

3.1 Data

a) Life-cycle bias

The life-cycle pattern of earnings suggests that it is important when in the life-cycle that earnings are measured. See Grawe(2001)

b) Interviews vs. registers

c) Definition of parenthood

Björklund & Chadwick (2003)

3.2 Estimation issues

Zero and low earnings observations: Couch & Lillard (1998). Solon's response.

Age controls

Averaging vs. IV as estimating techniques to eliminate transitory earnings variation.

4. Results: sibling correlations

Although most discussions about family background and subsequent labour market performance focus on intergenerational, i.e., parental-offspring associations, it is instructive to start a survey like by looking at earnings correlations among siblings. Obviously, the more factors subsequently affecting adult earnings that siblings share, the more similar their earnings will be. Siblings, who grew up together, share not only the family background ("nature" as well as "nurture"), but also their childhood neighbourhoods. And the neighbourhoods reflect the quality of schools, the ambition and skills of peers, and much more. Furthermore, a sibling correlation can also be given a very precise definition; it is namely the fraction of the variation in the outcome variable (long-run earnings) that can be attributed to factors that siblings share. Note that in this special case a correlation coefficient, not the squared correlation coefficient, informs about the explanatory power of certain variables. The variables per se are in this case unobserved but they are all shared by the siblings. See Appendix 1 for a formal illustration of this result.

Björklund, Eriksson, Jäntti, Raaum & Österbacka (2002) estimated brother correlations in long-run earnings for the United States, Denmark, Finland, Norway and Sweden. They used as similar variables and sample criteria as possible from their data sets. Their U.S. estimate¹¹ exceeds 0.4, whereas the estimates for the Nordic countries were in the range 0.15-0.25. We want to stress two aspects of these results. First, as follows from the property of the sibling correlation mentioned above, the numbers tell us what fraction of variation in long-run

¹¹ In their seminal paper on brother correlations for the United States only, Solon et al. (1991) got estimates of the same magnitude. Björklund et al. could use longer time-series of data and thus corroborated the results in the first study.

earnings that can be attributed to factors that siblings share. Obviously, in none of these countries, such broad family and community background factors explain as much as half of the variation in long-run earnings. Second, in the three Nordic countries where earnings are more equally distributed than in the United States¹², such broad background factors account for a larger share of inequality. We return to this cross-national pattern below.

Table 1. Estimated brother correlations in long-run earnings in five countries

<u>Sweden</u>	<u>Denmark</u>	<u>Finland</u>	<u>Norway</u>	<u>USA</u>
0.25	0.23	0.26	0.14	0.43

Source: Björklund m. fl. (2002).

A few studies have also estimated sister correlations; Österbacka (2001) for Finland, Björklund, Jäntti & Solon (2002) for Sweden. The most common pattern seems to be that these correlations are somewhat lower than those for brothers.

5. Results: intergenerational income mobility

5.1 Father-son elasticities

Table 2 reports a number of recent estimates of intergenerational father-son elasticities. Swedish estimates range from .13 to 0.28. Although the standard errors of these estimates are non-trivial, the discrepancy also reflects alternative approaches to measuring long-run earnings and sample criteria. The two Finnish estimates are basically in the same ballpark, whereas the Norwegian study got even lower estimates.

United States and United Kingdom have the highest estimates, well above 0.4. A recent study by Mazumder (2002) suggests that these U.S. estimates might be too low. The two German studies provide ambiguous results, but a higher weight on Wiegand's study would indicate a somewhat higher elasticity than in the Nordic countries. The estimate from the Canadian study is interestingly closer to the ones for the Nordic countries than to the U.S. and U.K. ones.

¹² Aaberge et al. (2002) show that the ranking of the Nordic countries and the United States in terms of earnings and income inequality is not affected by using longer time periods than one year.

Table 2. Estimated father-son earnings elasticities for various countries.

<u>Country</u>	<u>Study</u>	<u>Elasticity</u>	<u>Comment</u>
Sweden	Gustafsson (1994)	.14	Gustafsson stresses that he only measures father's income in a single year and that the estimate might be too low because of this.
	Björklund & Jäntti (1997)	.28	
	Österberg (2000)	.13	
	Björklund & Chadwick (2002)	.25	
Finland	Jäntti & Österbacka (1996)	.22	
	Österbacka (2001)	.13	
Norway	Bratberg, Nilsen & Vaage	.12	.12 refers to the 1960-cohort and
		.17	.17 to the 1950-cohort
Canada	Corak & Heisz (1999)	.23	
United Kingdom	Atkinson et al. (1983)	.42	
	Dearden et al. (1997)	.57	
Germany	Couch & Dunn (1997)	.11	Couch & Dunn use very young sons. Because earnings at young age poorly reflect long-run earnings, the young sons could explain the low estimate compared to Wiegand.
	Wiegand (1997)	.34	
USA	Solon (1992)	.43	
	Zimmerman (1992)	.45	

Note: this is a short version, I can make it much longer!

5.2 Trends

Further insight into the intergenerational puzzle is achieved by studies showing how statistics like the ones presented above evolve over time. Such studies, however, are sometimes more difficult to do than one might believe at first thought. Note that the data and estimation problems discussed in section 3, must be handled in a way that is consistent over time. For example, income or earnings must be consistently measured over time and the same applies to sample criteria and parental definitions. Nonetheless, a few studies have focused on trends in the father-son association.

USA: Susan Mayer et al. (?) Fertig (?) Chadwick. No consensus about changes

United Kingdom: Blanden et al. (2003): Mobility has fallen over time

Norway: Mobility has increased over time.

5.3 Father-daughter elasticities

They seem to be lower than father-son elasticities.

5.4 Family income based studies

Assortative mating enters the picture

5.5. Non-linearities

a) on parents' side

b) on offsprings' side (quantile regressions)

6. Reconciling the results from sibling correlations and intergenerational studies

7. Results: Neighborhood correlations

Explain the association between neighbourhood correlations and sibling correlations

Results

Solon, Page & Duncan (2000), Raaum, Salvenes m fl

8. The nature vs. nurture issue

One of the fascinating aspects of the intergenerational issue is that so many people are interested in it and seem to have their own views about it. Sometimes one even gets the impression that discussions about intergenerational mobility offer each one of us an opportunity to consider our own family background and life experience. This fact is particularly true about the genetic dimension of family associations in outcomes like earnings, education or social class. My experience is that most non-academic as well as academic discussions about family background and earnings sooner or later comes to statements about the importance, or non-importance, of the genetic inheritance of skills.

There is a standard model frequently used in psychology and behavioural genetics that – applied to earnings – would yield information about the fraction of earnings inequality accounted for by genetic factors. For example, the correlation among identical twins reared apart provide this information if one can reasonably make the assumption that the adoption process is random so their environmental influences are uncorrelated.

Björklund, Jäntti & Solon (2003, forthcoming) use nine different sibling types to test the assumptions used in such analysis. They reject the standard model

Discussion of Goldberger's claim that the results are not informative anyway!

9. Summary

This survey has covered much ground so the reader might be somewhat confused. But at this stage I would like to stress five main insights from the research summarized above:

1. Magnitudes: We have learnt that over 40 percent of variation in long-run earnings among US men are accounted for by factors that siblings share. The corresponding number for Denmark, Finland, Norway and Sweden are around 0.20. Further father-son correlations seem to exceed 0.4 in the United States and United Kingdom but are around 0.25 (or below) in the Nordic countries.
2. Cross-national differences: The cross-national difference in 1 is striking. It suggests that there might be some general relationship between inequality of outcomes and inequality of opportunity as measured by these family associations.
- 3: Parental income explains very little of the family and neighbourhood factors that according to sibling correlations are at work
4. Because neighbourhood correlations are low compared to sibling correlations, factors related to the family are more important than those related to the neighbourhood.
5. Family associations – intergenerational as well as sibling associations – are in general weaker for daughters than for sons.

10. Suggestions for future research

Theory vs. empirical approaches

Important distinctions: countries (like the Nordic and Canada) with large administrative data sets based on registers vs. smaller interview-based data sets.

10.1 Family structure and intergenerational mobility

10.2 Trends

10.3 Local policy variation

10.4 Are cross-national differences driven by differences in the earnings return to schooling?

10.5 The gender perspective: how important is the neglected mother?

10.6 Non-linearities

10.7 Contextual information from interviews

10.8 Theory????

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Appendix 1.

How to interpret the sibling correlation:

$$Y_{ij} = a_i + v_{ij}$$

Y_{ij} = earnings of sibling j in family i

a_i = family component

v_{ij} = individual component, uncorrelated with family component

$$\text{Var}(Y_{ij}) = \sigma_a^2 + \sigma_v^2$$

$$\text{Cov}(Y_{ij}, Y_{ij'}) = \sigma_a^2$$

$$\text{Corr}(Y_{ij}, Y_{ij'}) = \sigma_a^2 / (\sigma_a^2 + \sigma_v^2)$$

Multi-Dimensional Measures of Well-Being

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Introduction

While recognising its limitations, economists have always relied heavily on income as a measure of command over resources, standard of living, and well-being. This remains true, but there has also been an increasing emphasis in recent years on the role that multidimensional measures of well-being can play, at individual and societal level. This arises from several distinct concerns. The first relates to the inadequacy of (measured) income as a measure of command over resources – “income is not good enough” – whereas the second relates to the notion that command over resources is not all that matters to quality of life – “income is not enough”. Finally, the argument for a multi-dimensional focus is also often framed in terms of the need to capture the complex nature of the underlying processes and the multi-sectoral response required.¹³

These concerns have particular salience in researching poverty and social exclusion, and we begin this brief review by looking at the use of multi-dimensional measures in that context. We then look at their use in seeking to capture well-being across the full range rather than towards the bottom. We conclude with a discussion of what is perhaps the main conceptual issue in relation to multi-dimensional indicators in either context, namely whether we can aggregate them and if so how this is best done.

Multi-Dimensional Measures of Poverty and Social Exclusion

In December 2001, the Laeken European Council adopted a set of commonly agreed and defined indicators of social inclusion, which are to play a central role in monitoring the performance of EU member states in promoting social inclusion. Some of these relate to poverty and inequality measured in terms of income, but others relate to educational disadvantage, health inequalities, or unemployment. Areas flagged for development of further indicators include housing and homelessness. So a

¹³ Proponents of a focus on social exclusion for example stress the need to go beyond low income because of the multidimensional nature of the mechanisms whereby individuals and groups are excluded (EU Commission 1992), requiring the mobilisation not only of employment and social policy but also housing, education, health, leisure and culture (EU Commission 2000).

multi-dimensional approach to monitoring progress in relation to poverty and social exclusion has now been formally incorporated into EU processes, as it has been to a greater or lesser extent in many of the member states.

The multi-dimensional indicators in question are each produced and presented at aggregate country (or regional) level – so one sees the percentage below a relative income threshold, the long-term unemployment rate, the proportion of early school-leavers etc. in each country. This leaves open the issue as to how one assesses whether things are getting better or worse overall, since different indicators may well move in different directions and some may be considered more important than others. We deal with this question of aggregation across dimensions in our concluding section, since it has to be faced both in a social inclusion context and in measuring well-being more broadly, but focus at this stage on a core feature that also relates to aggregation. This is the fact that such indicators are produced independently, so we do not see whether, for example, some of those below the relative income threshold are also long-term unemployed: the inter-relationships across dimensions at individual and household level are not visible.

A multi-dimensional approach can however also be implemented in analysing poverty at individual and household level, and we will describe some significant findings from this research and point towards priority areas for further investigation, particularly in an EU context. This research starts by taking seriously what is now the commonly-used definition of poverty in a European context, as inability to participate in the ordinary life of one's society due to lack of resources. The most widely-used measure of poverty compares household income with an income threshold, often derived as a particular percentage of mean or median income in the society. The broad rationale is that those falling more than a certain 'distance' below average income are unlikely to be able to participate fully in the life of the community. The problem with this approach is that, as has been recognised for some time (Ringen 1987, 1988), low income may be an unreliable indicator of poverty in this sense, failing to identify households experiencing distinctive levels of deprivation.

This has been demonstrated in a variety of studies of different industrialised countries employing non-monetary indicators of deprivation. These include Townsend (1979),

Mack and Lansley (1985), Gordon *et al* (1995), Gordon *et al* (2000) and Bradshaw and Finch (2001) with British data, Mayer and Jencks (1988) for the USA, Callan, Nolan, and Whelan (1993) and Nolan and Whelan (1996) with Irish data, Muffels (1993) and Muffels and Dirven (1998) with Dutch data, Hallerod (1996) for Sweden, Kangas and Ritakallio (1998) for Finland, Bohnke and Delhey (1999) for Germany, Tsakloglou and Panopoulou (1998) for Greece, Bray (2001) for Australia, and Jensen *et al* (2002) and Krishnan *et al* (2002) for New Zealand. They generally show that a significant proportion of those below income poverty thresholds do not display (relatively) high deprivation scores in terms of such non-monetary indicators, whereas some households above the income lines do. To quote some examples, Bradshaw and Finch find an overlap of about 60% between an income and deprivation measure of poverty, Bray finds an overlap of 40%, Kangas and Ritakallio report a 32% overlap and Tsakloglou and Panopoulou a 44% overlap. Both the income and deprivation measures employed differ across the studies, but the consistent finding is that those below relative income thresholds are by no means always the most deprived, there is significant non-overlap.

The non-monetary indicators of deprivation employed in this context are generally based on first asking survey respondents whether they have a specific item or participate in a certain activity - for example going without a substantial meal all day, having inadequate heating, or not having an overcoat. However, it is obviously important to try to distinguish between situations of deprivation – not having an overcoat – and *not being able to afford* an overcoat. To help in doing so, survey respondents are sometimes asked in addition whether they are doing without the item or activity because they do not want it or because they cannot afford it – the latter often then being referred to as “enforced lack”. (This in effect combines non-monetary and monetary components, but we will continue for convenience to include them under “non-monetary” indicators).

The availability of data from the European Community Household Panel survey (ECHP) allows the relationship between income and such non-monetary indicators to be investigated in a harmonised manner across countries. The limited overlap between income and deprivation is then best displayed when one looks at those below a conventional relative income threshold of 60% of median equivalised income, and at the group constructed to be the same size as that for each country but comprising

those with the highest deprivation scores. The overlap is then found to mostly be in the one-third to one-half range (Layte et al 2001). In terms of correlation over the whole range, figures of the order of 0.3-0.4 are commonly reported between equivalised household income and scores on summary deprivation indices. This may be reasonably high in social science terms, but means that the extent to which one can serve as a substitute for the other is much less than commonly assumed. It is also worth noting that as the income poverty threshold is lowered the extent of overlap generally falls rather than rises.

It is worth sketching out briefly why this arises, reflecting both conceptual and empirical considerations. It is partly because current disposable cash income, although a key financial resource, is not the only one. Savings add to the capacity to consume, and servicing debt reduces it. Past investment in consumer durables influences the need for such expenditure now. Imputed rent from owner-occupied housing should be counted as a resource but often is not, and the same is true of goods and services provided directly by the State. Needs also differ across households, with household size and composition affecting the living standard a given level of income will support. This is generally addressed in research by dividing income by the number of “equivalent adults” in the household, but the equivalence scales employed may or may not satisfactorily achieve their objective. Households may also vary in a variety of other ways that affect the demands on their income, notably in terms of health status/disability. Work-related expenses such as transport and child-care, and geographical variation in prices, may not be taken into account.

Empirically, one cannot of course be confident that income has been measured comprehensively and accurately at a point in time. Household surveys – on which research most often relies – face (intentional or unintentional) mis-reporting of income. They also find it particularly difficult to adequately capture income from self-employment, from home production, and from capital. One would be particularly concerned about the reliability of very low incomes observed in surveys - particularly in countries with what are thought to be effective social safety-nets – but other incomes may also be mis-measured to an unknown extent. These conceptual and measurement considerations mean that it is hazardous to draw strong conclusions

about living standards, and in particular about whether a household is unable to reach an acceptable standard of living due to lack of resources, from current income alone.

One response to the inadequacy of current income as a measure of command over resources, advocated by for example Jorgenson (1998), is to measure financial poverty in terms of consumption expenditure rather than income, on the basis that the transitory component of consumption is a great deal smaller. This may make it more difficult to distinguish between the transitional and persistently poor, however, and what is measured in household expenditure surveys is not the same as consumption. Expenditure measures may thus best be seen as another weapon in a multi-dimensional armoury rather than as a solution to the limitations of current income.¹⁴ The rationale for employing non-monetary indicators in measuring and understanding poverty is then that they reflect command over resources and help to capture the impact of long-term factors on current living standards. It is worth distinguishing this from the argument that we need to go beyond command over financial resources due to the multidimensional nature of the phenomena of poverty and social exclusion, though non-monetary indicators at household level can also be very helpful if not essential in that context as well.

Would simply lengthening the time period over which income is measured not be sufficient, obviating the need for a multi-dimensional approach to capturing resource constraints? Income measured over a number of years is likely to be a better indicator of long-term or “permanent” income than income this month or year, and increasing availability of panel data makes it more feasible to incorporate such a perspective empirically, as discussed in our review on low income dynamics. Analysis of the relationship between deprivation and income over three or four years using the ECHP certainly demonstrates that deprivation levels rise as the persistence of low income increases, and that the overlap between low income and deprivation is higher when one focuses on the persistently income-poor (Whelan et al 2001). However, the mismatch is still substantial, and regression analysis shows that even having controlled for persistent low income, both resource and need-related individual and household

¹⁴ See for example Blundell and Preston (1998) and Attanasio et al (2002) on the links between earnings and income changes and consumption.

characteristics such as education, labour market experience and social class, marital status and household structure are significant in explaining deprivation levels (Whelan *et al* 2002). So having measures of deprivation adds to our ability to capture poverty and social exclusion even when information on income over time rather than just current income is available.

Different studies have employed non-monetary indicators in different ways for this purpose. Some simply use deprivation indices to describe living standards or compare rankings with income and remark on the divergence, while others seek to derive a measure of poverty from them. An approach to doing so pioneered by Townsend (1979) is to derive an income poverty line on the basis of the relationship between scores on a deprivation index and household income, locating an income threshold below which deprivation escalates rapidly. This would be very valuable as a guide to the percentage of median income to be used in a relative income poverty measure, but whether such a threshold is theoretically or empirically plausible remains controversial. Another approach is to rely primarily on enforced deprivation scores in measuring poverty (e.g. Mack and Lansley 1984, Gordon *et al*, 2000). This faces the problem that measured deprivation may reflect choices as well as resource constraints, as well as choosing a deprivation cut-off. A further possibility is to use both income and enforced deprivation scores in identifying the poor, as in research and some official practice in for example Ireland and Austria. The rationale is that combining direct measures of exclusion with measured low income allows one to identify with greater confidence those experiencing exclusion due to lack of resources.

Curiously, many of the studies employing non-monetary indicators have not explored the dimensionality of the deprivation measures themselves, although simply summing across a range of items to construct summary deprivation indices may involve ‘adding apples and oranges’. The inter-relationships among deprivation items have been explored using national data by for example Muffels (1993) and Nolan and Whelan (1996), and using data from the ECHP by Whelan *et al* (2001). Using factor analysis the latter identified five distinct dimensions:

- Basic life-style deprivation - comprising items such as food and clothing, a holiday at least once a year, replacing worn-out furniture.

- Secondary life-style deprivation - comprising items such as a car, a phone, a colour television, a video a microwave and a dishwasher.
- Housing facilities - housing services such the availability of a bath or shower, an indoor flushing toilet and running water.
- Housing deterioration - the existence of problems such as a leaking roof, dampness and rot in window frames and floors.
- Environmental problems - problems relating to noise, pollution, vandalism and crime, and inadequate space and light.

A striking finding was that this structuring was common across each of the EU countries. The overlap with income remains limited even where different dimensions are distinguished and one focuses on those most closely related to current income (Muffels 1993, Nolan and Whelan 1996, Whelan et al 2002)

Distinguishing dimensions of deprivation in this way opens up a number of fruitful avenues of research. It is worth noting in particular the weak relationship between low income, either currently or persistently, and housing facilities, housing deterioration, and even more so environmental problems - where no significant relationship even to persistent low income was found across countries in the ECHP (Whelan et al 2003). The fact that the relationship with both low income and with persistently low income varies substantially across the dimensions highlights the value of distinguishing between them. Exploring the factors underlying different dimensions of deprivation and their implications is clearly a priority for research, and the consistent structuring of the dimensions across EU countries found to date greatly simplifies this empirically.

The ECHP can also be used to investigate the stability of measured deprivation from one year to the next. It is often implicitly assumed that deprivation is more stable than low income, but this was found not to be the case over a three-year period: movement into and out of the higher ranges of the deprivation continuum was just as frequent as movement above and below a relative income poverty line (Layte *et al* 2002, Whelan *et al* 2002). This clearly merits further investigation, in particular the role of measurement error versus the impact of observed changes in the situation of households, including lagged effects of such changes. There is clearly significant

movement in and out of both low income and high deprivation, but concern with analysing such mobility and the analytic challenges it presents should not obscure the fact that the social groups exposed to high risk levels are still precisely those a conventional stratification perspective would lead one to expect.

Findings to date reinforce the notion that a fully-fledged multi-dimensional approach – both using non-monetary indicators as well as income, and distinguishing among different dimensions of deprivation rather than a single summary index – is productive in deepening our understanding of poverty and social inclusion. Rather than becoming fixated on trying to identify the “truly poor”, such research could usefully employ a variety of different income and deprivation measures, and look in depth not only at the overlapping group of “income poor and deprived”, but also at the distinguishing features of the other three sectors of the income-deprivation quadrant – the “income poor but not deprived”, “deprived but not income-poor”, and “neither income poor nor deprived” – in terms of different deprivation dimensions. It is also be useful in that context to introduce a further dimension, investigating how both income and deprivation levels relate to people’s subjective evaluations of their own situation (see Van den Bosch 2001 for a discussion of subjective assessments of income adequacy and Whelan *et al* 2001 for the relationship between deprivation and self-perceived economic strain).

Applying a multi-dimensional approach to concretely monitoring the extent of poverty over time and across countries using non-monetary indicators faces many difficult issues however. Non-monetary indicators can most obviously be used to apply a common “absolute” standard across countries, showing that for example only 15% of the Danish ECHP sample compared with two-thirds in Portugal had to do without what Eurostat termed “basic needs” items. Differences in average levels of living could be taken into account to produce a relative deprivation measure, by for example weighting each item by the percentage *not* deprived of it in the country in question. The mean score for Portugal on such a “basic needs” index with country-specific weights would be about three times that in Denmark – much closer to the gap between those countries in relative income poverty rates. However, developing a methodology to combine deprivation indicators with low income to capture poverty in

a way that is meaningful both across countries and over time is a considerable challenge (see Atkinson *et al* 2001 for a discussion).

Multi-Dimensional Approaches to Measuring Living Conditions and Quality of Life

Looking beyond poverty and exclusion, concern about reliance on income has also underpinned the development of various multi-dimensional approaches to measuring well-being applying at societal level, or at individual level throughout the range rather than towards the bottom. At societal level, these have been directed at a variety of concepts such as living conditions, quality of life, human development and “capabilities”, and we can only give a brief flavour here of what is a vast and diverse literature. Social reporting in various European countries, and at an EU level by Eurostat, has for many years tracked aggregate indicators of ‘living conditions’, on a fairly ad hoc basis without a developed theoretical underpinning. Swedish welfare research since the 1960s by contrast has focused on the theoretically-elaborated concept of ‘level of living’, encompassing an individual’s resources, the arenas in which they are to be used, and his or her most essential conditions (see for example Erikson and Aberg 1987). ‘Quality of life’ is another very broad concept with some conceptual underpinning, and the focus of a significant literature in itself since the 1960s (see for example Campbell *et al* 1976). Broadening the focus beyond the rich countries, Sen’s concept of “capabilities”, the alternative combination of functionings a person can achieve (see e.g. Sen 1993), has been particularly influential in the way development is conceptualised. It has added weight to an already significant shift away from reliance on GNP per capita in measuring development towards direct measures of progress across various dimensions.

Most the emphasis of the substantial social reporting literature has been on tracking changes over time in aggregate indicators across a broad range of dimensions relating more or less directly to one of these concepts. The dimensions distinguished differ across various countries and studies, but generally include categories like health, employment and working conditions, economic resources, education, social participation, housing, environment, crime, and recreation. A similar broad approach is adopted in EU monitoring exercises such as the *Social Situation in Europe* and the

Structural Indicators produced by the European Commission. As we emphasised in the poverty/social exclusion context, this aggregate indicator approach does not permit linkages across dimensions to be explored or causal processes and impacts to be investigated in any depth. The Swedish welfare approach, being grounded in the Level of Living Surveys, has been intensively applied at individual/household level, in contrast to “capabilities” where implementation at that level has had limited success to date.¹⁵ There have also been some recent attempts elsewhere to extend the scope of non-monetary indicators beyond deprivation to capturing living standards and the impact of resource constraints throughout the distribution (see for example Jensen *et al* 2002 with New Zealand data). Designing indicators which serve that purpose towards the top of the distribution seems particularly problematic, but the more fundamental problem is distinguishing the role played by the different choices people make about how to spend their money rather than the constraints they face. This is of course also a real problem towards the bottom of the distribution, but there at least the focus is on items/activities very widely regarded in the society as “essential”. When we broaden the focus beyond the bottom of the distribution the question being addressed using multi-dimensional measures can often become rather diffuse or unclear as well. However, the range of indicators included in the ECHP – though not designed with the “level of living” conceptual framework in mind - now offer the exciting possibility of exploring many of the issues addressed in the Scandinavian welfare research tradition in a harmonised fashion across the EU.

Much of the literature on quality of life has also been based on individual-level data, but has had subjective well-being as the focus of interest. Economists, having long been suspicious of such subjective measures, have started to take “happiness research” more seriously.¹⁶ It has to be emphasised that overall subjective satisfaction very often does not correlate highly with objective indicators of welfare, certainly over time at aggregate level but to a significant extent also at micro-level. This comes about because subjective assessments are a product of the interaction between them and expectations, as the long-established literature on reference groups and equity

¹⁵ Though see Brandolini and

¹⁶ See the survey by Frey and Stutzer (2002).

evaluation shows.¹⁷ There nonetheless seems to be a trend towards incorporating both objective and subjective aspects, both resources/conditions and satisfaction, in social reporting on quality of life - in official monitoring exercises in Germany and The Netherlands for example.¹⁸ (See also Allardt's 1973, 1995 approach distinguishing 'having', 'loving' and 'being' as basic human needs and including both objective and subjective aspects within each). This clearly needs to be underpinned by more research at individual level on the relationship between subjective evaluations and resources/conditions, to develop a deeper understanding of how people come to evaluate their work, family and community life and what life-events produce changes in these evaluations. This needs to move beyond multiple cross-section regressions, and the potential of panel data in that regard is only beginning to be exploited (see for example Ravallion and Lokshin 2001). The ECHP once again offers the possibility of investigating these relationships in a harmonised way across most of the EU member states.

Aggregation

We have left until last what is perhaps the most obvious conceptual issue to be faced in using multi-dimensional indicators: assuming agreement on a set of dimensions and indicators to reflect them, how are we then to treat the relations between different dimensions? Do we simply assume that the different dimensions are non-comparable and indicators relating to them should be presented separately, or do we try to aggregate or arrive at an overall assessment across dimensions, and if so how is this to be done?

This issue pervades the uses made of multi-dimensional measures of well-being, and some different approaches can be illustrated. There has been a longstanding practice in the quality of life literature of summarizing across dimensions to produce a single

¹⁷ Hagerty *et al's* (2001) comprehensive review of quality of life indices notes that expressions of high levels of subjective well-being can be found in environmental conditions that are life-threatening, while on the other hand wealth may go together with dissatisfaction. Recent psychological literature has focused on the livability and comparison theories, notions of threshold effects, or the impact of the absolute versus relative differences in objective variables (Hagerty 1999, 2000, Veenhoven 1995).

¹⁸ Zapf (1984) and Noll (2000) for example see quality of life measurement as focusing on the constellation of objective living conditions and subjective well-being across different life domains.

quality of life index (see Hagerty *et al* 2001 for a review). In a development context the UNDP's Human Development Index (HDI), constructed from indicators of life expectancy, education and standard of living, has received a great deal of attention and a variant designed for developed countries is also now produced. In an EU context, on the other hand, the social exclusion indicators adopted at Laeken are very deliberately presented individually with no attempt to produce an overall "score" across the dimensions – indeed, Atkinson *et al* (2002) argue that this should be avoided precisely because the whole thrust of the European social agenda is to emphasize the multidimensionality of social disadvantage. (Politically, member states would also not be encouraged to learn from each other if attention were focused on a single rank order).

Proponents of summary measures of national performance aggregating across dimensions argue that they serve the twin functions of summarising the overall picture and facilitating communication to a wide audience (see for example Micklewright 2001). However, the arguments against are also well illustrated by the on-going controversy around the use of the HDI (and its Human Poverty Index variants designed for use in developed versus developing countries). The specifics of the way the measures themselves are constructed have been much debated and criticised, and this brings out the general problem. How do we reach agreement on which indicators to use, and even more on how much weight to give to each? If a society has a relatively low level of average income but above-average life expectancy, to use perhaps the most obvious but striking example, how would we place a value on one versus the other in constructing a summary measure? Such indices, in consequence, are always arbitrary in fundamental and unavoidable ways.

However, Atkinson *et al* (2002) note that combining what are already aggregate indicators - such as the unemployment rate, the poverty rate and average life expectancy – to produce a summary measure is to be distinguished from aggregation at the level of the individual. At individual (or household) level, it is easy to see the value of linking information across dimensions, so that we see for example where unemployment, poverty and ill-health are found together. Studies measuring deprivation in various dimensions using survey data do indeed sometimes measure where people are deprived in more than one dimension. The simplest summary measure of the individual's well-being is then the number of dimensions in which they are deprived – see Vranken (2002)

for an example with Belgian data. Identifying the poor as those both on low income and deprived is a variant of the same general approach, what Atkinson (2003) refers to as the “counting approach”.

The issues arising in the aggregation of different dimensions of deprivation at the individual level have been explored by Tsui (2002) and Bourguignon and Chakravarty (1998, 2002) from the economist’s welfare-theoretic perspective.¹⁹ Tsui provides an axiomatic justification for aggregating across different deprivation dimensions into a single cardinal index, and distinguishing the poor as those above some threshold score on that index. Bourguignon and Chakravarty, on the other hand, seek to take into account that we may want to define a poverty threshold *for each dimension* or attribute. They provide a framework for counting the number of poor in different dimensions and combining that information into a statistic summarising the overall extent of poverty. One can for example have a summary measure which counts as poor all those who are poor on any dimensional – corresponding to a headcount measure of poverty. More sophisticated measures take into account different weightings of dimensions and the degree of substitutability one builds in between them. They shows in particular how this can be linked to assumed properties of the social welfare function. Atkinson (2003) brings out how the “counting approach” can be seen within the same framework, and also highlights the role of assumptions made regarding the degree of concavity of the social welfare function and the weighting of different attributes or dimensions. Since there are likely to be differing views about the best form for the deprivation measure, the dominance approach - familiar from comparison of income inequality – seeks to identify circumstances under which we can nonetheless say that “multidimensional deprivation in Country A is lower than in country B”. Further development of the theoretical underpinnings of these approaches and attempting to apply them empirically is clearly a priority.²⁰

¹⁹ See also Tsui (2002).

²⁰ See also Brandolini and D’Alessio (1998).

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Accounting for differences in poverty and deprivation across countries

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Introduction

Differences in poverty and deprivation across countries are a puzzling problem. Explanations of these differences may lead to more general theories about the working of welfare states, and to an improvement of social policy instruments to combat poverty and deprivation.

In what follows we only deal with highly developed welfare states, and we restrict the overview to analyses that refer to the entire country. Regional difference in poverty are not dealt with. We use the term “poverty” in the sense of “income-poverty”, meaning that poor persons are those, whose net income or more general: whose command over resources is below a socially accepted minimum of subsistence. We assume that there exists a poverty line that is defined relative to some average (mean of median) net income of a population. We also assume that the net income of a household is recalculated by using an equivalence scale to result in net equivalent income of each member. Implicitly, we think in terms of a head-count measure of poverty. In principle, income poverty can be completely abolished by monetary transfers.

The term “deprivation” is used to denote persons who are living below socially accepted minima in important dimensions of their living conditions (nutrition, clothing, housing, health, education and vocational skills, information, mobility, participation in societal activities and in the political process, protection against crime, and legal protection). Command over resources at the level of a socially accepted minimum of subsistence does not preclude deprivation. It is a necessary but not a sufficient condition to avoid deprivation. Since deprivation can take many forms there are no simple recipes to combat deprivation.

To analyse differences in poverty and deprivation one needs representative and comparable statistical information about the populations in the countries to be compared. This information has to refer to the variables, which are considered as describing the state of income poverty

and deprivation of persons (endogenous variables), and also to factors that a priori are considered as possible causes for income poverty and deprivation (exogenous variables). A single cross-section of data for individuals and households, and additionally important aggregated data for the countries under review are a minimum requirement for analysis. Series of cross-section data would allow to analyse not only differences in poverty and deprivation between countries but also changes of these differences which are caused by changes of the determining factors.

With cross-section data of individuals and households one can only show the state of poverty and deprivation but one cannot analyse the movement of persons into and out of poverty and deprivation. Furthermore, with cross-section data or time series of cross-sections one can only show correlations between exogenous and endogenous variables that may indicate causality but one cannot be sure about it. For a better causal analysis one needs comparable and representative panel data that not only refer to one point in time but that contain information about the individual histories year by year for a period as long as possible. Such a data base allows one to distinguish between period and cohort effects as well as country differences and their changes.

Since the data sources limit the possibilities for analysing differences of poverty and deprivation among countries the following overview is organised according to the types of data sources used. There are only a few data sources that contain comparable information. The most prominent ones in the field of economics are the collection of national data sets which are made comparable as far as possible by the Luxembourg Income Study (LIS), and the European Community Household Panel (ECHP) of EUROSTAT. Additionally, there is GSOEP Equivalent File that contains several panel data sets made comparable by Richard Burkhauser and his team at Cornell University (including the German Socio-Economic Panel, the British Household Panel Study, the Canadian Household Panel (?) and the US-American Panel Study on Income Dynamics (PSID). The PACO project in Luxembourg has combined the GSOEP, the PSID, the BHPS and a Hungarian Panel).

We will deal only briefly with comparative poverty studies, which are merely a collection of coordinated national studies for which the comparability of the underlying data sets was not checked. Because it is impossible to present a complete overview we cite only some examples in each section.

Results of analyses of the differences in poverty and deprivation do not only depend on the type of data source but also on the approach used. Therefore, we first present an overview of approaches and problems.

An overview of approaches and problems

We distinguish four approaches to comparative studies in the field of social policy. These approaches are also used to analyse differences in poverty and deprivation among countries.

- a) The institution-by-institution approach.
- b) The Group-by group approach.
- c) The problem-by-problem approach.
- d) The welfare state-by-welfare state approach.

By using the *institution-by-institution approach* one describes and compares institutional settings and their main features. Since institutions change over time these comparisons should refer to the same year of reference. With respect to poverty there exists a more narrow and a wider institution-by-institution approach. One can only look at institutions which are designed to directly combat poverty and to guarantee a minimum of subsistence, e.g. social assistance regulations, or one can extend the analysis to the whole tax and transfer system, which has a direct and an indirect influence on poverty. To show the effects of institutions on net income of recipients one can use clearly defined model cases – the more the better – or one can use an empirically based institution-by-institution approach. In this case static simulations showing the effects of institutions on the distribution of net income or on poverty rates complement the description of institutions and their differences. An additional, but far reaching question is, why the institutions under consideration have developed to their present form, and which political factors explain the differences between the institutional arrangements of the various countries. This leads to the final question: How will these institutional regulations develop in the future, and will they converge or diverge.

With the *group-by-group approach* one defines a priori the groups to be analysed, like the poor and/or deprived, or lone mothers or elderly or persons, and then one tries to find out the size of this group, the group's average income, the distribution of income among the group

members, and the distribution of other aspects that characterise their general living conditions. Then one can compare these averages and the distributions of characteristics of the group under consideration with the characteristics of the entire population. The final step is the comparison of the group's position within each country with the position of the same group in other countries. Comparing entire populations can also be considered a group-by-group approach.

Such a descriptive analysis should be complemented by a causal analysis to answer the question, which differences of the causal factors working in the countries under consideration explain differences in the size of the groups, differences in their average living standards, and differences in the distribution of the various other characteristics. One has to start with some facts that are considered as given, being determined by the history of each country. These are the exogenous variables that determine the endogenous variables, in which we are interested. These exogenous factors are often called structural factors. But it is well known that causal factors can be analysed at different levels. The more aspects we consider as given the more narrow the analysis gets.

An extremely narrow analysis would postulate that income poverty can be avoided by monetary transfers, and that, therefore, the only cause of income poverty is the lack of a transfer system that provides a minimum benefit to each resident of a country without any further conditions. But there may remain a take-up problem that has to be checked.

If we assume the labour market institutions, the tax system, the social protection system, and the educational system and the personal history of each person (including her state of health, her level of education and vocational training and her family situation) as given in the year to which the data refers, the factors accounting for differences in poverty and deprivation across countries are reduced to:

- *Economic factors* (the business cycle, the working of the labour market and the distribution of the risk to become unemployed or to be discriminated against, the wage structure, the labour force participation rate of men and women, the distribution of wealth, which determines the distribution of income from capital, the percentage of persons who earn income from self-employment).
- *Demographic factors* (family structure, marriage and divorce behaviour, fertility).

- *Private family law, which* determines the obligations to support family members and to pay alimony in case of divorce or child birth by unmarried mothers, and even the way in which inheritances are distributed.
- The *working of the social protection system*, which determines the contributions to be paid and the transfers to be received in case a social risk occurs.
- The *working of the tax system*, which determines the personal taxes to be paid.
- *Individual abilities and behaviour* (ability and willingness to take on a job in the official labour market or to work in the shadow economy, the take-up of social benefits, the ability to organise consumption according to standards accepted in a society, the willingness to adjust to changing demands of the labour market).

A more penetrating causal analysis would also consider the educational systems that shape the abilities of the populations, the policies with respect to social housing, the policies with respect to health (health care, prevention of occupational and private accidents, prevention of drug use), the dominant value systems and the political processes which are reflected in the constitution and the laws of the countries including the labour market regulations, and the tax and transfer systems. Additionally, the policies to enable poor people to escape poverty (e.g. counselling, jobs in sheltered work places, housing for the homeless) could be considered. This wider approach would especially be necessary if differences in deprivation are to be explained.

This group-by-group approach with respect to poverty can usefully be complemented by static simulations of changes in relevant institutions, especially of the social protection system, to show by which means income poverty could be reduced at which costs. A more far reaching combination of the group-by-group-approach and the institution-by-institution approach would consist of the simulation of the effects on poverty if the social protection system of one country would work in another country.

If the relative importance of the causal factors with respect to the size and the average living standard of the poor can be found out, the group-by-group approach could, in principle, enable the researcher to make short-term and medium-term predictions about future changes. A prerequisite for such predictions for groups are predictions of expected changes of each structural factor. Fortunately, most of these structural factors remain constant or change only

slightly within a few years. In this way one can also make predictions about the effects on poverty of proposals to reform some institutional settings.

The *problem-by-problem approach* looks at a problem that shows in a different form in the countries under review. At the beginning of the analysis, therefore, the problem has to be defined in general terms, and then it has to be interpreted for each country under review in an appropriate way. A good example is discrimination. In one country there may be discrimination by gender, in other countries it may be discrimination by religious belief, by race or by political views. Another example is deprivation. While income poverty can be clearly defined relative to the average living standard of a population and, therefore, is better suited for the group-by-group approach, deprivation may take on different forms. Therefore, it is more suited for the problem-by-problem approach only if it is possible to identify the group of deprived persons in each country under review by the same criteria, the group-by-approach can be applied. The results of such an analysis, however, will be the more diverse and the less generalisable the greater the differences between the deprived groups in the various countries are. In the extreme, these are only case studies for each country that are not comparable at all, and, therefore, an accounting for differences does not make sense. A third example is the non-take-up problem which may have different forms in various countries.

The welfare state-by-welfare state approach obviously is the most demanding approach. It combines the three approaches mentioned before in their extensive forms. It includes institutional, economic, societal and political aspects, as well as a country's traditions, and usually leads to a typology. Although one of the characteristics used for such a typology can be the extent and the political treatment of poverty, we don't include this approach explicitly in what follows. Comparative poverty studies may supply material to construct or to improve such typologies, but not the other way round. In our opinion, starting with a given typology and then to deduct statements about the size of the population living in income poverty or in a deprived status is only permissible in the sense of creating new hypotheses that have to be checked by comparative empirical analysis. The same is true with a statement concluding that a difference between two types of welfare states accounts for differences in poverty and deprivation. Reality is much more complex because of differing social policy goals and differing causal relationships (comp. Sainsbury and Morissens 2002).

Comparative studies are the more fruitful the more similar the levels of economic development and the phases of the business cycle of the countries under consideration are. It may also be necessary to describe differences in the customs and deep rooted beliefs of the population to better understand differences in the situation of the groups living in poverty and/or deprivation.

An overview of comparative poverty studies

The following overview of comparative empirical poverty studies is organised according to the type of data used, and, as far as possible, according to the approaches researchers have applied.

3.1 Studies based on one or more cross sections of comparable data sets for various countries

a) Selected studies based on the institution-by institution approach

An example is the study of the social assistance regulations of the OECD member states by Eardley et al. (1996). This study works with model cases to compare the levels of benefits. Another example is the compilation of the main characteristics of the social protection systems and the minimum income regulations of the member states of the European Union called MISSOC (European Commission 2000). Since the regular publication of this survey began about 10 years ago we have, on the one hand, a description of the institutional differences between countries in the field of social protection, and, on the other hand, a time series of changes of these differences. These descriptions, however, are purely institutional. The effects of the social protection systems for different types of households or persons are not shown. A third example is the study by Sainsbury and Morissens (2002) who distinguish between the effects of the entire tax and transfer system on income poverty, and the means-tested part of it, across 13 countries based on LIS data sets for the early 1990s and the mid 1990s. In interpreting the results they refer to the typology of welfare state regimes distinguished by Esping-Andersen (the Conservative Corporatist regime, the Liberal regime, the Social Democratic regime), a typology that was later complemented by a fourth type, the Southern European welfare state regimes. It comes as a surprise that the effectiveness of means-tested benefits is highest in the Scandinavian countries which belong to Social

Democratic regime type for which it was claimed that means-tested benefits play only a residual role. This institution-by institution approach for the entire population is combined with a group-by-group approach which looks separately at the unemployed, solo mothers, couples with three or more children, and the elderly. It is shown that the importance of means-tested benefits varies between countries and between group considerably. For the elderly means-tested benefits are of some importance only in Denmark and in the UK while other social transfers dominate as an instrument to reduce poverty. But in several countries means-tested benefits are of great importance for the reduction of poverty among the unemployed and for solo mothers.

These institution-by institution approaches even if combined with a group-by group approach usually take the primary income distribution and all the other factors mentioned above as given, and they do not control for differing macro economic conditions. Furthermore, these analyses do not account for behavioural responses to assumed institutional changes. Causal analysis – if one can say so – only refers to the effects of a given tax and transfer system or a fictitious change.

b) Selected studies based on the group-by-group approach

These studies usually start with the calculation and comparison of measures of the distribution of net incomes and of measures of poverty for the entire population or for subgroups. A straightforward extension of this approach are static simulations of measures of poverty based on pre-government income to compare them with measures based on post-government income, and thus to show the effects of the tax and transfer systems on poverty. But these are static simulations of the short-run impact with strong restrictions on the behavioural responses of the groups under consideration, and, possibly, of the other population groups as well. In general, these static simulations overestimate the effects of the tax and transfer system to some degree.

An example is the study by Atkinson, Rainwater, Smeeding (1995) of the income distributions in OECD countries, which was based on LIS data.

Another example is presented by Nolan, Hauser and Zoyem (2000, Tab. 5.2) who compare differences of the effectiveness of the social protection systems in alleviating poverty of the unemployed among six countries (Denmark, France, Germany, Ireland, Sweden, UK). By far the most effective poverty reduction is shown to exist in Denmark, and it has not changed between the 1980s and the 1990s. The least effective system seems to exist in the UK, and its effectiveness was even reduced from the 1980s to the 1990s. Although this study was coordinated with respect to the methods used, there was no in-depth check, whether the data sets for the six countries were really comparable.

A third example is a study by Förster and Pearson (2002) on trends and driving forces of income distributions and poverty in the OECD area. Similar papers were written by Ritakallio (2001), and Jesuit and Smeeding (2002). This Förster/Pearson study uses data on 21 countries that are comparable “according to the OECD questionnaire on distribution of household incomes (2000)” which is not reprinted in the paper. We assume that the authors used LIS data. Poverty ratios (persons below 50 % of median equivalent income as a percentage of the entire population combined with the square-root equivalence scale) vary between 5 % in Finland and 35 % in Mexico. From the mid-1980s to the mid-1990s on average there has been little change in income poverty. The poverty head-count measures fell in six countries, rose in five, and stayed approximately the same in nine. But it is stressed that income mobility in these lower sections of the income distribution is rather high, and, therefore, the share of the populations which is permanently poor is only a small fraction of those poor in one year.

The study tries to isolate groups of driving factors of changing income distributions and of changing poverty ratios. The first group of factors is changes in the distribution of market incomes, especially gross earnings. The poorest 30 % of the working-age populations receive only between 5.7 % (Ireland) and 11.9 % (Germany) of total market income, and from the mid-1980s to the mid-1990s this share on average has decreased by about 1.7 percentage points although this is not the case in all the countries. “Employment polarisation” among the households at working age, i.e. an increase in the percentage of households where all adults are working, an increase in the percentage of households where no adult is working, and a decrease of the share of “mixed” households where only one adult is gainfully employed, is seen as another driving force behind a widening of the earnings distribution. A third factor is an increase in the dispersion of wage rates in some countries.

Transfers and taxes are considered as a second group of driving factors behind changes in the equivalent income distribution and in the poverty ratios of the population of working age. In all the countries there exists a progressive pattern, although in some countries only a slightly progressive one. Unemployment benefits and family benefits were the most important transfers for the lower segment of the population at working age. In some countries losses in the share of market income of the lowest quintile were partly compensated for by an increase in the share of transfers (e.g. Australia, Canada, Denmark, Ireland), but in others there were losses of market income and of transfers, presumably due to a policy of retrenchment. Although the pre government poverty ratios increased in all the countries post government poverty ratios fell in five countries (Australia, Canada, Denmark, Ireland and USA), suggesting that in these countries the poverty alleviating effect of the tax and transfer systems was strengthened.

The demographic structure, i.e. the age structure and the household structure of the populations, and their changes are considered a third group of driving forces which overlay the other two groups of factors.

Although there can be no doubt that these groups of factors are driving forces their relative importance could not be ascertained. The study does not check explicitly whether there is an unambiguously positive or negative correlation between a change of each factor, and changes in overall measures of income inequality or poverty. Important elements of the distribution of market income are assumed as exogenous, e.g. labour force participation, and the wage structure. The distribution of income from capital and from self-employment is also exogenous. Therefore, a more penetrating analysis would have to go further in explaining differences in the distributions of market incomes and their changes. Furthermore, it is possible that results depend on the level of the poverty line and the equivalence scale used. If the poverty line is set below the level of a minimum of subsistence that is provided by a universal minimum income regulation its transfers will dominate all the other factors.

c) Selected empirical studies using the problem-by-problem approach

The problem of non-take-up of social security benefits, especially means-tested benefits, is known in many countries although it takes different forms depending on the various social

protection systems. Obviously, non-take-up of minimum benefits is one of the reasons of income poverty even according to the internal standards of a country, but non-take-up of other benefits can also contribute to poverty. Van Oorschot (1994, ch.2) presents an overview of the national studies available. A comparative study based on a comparable data basis, however, is still missing. Which percentage of post government income poverty as analysed in the various studies cited is due to non-take-up is still unclear. The more so are causes for differences between countries.

Deprivation can also best be studied by a problem-by-problem approach because - contrary to the income poor – deprived persons cannot easily be identified. The meaning of deprivation has to be defined in relation country-specific needs and subjective attitudes. An example is presented by Halleröd (1998) who compares relative deprivation in Sweden and Great Britain. To derive a proportional deprivation index that characterizes the extend of deprivation of each (sample) person, he first ascertains the percentage of the population who regard a list of items as necessary. In a second step he finds the percentage of the population who would like to have those items that a vast majority considers as necessary but cannot afford them for financial reasons. Based on the two surveys that are available for this exercise (the Swedish Standard of Living Survey (SLEV) and the British Breadline Britain Survey (BBS)) Halleröd shows that the items considered necessary overlap considerably but do not fully correspond. He does not use a poverty line defined at a certain level of the deprivation index but considers the total distribution. The mean value of this deprivation index is much higher in Great Britain than in Sweden, and most of sum of deprivation scores concentrates in the lowest two deciles, but more so in Great Britain than in Sweden. A Tobit model is used to analyse the effects of independent variables (equivalent net income, unemployment, recipients of means-tested benefits, household structure, age groups, gender). As was to be expected long-term unemployment, low income, and the receipt of means-tested benefits have a very significant effect on the deprivation scores, albeit the size of the effects differs between the two countries. The influence of the household types and the age groups is mixed. The author tries to explain these differences by referring to differences in the working of the labour markets and the systems of social protection. Generally speaking, one would like this approach to be extended to a comparison of many countries and to comparisons over time although some problems remain to be solved.

Selected comparative studies based on panel data

While with cross-section data one has observations of individuals and households for only one point in time, with panel data one has information about the same unit for several points of time, ideally for a long period. That increase in information opens up a number of additional opportunities for research on poverty.

Firstly, it is possible to distinguish between short-term and long term or persistent poverty. Obviously, it is socially and politically important, if the poor consist of persons who are only temporarily poor or of persons who stay poor for a long period. This point is studied for example by Eurostat (Mejer/Linden 2000) and by Layte et al. (2001) on the basis of the European Community Household Panel. Persistent poverty is defined as being poor in all observed waves, which are two in the study of Layte et al. (2001) and three in the study of Mejer/Linden (2000). The persistent poverty rate is correlated with the current poverty rate, but Mejer/ Linden (2000) show that there are major differences concerning the share of persistent poor among the poor. It is very low in Denmark and the Netherlands, where about 75% of the poor are only poor for one period, and it is relatively high in Portugal and Greece, where about the half are persistently poor. A main aim of Layte et al. (2001) is to analyse the correlation between current income poverty and persistent income poverty with deprivation. They find out that the correlation between current income poverty and deprivation is relatively low but that it is higher if persistent poverty is used instead of current poverty. An alternative definition of persistent poverty is based on the idea of permanent income by Milton Friedman. Based on that idea persistently poor can be someone whose income averaged over several years is lower than a poverty threshold (see Burkhauser et al. 1997). Thus, it is assumed that a lack of income in one period can be compensated for by a higher income in another year. Another alternative, also based on Friedman's idea of permanent income, is used by Fouarge/Muffels (2000), who compare persistent poverty in the Netherlands, Germany and the U.K.. They used an error components model to estimate the fraction of income which is permanent. The result is that persistent poverty is higher in Great Britain and nearly the same in Germany and the Netherlands. On the other hand, the share of total income that can be explained by persistent poverty is nearly the same in Germany and the U.K. but is higher than in the Netherlands. Finally, there is the spell based measure of

persistent poverty proposed by Bane/Ellwood (1986). Persistent poverty is then defined by the likelihood to stay poor after a spell of n years.

Accounting for differences in the shares of short-term poor and long-term poor between countries, however, is a research field that is still underdeveloped. Progress can now be made because for a number of countries several waves of comparable panel data have become available.

Secondly, analyses of the dynamics of poverty or low income can be the more profound, the more panel waves become available. If there are only two waves one can merely distinguish between movers and stayers. If there are more panel waves one can determine the length of poverty spells, one can differentiate between various types of poverty “careers”, one can calculate the probability to stay poor or to leave poverty, and, finally, it is possible to compare the poverty situation with the situation before the fall into poverty or after the escape from poverty. Furthermore, only with panel data it is possible to describe *processes* of social exclusion, and one can test the hypothesis that social exclusion increases with the duration of poverty.

Thirdly, panel data on low income and social exclusion give the opportunity to analyse some causes of poverty by way of an event analysis because one knows the situation prior to the fall into poverty. Similarly, events that are the cause of escaping from poverty can be researched. Additionally, it is possible to analyse the impact of the social security system and its changes both on the probability to fall into poverty and to move out of it, and also on the length of a poverty spell.

A broad literature exists that deals with these questions for countries that have established representative panels some years ago. International comparisons to account for differences in these various phenomena, however, are rare. An extensive study of this kind has been done by Goodin et al. (1999), who use the American Panel Study of Income Dynamics (PSID), the Dutch Socio-Economic Panel (SEP) and the German Socio-Economic Panel (GSOEP). These three panels already exist for more than ten years. Fortunately, these three countries can be interpreted as examples of the three kinds of welfare states of Esping-Andersen’s typology. The main underlying question of this study is, therefore, whether different types of welfare states show differences in the dynamics of poverty.

Besides this study dealing with the poverty dynamics within the entire population there are some investigations of child poverty dynamics. Bradbury et al. (2000) describe the patterns of poverty dynamics in seven countries (Britain, Germany, Ireland, Spain, the USA, Hungary and Russia). They find that in all countries the majority of poor children is also poor in the next year. In some countries there is a substantial share of children staying poor in every year during a five year window (9 % in the U.S. and 6 – 8 % in Britain, Hungary and Germany). Over a ten year period, 40 % of all children in the U.S. and in Germany have been poor at least once. Jenkins et al. (2000) compare dynamics of child poverty between Germany and Britain for the period from 1992 to 1997. In both countries children are more likely to be persistently poor than adults, but in Great Britain the poverty spells are longer and poverty exit rates are lower.

Directions of further research

Even given the limitations of the available data sets fruitful research seems possible in several fields:

- Further research using the panel data of the ECHP of which six waves are now available. Despite its limitations this data source can be used for cross-section as well as longitudinal analyses. The potential for spell and event analyses is not yet fully exploited. The non-take-up problem could also be tackled on a comparable basis.
- Further research along the same lines using the comparable panel data of the GSOEP equivalent file, which partly overlaps with the ECHP is also needed.
- Researchers should prepare to quickly get and use the data of the European wide survey of living conditions (European Union Survey of Income and Living Conditions (EU-SILC) that is in preparation and is expected to start in 2005. Even lobbying for fast and inexpensive distribution of these data to the scientific community seems appropriate.

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The Panel-of-Countries Approach to Explaining Income Inequality:

An Interdisciplinary Research Agenda

A B Atkinson and Andrea Brandolini

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Introduction¹

The aim of this paper is to review the current state of the art with regard to empirical studies of the determinants of income distribution in OECD countries, with particular reference to the European Union. It focuses on recent studies of inequality, based on panels of countries, combining time-series and cross-section evidence, in economics, economic history, political science and sociology. The paper does not aim to be an exhaustive survey of the time-series cross-section (TSCS) literature (although we would welcome references to studies not listed in our bibliography). In particular, we restrict our attention to studies that use econometric techniques to investigate inequality, and exclude those studies that have produced descriptive evidence on the basis of examinations of multi-country time series data.² Rather our emphasis is on:

- bringing together the literature from different social science disciplines;
- providing a framework within which the different studies can be assessed;
- identifying areas that are fruitful for further research.

The conclusion of the paper is that we need greater horizontal integration – across the different disciplines – and greater vertical integration of theory, data, and estimation. While the explanation of income inequality is a thriving research area, there tends to be parallel literatures, each with their strengths and weaknesses.

Different issues are regarded as important; different hypotheses are tested; different

¹ Nuffield College, Oxford, and Bank of Italy, Economic Research Department, respectively. The views expressed here are solely those of the authors; in particular, they do not necessarily reflect those of the Bank of Italy.

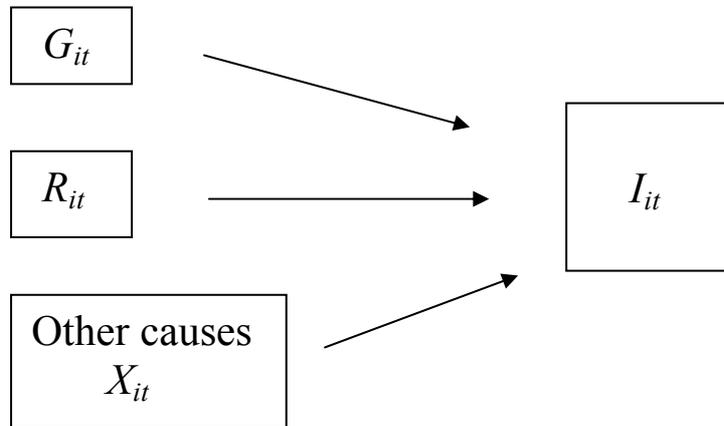
² One relevant example is Kuznets (1963) where he examined jointly how income inequality had changed in the long run in 9 countries, finding only weak support for his inverse-U hypothesis. After considering the historical record for six countries, twenty years later Lindert and Williamson (1985, p. 346) concluded instead that “... 20th century history agrees with the international cross-sections and with Kuznets’ original conjecture: while the early stages of development may have seen widening gaps more often than not, the clearer trend is an equality downswing in the later stages”. For examples in the literature on economic development see the articles by Weisskoff (1970) on Puerto Rico, Argentina and Mexico and by Ahluwalia (1974) on 18, mostly developing, countries.

methodological problems are highlighted; different solutions are invented, or the same solutions are re-invented. As we shall argue, there is considerable scope for mutual learning.

Reaching conclusions about the determinants of income inequality requires a theoretical framework, reliable data, and appropriate statistical techniques. These tend to involve different branches of social science. The typical applied economist takes a theoretical model “off the shelf” (such as the Kuznets models of structural change), and data from another shelf (or website), and then statistical techniques from an accessible software package. These “off the shelf” ingredients cannot however be used uncritically. The theoretical model may need to be adapted before it can be applied to the issue at hand; data are always imperfect, and their weaknesses need to be assessed in relation to the potential use; the estimation method needs to be tailored to the model under consideration and to the shortcomings of the data. In what follows, we consider in turn theory (Section 1), data (Section 2), and estimation (Section 3), but these should be seen as a vertically integrated activity, not as a set of specialisms.

To make this concrete, let us take an example. Much of the recent literature has been concerned with the extent to which globalisation has caused rising income inequality, and with the capacity of nation states to moderate its impact through redistributive tax and social policy. A recent example emphasising the former is the article in a recent issue of the *American Journal of Sociology*, “Globalization and the Great U-Turn: Income Inequality Trends in 16 OECD Countries”, by Arthur Alderson and François Nielsen (2002). Other studies, including those giving more weight to redistribution, are listed in Table 1. In a broader sense, this literature is concerned with the balance between exogenous factors and policy choices, although globalisation is in part a result of policy choices and the effectiveness of the welfare

state is in part constrained by exogenous forces. In order to study the relation between inequality (I), globalisation (G) and redistribution (R), many studies have used panels of countries: a time series (index t) of countries (index i). Schematically,



(There are of course issues of reverse causality that we do not discuss here.)

Algebraically, in a linearised form

$$I_{it} = \alpha_i + \beta G_{it} + \gamma R_{it} + \delta X_{it} + \varepsilon_{it}, \quad (1)$$

where the α_i are country fixed effects, representing (constant over time) differences across countries which are not captured by the explanatory variables. From estimation of a relationship such as Equation (1), conclusions are drawn about the impact of globalisation and about the effectiveness of redistributive policy.

1 A Theoretical Framework

Much of the literature on trends in income inequality draws on the Presidential Address of Kuznets (1955). This applies to the political science and sociology literature as well as to economics: of 13 articles in these two disciplines identified in our review, seven cite this article by Kuznets and a further four cite related work by Kuznets. On the second page of their article, Alderson and Nielsen describe how Kuznets “conjectured a general developmental pattern in which inequality traces a

curvilinear, inverted U-shaped relationship with economic development” (2002, p. 1245). The inverse-U arises from the existence of sector dualism, average incomes in the traditional agricultural sector being less than those in the modern industrial sector. Inequality is relatively less when either most people are in the traditional sector or when most people are in the modern sector. This explanation in terms of structural change has resonance in other disciplines. Nielsen (1994) notes that “most theoretical discussions of the evolution of inequality in sociology [tend] to produce monotonic predictive statements ... of the form ‘the greater x (e.g. the spread of education), the lower y (income inequality)’” (1994, p. 657), whereas sector dualism can explain an inverted-U shape.

The Kuznets Model of Structural Change

A simple theoretical model allows us to see how the inverted-U comes about. Suppose that there is no within-sector inequality.³ There are then two income groups, one (in the modern sector) with a higher income; the wage differential between agriculture and industry necessary to cause movement between the two sectors is assumed to be a constant proportion of the industrial sector wage. This dual economy can be represented in terms of a Lorenz curve, which plots the share of income of the first $100x\%$ of the population against x . It is drawn between 0 and 1, is convex upwards and never lies above the 45° line that represents complete equality. The first segment has a slope equal to the ratio of the traditional sector income to the average income; the second segment has a slope equal to the ratio of the modern sector income to the average income. As the economy develops, the modern sector grows, so that the point P in Figure 1 moves to the left. The slopes of both segments fall, since

³ This is a simplification. Kuznets allows for within-sector inequality.

both the industrial workers and farmers find that they are worse off relative to the rising average. The gainers are those making the transition between sectors. This means that the Lorenz curve shifts inward (towards equality) at the top and outward (away from equality) at the bottom. It may be noted that once the industrial sector exceeds 1% of the labour force, the share of the top 1% is continually falling in this model.

Where the Lorenz curves intersect, different summary measures of inequality can give different answers. Most commonly employed is the Gini coefficient. In the present case, the Gini coefficient of inequality, I , can be calculated using the fact that it is equal to the ratio of the area between the diagonal and the Lorenz curve to the whole triangle. The value in the simple case shown is the difference between the population share and the income share of the agricultural sector, which is the “sector dualism” variable, denoted here by D , used by Nielsen (1994), and Alderson and Nielsen (2002): $I = D$. Initially, both population and income share are close to 1, and the Gini is near zero; it rises over time, but as the economy matures the population and income share of agriculture both tend to zero. Hence the \cap shape.

Capital Accumulation

Kuznets (1955) also refers to a second mechanism causing widening inequality: the concentration of savings in the upper income brackets. This has received less attention, although it relates to other explanations of income inequality, such as the classical savings theories (Kaldor, 1955-6). Since capital accumulation drives the growth of the advanced sector, it is clearly important, even if capital income is only received by a small fraction of the population. The share of profits in

national income then interacts with the extent of dualism, illustrating why an explicit framework is essential.

Capital income is important not only in its own right but also because it is typically very unequally distributed, so that we need to consider the distribution *within* the capitalist class. The top of the distribution is of particular interest. For this purpose, we may want to distinguish redistribution among the rich from redistribution between rich and poor. If, for example, the upper tail of the distribution can be approximated by the Pareto form, so that the number of people with incomes above y is proportional to $y^{-\lambda}$, then the share of the top 1% within the top 10% is a linear function of $(1/\lambda)$: $\log[S_1/S_{10}] = b(1/\lambda - 1)$. Changes in λ may show a different picture from changes in the Gini coefficient.

Globalisation and Redistribution

The Kuznets model takes us part of the way, but is not enough on its own. In fact it lacks both of the ingredients in which we are interested. The economy is assumed closed to foreign trade, so that globalisation has no direct role. There is no redistributive state.

Suppose that we re-interpret the two sectors as using “skilled” and “unskilled” workers, and assume that the supply of skills is fixed. According to a widely held view, globalization has led to a shift in demand away from unskilled labour. As has been described by Krugman (1994), this can have led to different outcomes in Europe from those in the US. Where wages are freely flexible, as may characterise the US, then the shift in demand causes increased wage dispersion, and the Lorenz curve for wages unambiguously shifts outward – see the solid line in Figure 2. On the other hand, if in the Continental European labour market wage differentials are held fixed,

so that the wages of unskilled workers do not fall relative to those of skilled workers, then unskilled workers become unemployed. In that case, the distribution among those employed may become more or less unequal: the relative slopes of the two Lorenz curve segments is, by assumption, fixed, so that the Lorenz curve moves inward at the top. (If international competition completely eliminated the demand for unskilled workers, then there would be equality among the employed, who would all be skilled). But the distribution of market incomes among the whole population becomes more unequal – see the dashed line in Figure 2, where we now have 3 groups: skilled workers, unskilled workers and the unemployed.⁴

The distribution of market income in this Krugman model becomes more unequal with the rise in unemployment, but this is moderated by unemployment benefit. The existence of unemployment introduces the redistributive role of the state. Suppose that redistributive public policies are modelled as an unemployment protection scheme, whereby contributions are paid by the employed towards unemployment benefits. More precisely, we suppose that the programme covers a proportion c of the unemployed, and that a subsidy B is paid to each insured unemployed; benefits are financed by contributions levied on wages, w , at rate τ . (It is assumed that $0 \leq c \leq 1$, $0 \leq \tau \leq 1$, and $B \leq (1 - \tau)w$.) These hypotheses allow us to construct a stylised distribution of disposable income where four different classes of people are now distinguished: uninsured unemployed workers, insured unemployed workers, employed unskilled workers, and employed skilled workers. Skilled workers account for a proportion $(1 - \phi)$ of the population and receive a skill premium s (i.e.

⁴ This characterisation of personal income distribution resembles that of Bourguignon (1990), who examined a three-class dual economy with workers employed either in the “traditional” sector, or in the “modern” sector, but his third class is that of “pure capitalists”.

the skilled wage is $1+s$ times the unskilled wage). The Gini coefficient can now be calculated as:

$$I = (1 - \omega)u + \omega\phi - \beta cu, \quad (2)$$

where ω is the share of total income accounted for by the skill premia, that is

$$\omega = \frac{s(1 - \phi)}{1 - u + bcu + s(1 - \phi)} = (1 - \phi) \frac{sw(1 - \tau)}{y}, \quad (3)$$

and β is the ratio of the unemployment benefit to the mean disposable income computed across income recipients,

$$\beta = \frac{b(1 - u + cu)}{1 - u + bcu + s(1 - \phi)} = B \left[\frac{y}{(1 - u + cu)} \right]^{-1}. \quad (4)$$

Even for the extremely simplified distribution sketched here, the Gini coefficient turns out to be a rather intricate function of macroeconomic variables, s and u , and the institutional parameters, b , τ and c . This makes it hard to predict the effect of globalisation on the distribution of disposable income. If globalisation only affects the skill premium, its impact is unambiguous since, *ceteris paribus*, inequality is increased if the skill premium rises. However, if also the unemployment level varies, then the total effect may be difficult to determine. It is also evident that the impacts of globalisation and of redistribution interact: for instance, the derivative of inequality with respect to the skill premium depends on the extent of social protection.

Underlying Explanation of Inequality

We arrived at an alternative to the Kuznets model by re-interpreting and extending the Lorenz curves. There is however a key difference between the Kuznets and Krugman models described above. In the “stripped-down” Kuznets model, workers are inherently identical. They receive different incomes because, for

historical reasons, they find themselves in different sectors of the economy. Inequality is a disequilibrium phenomenon (or a class phenomenon in the case of capitalists). In the Krugman explanation, people differ in their skill. What are the origins of these skill differences? Some authors identify skill with education or training. In that case, inequality is again a disequilibrium phenomenon, since people will over time invest in human capital formation so as to eliminate any excess economic advantage from skill (wages may still be different, but only by enough to compensate for the period of education). But if skill is innate, then inequality is a permanent – but unexplained – feature of our society.

The economic forces modelled by Kuznets, and by Krugman, have influenced the approaches of other social science disciplines, but the traffic needs to be in both directions. Shanahan and Tuma in their review of the “Sociology of Distribution and Redistribution” (1994) note that empirical studies tend to corroborate Kuznets’s hypothesis of an inverse U-shape, but move on to an explanation based on political power: “Most of the sociological literature on comparative income inequality following Lenski (1966) draws especially upon his central contention that political democracy, as an equitable system of power distribution, reduces income inequality (1994, p. 748). There has been a large literature on the relation between cross-country differences in income inequality and social democratic governments. A valuable summary is provided by Maravall (1997, Appendix 3). A crude count indicates that 7 out of 12 studies indicate that social democratic governments are associated with lesser income inequality. This literature in turn has been criticised for focusing on the nation state in isolation. The world-system perspective, for example, argues that the political determination of income inequality depends on the country’s relations to the world economy. In this case, G and R interact.

Economists have begun to develop an interest in political economy, usually but not invariably based on models of median voting, and have used these models to explain how economic growth is affected by (initial) income, or wealth, inequality. These models pay little attention to the dynamics of the distribution but, when fully developed, the implications for the long-run time path of inequality appear to vary considerably from one model to the other. In Alesina and Rodrik (1994) the distribution is constant over time by construction. In Persson and Tabellini (1994) it is possible to show that the median voter always belongs to the same dynasty: if the wealth of the median voter dynasty grows more quickly than the average, inequality tends to a minimum; otherwise, the economy converges to a maximum-inequality long-run equilibrium. It is not however evident that the median voter hypothesis captures adequately the role of political forces, and a fusion of the two literatures may allow a richer treatment of the interaction between economic and political mechanisms.⁵

Lessons for Future Research

The world we are describing is very simple, but the theoretical framework allows a number of conclusions to be drawn:

- We need to look at different parts of the income distribution, and not rely solely on a summary measure such as the Gini coefficient. The Kuznets story shows the upper part levelling (“we all become middle class”), while the poor get left increasingly further behind.

⁵ An example is provided by Austen-Smith who argues that “proportional representation polities tend to adopt higher redistributive tax rates than two-party majoritarian systems” (2000, p. 1239). He posits a continuum of individuals with differing productive abilities, and examines the resulting political-economic equilibrium, demonstrating the conditions sufficient for the proposition to hold.

- We must distinguish the distribution of wages among workers from the distribution of market incomes among the whole population (including the unemployed), and this in turn must be distinguished from the distribution of disposable incomes. These different distributions may move in different directions as a result of globalisation.
- Even in a highly simplified model, the factors that determine income inequality interact in a rather complex manner. The effect of globalisation is not independent of the degree of redistribution.
- Different approaches to inequality differ in the extent to which inequality is a disequilibrium phenomenon or is innate.
- We need to bring together economic and political explanations of inequality.

2 Data Fit for Purpose

There has been a great improvement in the availability of data for the analysis of income distribution. When Kuznets gave his Presidential Address, he based his inverse-U hypothesis on 5 observations for the US, 5 for the UK and 2 each for Prussia, Saxony and united Germany. This is a rather slender basis for drawing firm conclusions. When Kuznets (1963) returned to the subject, his "long-term estimates" included, for the US, averages of data for some 45 years, and he added further countries: Netherlands, Denmark, Norway and Sweden. The range of the data has continued to expand. There has in particular been an explosion in the number and size of household surveys, many of them on a panel basis, which provide micro-data on income distribution. Here we consider three such sources that have played a key role: (a) the earnings data assembled

by OECD (1996), (b) the Deininger-Squire secondary dataset assembled at the World Bank, and (c) the Luxembourg Income Study (LIS) micro-data.

Distribution of What, Among Whom, and When

The theoretical framework has shown the importance of distinguishing between the distributions of earnings, market income, gross income and disposable income. In the case of earnings, the OECD dataset relates to the earnings of individuals, but this still leaves open many questions. Do we want to consider all workers, or just males or just females? Do we want to consider only adult workers, or to include young workers? Do we want to consider only “prime age” workers? Do we want to consider only private sector workers? Do we want to limit attention to full-time workers, or to include part-time workers? Do we want to limit attention to full-year workers? Are we interested in annual earnings or in hourly pay?

These choices drive us back to the underlying theory. If the inequality is hypothesised to derive from individual educational characteristics, then this will show up whether we consider all workers or just male workers. On the other hand, in the Kuznets model of structural change, gender may be related to the sorting of workers between the high and low wage sectors, and we have to look at the whole distribution.

The “distribution of earnings” can therefore mean different things, and the problem of assuring comparability is acute. Table 2 illustrates the problem for the 1993 version of the OECD dataset. A wide range of definitions has been used for the 15 OECD countries. These differences will lead to differences in the measured dispersion. For example, the truncation of earnings at the ceiling for social insurance contributions, as in Austria and Belgium, means that the dispersion is under-stated (or the top decile cannot be reported). The exclusion of agriculture, as in Italy and

Portugal, is likely to cause dispersion to be under-stated. Moreover, the difference caused by the difference in coverage is unlikely to remain constant over time; as the agricultural sector shrinks, so will the understatement. The description in Table 2 is taken from the OECD (1993) summary, but there are a number of important differences not covered, including the nature of the underlying source. Some of the earnings data come from household surveys, some from income tax or social security administrative records, and some from surveys of employers. These sources may require care in their comparison.

The same issues arise when we turn to the distribution of disposable income, particularly those that affect comparability over time. The data set assembled by Deininger and Squire (DS) draws together more than 2,600 observations on Gini coefficients and, in many cases, quintile shares from a wide variety of studies covering 135 developed and developing countries for the years 1947-1994. The DS data-set has been made freely available at the World Bank's web-site,⁶ and has been very extensively used. The data set covers a wide range of countries; here, as in Atkinson and Brandolini (2001), we concentrate on OECD countries.

Consistency over Time

The data in the DS dataset are highly heterogeneous and have to be used with considerable care. To illustrate this point, we have examined the DS data used by Alderson and Nielsen (2002) for 16 countries, which they helpfully graph at the end of their article. In some cases, such as the UK and the US, the data are drawn from a consistent series over time, but in others there are apparent breaks that make us pause.

⁶ At the time of writing, the data-set is available at the address:

<http://www.worldbank.org/html/prdmg/grthweb/dddeisqu.htm>.

While the Gini coefficients can change substantially from one year to a next, a sharp rise or fall requires investigation. Visual inspection of the Alderson-Nielsen graphs led us to consider 8 cases, shown in Table 3. In half of the cases, the sharp changes coincide with changes in the underlying sources. Where possible we have checked against alternative national sources that give a continuous run of years. For example, the estimates for West Germany using the budget survey (EVS) of the Gini coefficient for equivalised disposable income by Becker (1997, p. 47) show a fall between 1969 and 1973 from 25.8% to 24.8%, compared with the 3 percentage point fall in the DS data used by Alderson and Nielsen. But the same apparent source does not ensure consistency over time. Statistics Canada publishes a CD-ROM “Income Trends in Canada” containing data from 1980-1999 based on the same source (Alderson and Nielsen use data from 1967 to 1991). The Statistics Canada series shows a modest fall from 1988 to 1989 (from 35.0 to 35.4%), nothing like the 4.5 percentage point fall recorded in the DS data used by Alderson and Nielsen. In the case of Italy, the underlying source is the same, but the methods changed: 1975 differed from 1976 in that high-income households were over-sampled, and in that interest and dividend income were included; if the latter are excluded the 1975 figure drops from 39 to 36% (Brandolini, 1999, Table 13, p. 224). There is therefore a break in continuity.

Given that income distribution data do not move sharply, apparent large changes could play a particularly influential role in the resulting statistical analysis. While we have not yet fully reproduced the Alderson-Nielsen equations, experimentation with replacing DS data by more consistent series suggests that the results can change significantly. This does not necessarily mean weakening the conclusions drawn. Indeed, it may be the reverse. Alderson and Nielsen conclude “while sector dualism continues to affect inequality in the advanced industrial

societies, inequality within the agricultural sector is no longer significantly lower than in the nonagricultural sector” (2002, p. 1275). This is based on t-statistics for dualism and the % labour force in agriculture of 1.64 and 1.25 respectively; our re-estimate replacing the data for Canada by a consistent series from a national source shows the former t-statistic rising to 2.30 and the latter falling to 0.71. This suggests that data may indeed matter.

Extent of the Panel

Economists do not typically pay much attention to the issues involved in selecting samples of countries. In the case of the OECD, they usually employ all countries for which data are easily accessible. It is almost as though, having despaired of “matching” comparable countries, they have gone to the opposite extreme of including every country that published income distribution data. The selection of countries should however be related to the hypothesis being tested.

A second issue here is the potential use of sub-national data. US states are often used on their own as a source of variation, but should we not consider combining state, or regional, data with national data? Saez and Veall (2003) point out that the rise in inequality at the top has been less in francophone Quebec than in the rest of Canada, mirroring the fact that France has not seen the same rise in inequality at the top as the US. The experience of the Italian South may be different from that of the North.

Panels are typically of N countries for a maximum of T years, although they are often unbalanced, with the number of years varying. In the case of Alderson and Nielsen (2002), there are 16 countries, with a maximum of 26 observations (US). If the panel were balanced, then the total number of observations would be 416, but in fact there are

only 187. For Belgium and Ireland there are only 3 each, and for Australia, Denmark, France, (West) Germany, and Norway there are 8 or fewer observations. Almost half the observations (89) are accounted for by the US, UK, Japan and Canada. For some countries, the data used are all that exist, but in others more can be done.

A longer run of years is important, not only to balance the panel, but in its own right. There are dangers in considering a small slice of history, as is illustrated for the US and the UK by the two ovals drawn in Figure 3. The first shows the period covered by the evidence that Kuznets had available to him in 1955; the second shows the rise in inequality in the 1980s that has been the main source of the view that we now have an up-turn in the U shape. But looking at the period as a whole, we can see that these two episodes were separated by a period in the US where overall inequality was not trending up or down: the US Gini coefficient in 1971 was the same as in 1951. This does not mean that it was uninteresting – we have to ask why there was this relatively long period of stability. Is stability consistent with the theoretical models discussed above? Why did the UK see falling inequality in the same period?

Lessons for Future Research

The main conclusion is that data matter. In saying this, we are not concerned with the quality of data in abstract, but with their *fitness for purpose*. The question is – do the data capture the essence of the problem? This depends on the problem at hand. Data may be suitable for one purpose, but not for another.

In stressing data quality issues, we are not adopting a nihilistic position. All data are imperfect and this is not a reason for rejecting them out of hand. Rather we need to be aware of the data limitations when carrying out the analysis, to which we turn in the final section.

3 Statistical Analysis

Statistical analysis can take different forms. In this section, we consider in turn three elements: data description, specification of statistical relationships, and allowing for data deficiencies.

Describing the Evidence

In contrast to much of economics, studies of income inequality pay considerable attention to “looking at the data”, which we believe to be a crucial first step. It is not possible to make sense of reported regression coefficients without some idea of the behaviour of the underlying variables. This applies to both explanatory variables and to the dependent variable, but the latter is particularly important. Is the variation across countries much greater than the variation across time? Is there a pattern of diffusion of rising inequality across counties? Alderson and Nielsen (2002) provide, as already noted, individual time-series for all 16 countries. They also give a scatter plot of the Gini coefficient against GDP per head; Gustafsson and Johansson (1999) begin with a plot of the annual observations (89 in all) by country (16 OECD members).

An intermediate stage between graphic display and econometric analysis is the fitting of trends. De-trending is a subject much discussed in the macro-economic literature and there are interesting parallels, not least in the controversy generated. Different approaches yield different “stylised facts” about the business cycle. But there are also differences, not least in that the Gini coefficient, unlike US GNP, has a limited range (see Jäntti and Jenkins, 2001). Here the trend over time in income

inequality is itself of considerable interest. Some studies have fitted linear trends to Gini coefficients for panels of countries. Li *et al.* (1998) using the DS data-set over the period 1947-1994 conclude that there is little intertemporal variation in income inequality: "income inequality is relatively stable within countries" (1998, p. 26). This finding is for all countries, developing as well as developed, but it will come as a surprise to those worried about widening inequality in industrialised countries. It is true that they find a "statistically large and quantitatively important time trend" (1998, p. 33) for four OECD countries, but in two cases these are negative (France and Italy), and the two where the trend is large and positive (Australia and New Zealand) do not include the United States and the United Kingdom - in both of which there has been considerable concern about rising inequality. For the United States and the United Kingdom, they conclude that there is a small positive trend, where "small" is defined as an annual rate of change less than 1% of the country's predicted 1980 value of the Gini coefficient: i.e. less than some 0.3 percentage points per year. From Figure 3, however, it is clear that fitting a linear trend to the period 1947-1994 in the US is a hopeless exercise.

A popular alternative is fitting a quadratic, to capture – on the Kuznets model – the inverse-U, or, more recently, its reversal, which Harrison and Bluestone (1988) have christened as the “great U-turn”. Cornia and Court describe how “the Golden Age, a period of stable global economic growth between the 1950s and early-mid 1970s, witnessed declines in income inequality in a number of countries (with some exceptions). This trend was reversed over the last two decades as country after country has experienced an upsurge in income inequality” (2001, p. 7). Fitting a quadratic equation to explain the Gini coefficient as a function of time is, however, still too restrictive. It imposes a particular structure on the U. It does not allow for situations where the decline and rise in inequality are separated by a period of

stability: a flat-bottomed U, as we have seen in the US. Most importantly, the quadratic implies that the rise in inequality is continuing. It assumes a U without a serif. In contrast, a U with a serif indicates that the rise has come to an end. Given that we are especially concerned with the recent past, we need to be able to test whether or not inequality is continuing to trend upwards.

Specification

In some statistical estimation there is a tight relation between the underlying theory and the specification of the empirical relation. The use of the sector dualism variable by Nielsen is a good example, where, in the simplest model, the Gini coefficient is equal to this variable. Another example is provided by the functional form derived by Anand and Kanbur (1993), showing that the Gini coefficient is as a function of mean income, y , should be written as $\alpha - \beta y - \gamma/y$. This is different from the quadratic specification often adopted in equations for the Gini coefficient. As they stress, the form depends on the choice of inequality index and vice versa: “the right index must be used with the right functional form for estimation purposes” (1993, p. 39). A final example is provided by the Pareto upper tail. A model of wealth accumulation with a pattern of primogeniture in passing on wealth can lead to a stable distribution with

$$1/\lambda = sr(1-t)/n \quad (4)$$

where $sr(1-t)$ is the rate of accumulation out of wealth, r being the rate of return and t the tax rate, and n is the rate of population growth (Atkinson and Harrison, 1978, p. 213). This suggests that we regress the relative shares $\log[S_1/S_{10}]$ on the net rate of return.

There is however often only a loose connection between the variables studied in the theoretical models and those entering empirical investigations. This raises issues about their specification. We give two examples. The first concerns interactions. Suppose that we were to simply write down an equation like Equation (1), where inequality is explained as a function of globalisation (G) and redistribution (R). This would ignore the interactions that we have seen to arise in several different ways. In the Krugman model, the impact of globalisation depends on the extent to which social protection provides a floor to wages, and the implications of unemployment depend on the replacement rate. If I is measured in terms of disposable income then $\partial I/\partial G$ is smaller where R is higher (the cross-derivative is negative). This could be allowed for by introducing a cross-term, GR, with an expected negative coefficient. However, this ad hoc response may not be a satisfactory solution. If the cross-derivative is negative, then its reverse implies that the derivative $\partial I/\partial R$ (which is negative by assumption) is even more negative if G increases. Globalisation increases the redistributive impact of the welfare state. This appears to be the reverse of what is argued by those who believe that the effectiveness of welfare states is under threat from globalisation. Such a difference of view reflects differences in the mechanisms assumed to be in operation, but it underlines the need to go back to the theoretical framework in order to specify the relation to be estimated.

The second example concerns interdependencies between countries. The typical statistical analysis treats the panel as proceeding in column; the countries simply happen to be on the same planet; there are no specific interdependencies. The same applied to the Krugman theoretical model. The US and Continental Europe were analysed in isolation. But what his formulation misses (as pointed out by Davis, 1998) is the *interdependence* of Europe and the US. The impact of internationalisation on

Europe is different on account of the existence of the US pursuing different labour market and welfare state policies. If in a unified analysis the US and Continental Europe both produce the goods that face global competition, then the wage floor in Europe determines the relative goods prices. Assuming that the minimum wage is unchanged, this prevents the relative price from falling. The US is therefore unaffected by increased trade. Europe bears the brunt in terms of unemployment (Davis, 1998). By the same token, any move to greater labour market flexibility in Europe causes a decline in the relative wages of the unskilled in the US. All this means that R_i affects R_j and this must be taken into account in the estimation.

Allowing for Data Deficiencies

The standard approach to dealing with systematic differences in definition is to use dummy variables. For example, some of the data used by Alderson and Nielsen (2002) relate to disposable income (Belgium and the UK, for example) and some to gross income (Australia, Denmark, and US, for example). Barro, for example, in his study of the effect of inequality on growth concludes that "the Gini value is lower by roughly [5 percentage points] if the data refer to income net of taxes or expenditures, rather than income gross of taxes" (2000, p. 21). This finding, as far as industrialised countries are concerned, is consistent with what is suggested by most national studies of fiscal redistribution, which indicate that direct taxes are mildly progressive in their impact.

Use of a dummy variable assumes that the difference between net and gross remains constant over time, and if this is the case then the difference in definition in effect simply disappears in the country fixed effect. However, the evidence suggests that in fact the redistributive impact of taxation and transfers vary over time.

Estimates of the Gini coefficient in Canada for market income, gross income and net income show that over time, inequality in market income has increased, the Gini rising by some 5-percentage points. This reflects among other things the increased size of the retired population. Since the retired receive state pensions, the degree of inequality in gross income (which includes state transfers) moves differently: indeed the Gini does not rise over the period as a whole. As a result, the difference between the two series doubles between 1971 and 1997. The Gini for net incomes (after income tax) is lower at the end of the period, so that the difference (gross-net) also rises, although by less. This means that we would need separate equations for the different income concepts. Indeed using all three series for Canada, and for other countries where available, would enrich the analysis.

Extending the dataset is one response to data deficiencies. An alternative is to explore the sensitivity of estimated relationships to weaknesses in the data. Here we refer briefly to two approaches. The first is to get away from a binary classification of data quality, where data are treated as either acceptable (included in the analysis) or unacceptable (rejected). A good example is provided by the 1967 data for Sweden. observation for 1967, which predates the official series starting in 1975. Gustafsson and Uusitalo say of the 1967 figure “because of some differences between the two data sets the comparability is less satisfactory” (1990, p. 84). Gustafsson and Johansson (1999) for this reason exclude the 1967 observation from their analysis of changes in inequality over time. On the other hand, it is included by Alderson and Nielsen (2002). An intermediate position is to include the observation but to “discount” it by assuming a larger error variance, as in generalised least squares estimation. The discount to be applied is a matter for judgment, informed by studying the sources. For this reason, we refer to this approach as the “Footnote Method”. It is

of course much easier to apply if the producers of the underlying data attach margins of error (see Feinstein and Thomas, 2001).

The second approach is a development of the dummy variable method to allow for breaks in the consistency of data. Breaks are an almost universal feature of time series; in many cases they can be neglected but in other cases we have to take them seriously. The US provides a good example. One notable break in the CPS series was that in 1993 when the data collection changed from paper and pencil to computer assisted interviewing, and when there was a large increase in the top codes (that for earnings rose from \$299,999 to \$999,999). This was important, since there was a large rise in recorded inequality in that year, and estimates (Weinberg, 1996, footnote 3) indicate that these changes could account for one half of the recorded increase. In considering this, we are again making use of the Footnote Method.

An alternative approach is to rely solely on the intrinsic properties of the data. For any series we can examine the sensitivity of our conclusions to there being an un-signalled break in comparability (assumed to take the form of an additive shift). Such an approach has resemblances to techniques for detecting influential observations (see, for example, Belsley, Kuh and Welsch, 1980).⁷ Consider the series for the US from 1967 to 2000. We are interested to know whether the upward trend in the Gini coefficient continued at the same rate during the Clinton Presidency. Such an assessment is hampered by the known break in 1993, and we introduce a dummy variable, DV, for years from 1993. Fitting first a simple trend, T, and then a separate trend post 1993, T^C (C for Clinton), yields

$$I = 38.55 + 1.75 DV + 0.173 T \qquad R^2 = 0.972; \text{SEE} = 0.411$$

(0.25) (0.011)

⁷ Alderson and Nielsen (2002, p. 1271) used a newer version of this approach to identify 5 outlying observations. Interestingly, none of these coincided with the cases identified here in Table 3.

$$I = 38.52 + 2.13 DV + 0.176 T - 0.094 T^C \quad R^2 = 0.974; \text{SEE} = 0.403$$

$$(0.35) \quad (0.011) \quad (0.063)$$

(Figures in brackets are standard errors.) The period as a whole indicates an upward trend of around 1.7% per decade. The second equation indicates a trend at around half this rate in the period post-1993, although the coefficient has a large standard error, and the 95% confidence interval for the difference in trend includes zero. Suppose now that we allow for the possibility of other breaks. The CPS series has been in the process of evolution, with improvements in statistical methods. In order to judge the sensitivity, we can re-run the second equation, allowing for a break in any of the years 1968 to 1992, the additive shift coefficient being estimated in each case. The difference in the trends remains constant at 0.082, but the significance of the difference changes substantially. If there is a break in [1985] then the t-statistic is down to 0.73 but a break in 1973 raises the t-statistic to 2.74.

Lessons for Future Research

The main points emphasised here are

- The value of looking at the data.
- The dangers in simply fitting trends or quadratics.
- The need to relate the specification of estimated relationships to the underlying theory, in particular to take account of interactions and interdependencies.
- Development of techniques to allow for data deficiencies that go beyond a binary classification (acceptable/unacceptable).

Concluding Comment

The combination of time series and cross-section evidence has attracted a lot of enthusiastic attention, in the hope that it will allow us to go beyond the strong maintained assumptions of cross-section studies and assimilate the historical experience of different countries. Others have been more sceptical. Parker (2000) describes time-series analysis of income inequality as a “can of worms”. Our view is intermediate. We believe that valuable lessons can be learned but that we require an integrated approach to theory and estimation and that we need to address the deficiencies of the underlying data. This enterprise in turn will advance much more quickly if the different social science disciplines learn from each other.

Table 1 Time-Series Cross-Section Studies of Income and Earnings Inequality

Study	Published	Data	Specification
Nielsen and Alderson (1995)	<i>American Sociological Review</i>	Income share of top 20% and Gini 279 obs from 88 countries 1952-1988	Sector dualism % in agriculture Secondary school Energy consumption Political democracy
Alderson and Nielsen (1999)	<i>American Sociological Review</i>	Income Gini 488 obs for 88 countries from 1967 to 1994	Sector dualism % in agriculture Secondary school Marxist-Leninist regime Foreign capital penetration
Alderson and Nielsen (2002)	<i>American Journal of Sociology</i>	Income Gini 192 obs for 16 OECD countries 1967 to 1992	Sector dualism % in agriculture and in manufacturing Secondary school Female participation Outflow of investment Import penetration Wage setting Decommodification
Gustafsson and Johansson (1999)	<i>American Sociological Review</i>	Income Gini 89 obs for 16 OECD countries 1969 to 1994	GDP per capita % in industry Imports from developing countries Inflation Government spending Unionisation Demographic structure Female participation
Barro (2000)	<i>Journal of Economic Growth</i>	Income and expenditure Gini 254 obs for 84 countries 1960 to 1990	GDP per head (and squared) Education Rule of law Democracy Trade openness
Deininger and Squire (1998)	<i>Journal of Development Economics</i>	Income and expenditure Gini and shares of quintile groups 223 obs for 50 countries (Tables 6 and 7) 1960s to 1990s	GDP per head and inverse
Lundberg and Squire (1999)	Discussion paper	Income and expenditure Gini and shares of quintile groups 117 obs for 36 countries	Simultaneous growth inequality model GDP per head Education Government spending Financial development Inflation Trade openness

			Inequality of land Civil liberties
Bourguignon and Morrisson (1998)	<i>Journal of Development Economics</i>	Income shares of different quintile groups 1970 and 1985	GDP per head (and squared) Education Natural resources Dualism
Galli and van der Hoeven (2001)	<i>ILO Employment Paper</i>	Net household income Gini 60 obs for 15 OECD countries 1973 to 1996	Inflation (and square) Growth Government spending
Higgins and Williamson (1999)	Discussion Paper	Income and expenditure Gini and ratio of shares of top 20% to bottom 20% 600 obs for 85 countries 1960s to 1990s	GDP per head (and squared) Cohort size Trade openness Education Natural resources
Mahler (2001)	<i>LIS Working Paper</i>	Ratio of top to bottom decile for disposable income 35 obs for 14 OECD countries 1981 to 1992	Outbound investment Financial openness Political variables Institutional variables for wage- setting
Wallerstein (1999)	<i>American Journal of Political Science</i>	Earnings ratio of top to bottom decile 44 obs for 16 OECD countries from 1980 to 1992	Institutional variables for wage- setting Political variables Trade dependence Government spending
Spilimbergo, Londono and Szekely (1999)	<i>Journal of Development Economics</i>	Income share of top 20% and Gini 660 obs from 108 countries 1947-1994	Endowments of land, skill and capital GDP per head (and squared) Trade openness
Cornia and Kiiski (2001)	<i>UNU/WIDER Discussion Paper</i>	Income and expenditure Gini 770 obs for 73 countries 1939-1998	Linear and quadratic trends Land concentration Natural resources Urban bias Education Technological change Liberalisation

Table 2 OECD Earnings Dataset as Described in OECD (1993)

Country	Variable	Employment status	Sector	Coverage
Australia	Gross weekly earnings	Full-time non-managerial employees	Excluding agriculture and armed forces	Receiving pay in May
Austria	Gross earnings per day, standardised to a monthly basis, truncated at maximum social insurance contribution			Wage-earners, salaried workers and some civil servants
Belgium	Gross average income per day, subject to ceilings	Full-time workers		
Canada	Gross annual earnings	Full-time, year-round workers		
Denmark	Annual earnings divided by recorded hours			Excludes persons with wages below 80% of minimum wage
France	Gross annual earnings adjusted for differences in annual hours	Full-time workers		
Germany	Gross monthly earnings plus 13 th and 14 th month pay	Full-time, full-year workers		
Italy	Annual after tax earnings	Full-time, full-year workers	Excluding agriculture	Employees between the ages of 18 and 65
Japan	Monthly scheduled earnings	“Regular workers”	Excludes agriculture, forestry, fisheries and private household workers	Governmental establishments with at least 5 workers
Netherlands	Weekly earnings excluding overtime	Full-time, full-week workers		Age 23-64
Norway	Wages divided by working hours			Age 19-55

Portugal	Weekly earnings	Full-time workers	Excluding agriculture	
Sweden	Gross hourly earnings			
UK	Gross hourly earnings	Persons paid on adult rates		Those in survey period, whose pay not affected by absence
US	Gross annual earnings divided by annual hours worked			

Table 3 Apparent Breaks in Deininger-Squire Data used by Alderson and Nielsen (2002)

Country	Data	DS source	National source	Alternative series
Canada	1988 31.91 1989 27.41	Same source (IDS)	Statistics Canada	1988 35.4 1989 35.0
Finland	1984 30.84 1987 26.19	1984 SY 1987 LIS	Uusitalo (2001)	1985 20.0 1987 19.7
France	1975 43.00 1979 34.85	1975 UN1985 1979 LIS	Hourriez and Roux (2001)	1975 32.0 1979 30.0
Germany	1969 33.57 1973 30.62	1969 UN 1981 1973 LIS	Becker (1997)	1969 25.8 1973 24.8
Italy	1975 39.00 1976 35.00 1977 36.30	Same source (UN 1981)	Brandolini (1999)	1975 36.4 1976 ... 1977 35.9
New Zealand	1989 36.58 1990 40.21	Same source (SY)		
Norway	1975 37.30 1979 31.15	Same source (SY)		
Sweden	1975 27.31 1976 33.12	1975 LIS 1976 SY	Gustafsson and Palmer (1997)	1975 21.3 1976 20.9

Note: SY denotes official Statistical Yearbook

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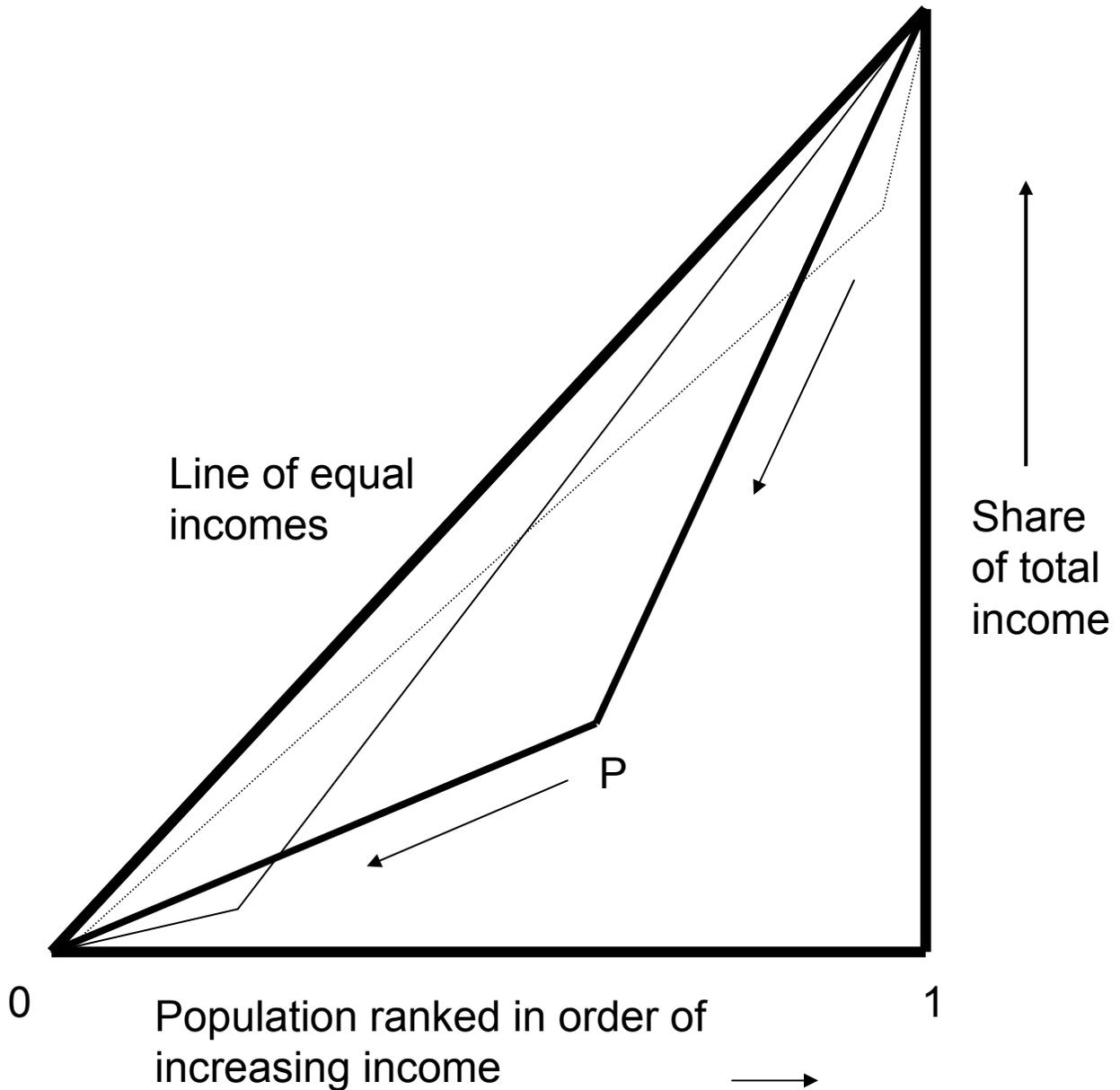
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Figure 1 Lorenz Curve for Kuznets Model



**Figure 2 Lorenz Curves for Krugman Model
Market Income**

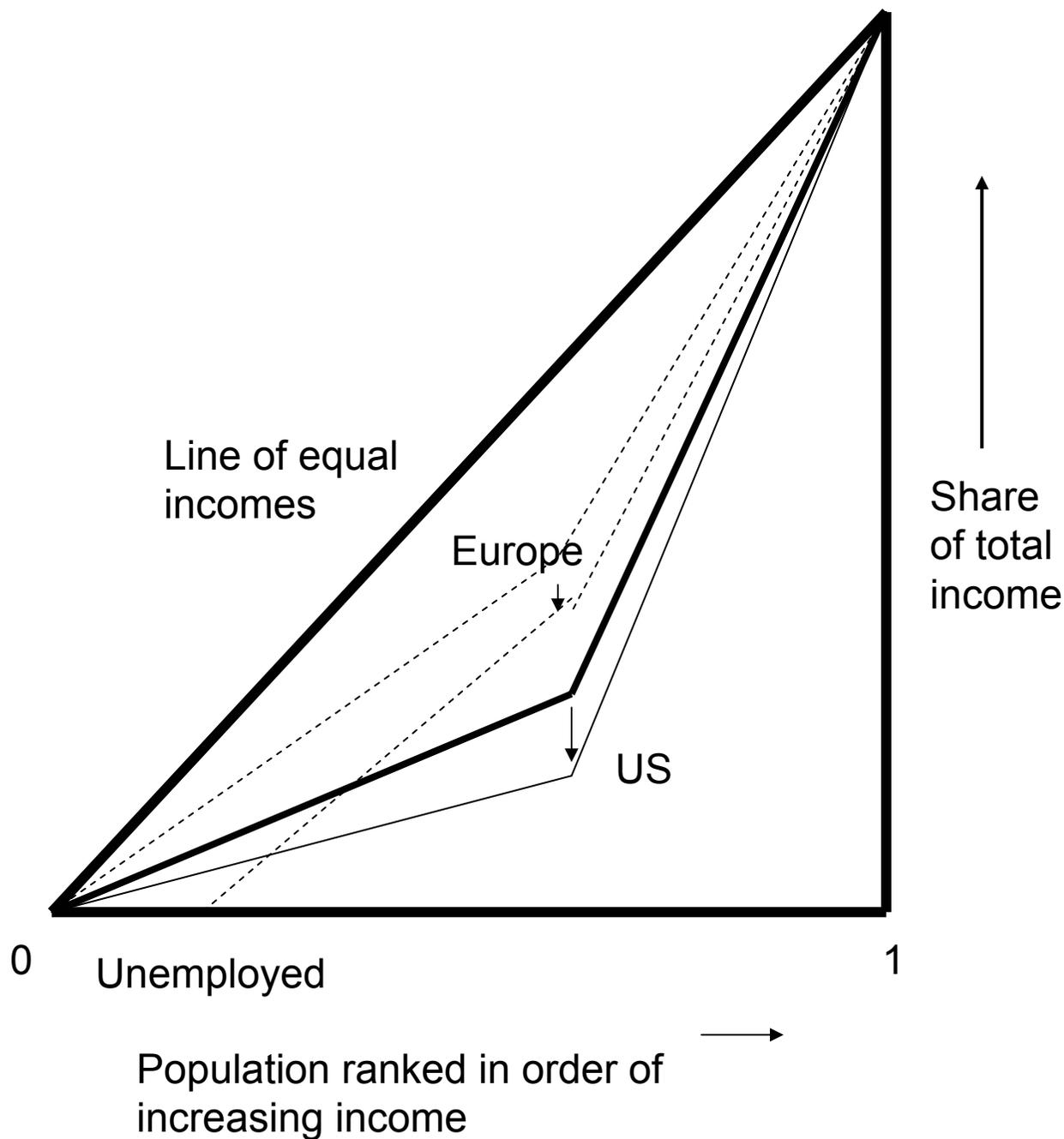
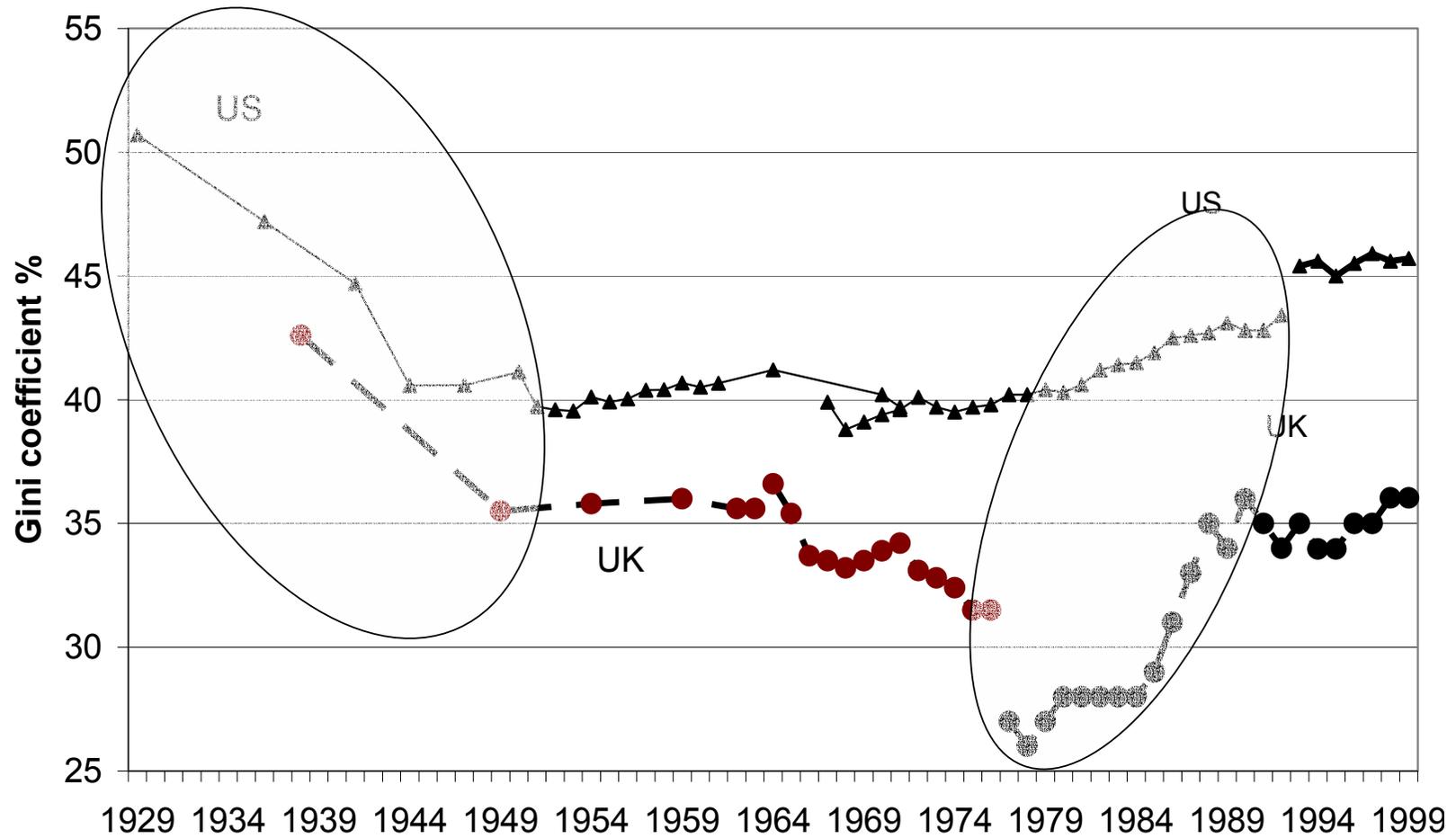


Figure 3 Gini Coefficients for US and UK: Different Foci



Theme 2 Comparative Analyses of Intergenerational “Inheritance”.

Theme Co-ordinator Prof. Walter Muller

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Introduction

Walter Müller, MZES

When sociologists talk about intergenerational “inheritance”, they relate to the fact, that individual’s unequal prospects to obtain access to more or less advantageous social positions to a considerable extent depend on the conditions of their social origin and on the resources commanded in the family of their upbringing. Using the term “inheritance” is a loose way to describe the common observation and regular research finding, that “sons follow their fathers footsteps or they tend to “inherit” their fathers social position. In general, these phenomena are studied in the context of research on social mobility, that investigate the extent to which the social position individuals reach in life are associated with the social position held by their parents. The social position is usually conceived in terms of social class or in terms of some measure of social status.

There are at least two more general interests behind the study of these phenomena. Classical authors have seen and studied social mobility primarily as a mechanism of class or status group formation. The basic assumption is that classes, status groups or other collectivities with some form of socio-cultural or socio-political identity can only emerge and eventually provide a basis for collective action under the condition of achieving a sufficient degree of “demographic identity” (Goldthorpe) in their membership, that is, when they include a kernel of members stable over time (families across generations or individuals along their working lives).

In its later development, research on so social mobility has largely turned into the study of social opportunity. It studies the extent of inequality of opportunity depending on individual’s social background and it is interested in the mechanisms that produce inequality of opportunity. In a more macro-sociological perspective the intention is to determine the relative fluidity or rigidity of a society’s class structure and to specify the individual, institutional and societal factors responsible for it. The more the positions persons hold are conditioned by their social provenance, the more rigid and closed is the class structure; the more mobility occurs between social origin and eventual destination the more open or fluid it is.

Given these general research questions it was inevitable to address the research issues in a comparative framework, comparing either different national societies or societies in the course of their development, and for this reason, the present reports also have a strong comparative orientation.

Evidently, the “inheritance” analogy should not be taken to literally. In modern societies, indeed, social positions are only rarely inherited; the son of a farmer may inherit his father’s farm and sons and daughters of parents who run their own business may inherit it. But if the son of the president of a big state later becomes president of the same state himself, he did probably not inherit the job. The issue is, which social mechanisms instead produce the strong association between background and destination under modern conditions. The reports collected here are attempts to elaborate the state of research on some of these mechanisms.

The first report “The Comparative Study of Social Mobility” elaborates the general research questions, concepts and methods used; it sketches the history of comparative research on social mobility and it summarizes the main results of core studies, emphasizing similarities and differences between national societies and trends over time in the extent and in the pattern of social mobility. The report concentrates on the gross association found in intergenerational mobility tables between parents social class and the respondents social class. It is thus a good starting point for the more detailed studies of the social mechanisms that produce this association and that are looked at in the succeeding reports.

In modern societies the core intervening mechanism is education. Children in families of different social classes invest in different kinds, amounts and levels of education and they differ in schooling success, leading to substantial stratification of educational attainment by children’s social background. Educational qualifications on the other hand crucially shape access to more or less advantageous positions in the labor market. The second report therefore summarizes the “State of the Art and Current Issues in Comparative Educational Stratification Research”. The third report then concentrates on school leavers transition into work positions and on the role different educational qualifications play for the gradual integration of school leavers in the labor market and for the allocation of them to different kinds of jobs and class positions. The report gives particular attention to describe and partly explain how and why different national educational systems shape in partly different ways the labor market outcomes of education.

Issues related to social mobility are often object of normative and political discourse and are then often interpreted ideologically, for instance in ways to legitimate social inequalities. At the extreme, unequal rewards are reckoned as deserved as they are assumed to be distributed according to contributions made for the efficient functioning of society. Or it is held that access to class positions of different advantage is merited because it depends on different investments in education, on the acquisition of different qualifications and productive capacities as well as on different effort people invest in work. The fourth report on “Education and Meritocracy” summarizes the discussion on this issue and shows how other than educational qualifications affect people’s class destination and how in particular social background resources significantly intervene in this process independent of their impact on educational qualifications.

All these processes are not gender neutral. In particular choices of field of study are strongly gendered and labor markets are gender segmented. The fifth report on “Gender, Education and Labour Market Outcomes” therefore is focused on these issues and how they affect gender differences in intergenerational inheritance.

Disadvantages may accumulate through vicious circles or by the accumulation of adverse conditions in different dimensions of social life. In recent debates such accumulation has been discussed under the notion of social exclusion and its study has been promoted as a contrast to the mainstream class theory and social stratification research. The report on “Cumulative Disadvantage” describes variants of this alternative approach and critically evaluates it on the basis of recent empirical evidence.

While the reports address core elements of the study of the production and intergenerational reproduction of social inequality, they evidently neglect several other important areas of study in this broad field. Some closely related issues are fortunately covered in several other thematic groups of the network.

Comparative Analyses of Intergenerational “Inheritance”.

A series of state of the art reports.

Report 1

The Comparative Study of Social Mobility: A Review

Richard Breen

The Comparative Study of Social Mobility: A Review

Richard Breen, Nuffield

Paper prepared for the Changequal Network meeting, Mannheim, April 2003¹

The study of social mobility is concerned with the description and analysis of the trajectories of social position that individuals and families follow; and research into intergenerational class mobility (that is, the relationship between the class position an individual occupies and the class into which he or she was born) has long been one of the core areas of empirical sociological research. However, within the past fifteen or twenty years, the focus has shifted towards an emphasis on internationally comparative studies, of which a good example is Erikson and Goldthorpe's *The Constant Flux: A Study of Class Mobility in Industrial Societies* (1992). There has also been a growing interest in studying how social mobility patterns change over time: notable examples include the work of Breen (2000), Breen and Jonsson (2003), Featherman and Hauser (1978) Hout (1988), DiPrete and Grusky (1990), Ganzeboom, Luijck and Treiman (1989), Goldthorpe and Portocarero (1981), Hauser and Huang (1997), Luijck and Ganzeboom (1989), Jonsson and Mills (1993) and Vallet (1999). In this paper we review the main theories that have guided comparative studies of social mobility and the results that have emerged, including those of a recent project (and forthcoming book) that adopts a comparative and temporal perspective.

When economists are concerned with the inheritance of inequality they typically focus on the intergenerational transmission of income or wealth: in contrast, sociologists are more likely to analyse intergenerational mobility between (and immobility in) different class positions. One immediate consequence is that while economists usually work with intergenerational *correlations* of income or wealth treated as continuous variables, sociologists more often work with intergenerational *patterns of association* between class positions that are treated categorically. The standard data array takes the form of a contingency table in which class 'origin' is crossed with class 'destination'. The former variable is usually indexed by class of father or other household 'head' at the time of a child's - i.e. survey respondent's -

¹ The review draws heavily on heavily on Robert Erikson and John H. Goldthorpe 'Intergenerational Inequality: A Sociological Perspective', *Journal of Economic Perspectives* 2002, 16, 3: 31-44; and Richard Breen and Ruud Luijckx 'Social Mobility in Europe and the USA between 1970 and 2000' in Richard Breen (ed). *Social Mobility in Europe and the USA*, Oxford University Press, forthcoming.

adolescence; the latter variable, by the child's (respondent's) present class or, that is, class at time of inquiry. The reliability with which father's class can be established in survey interviews has been subject to a good deal of investigation with reasonably satisfactory results (e.g. Hope, Schwartz and Graham, 1986; Breen and Jonsson, 1997) and is in any event more accessible than father's income. The child's, or respondent's, class at time of inquiry is not of course fixed, and significant worklife or intragenerational mobility does occur. But it is known that the frequency of such mobility falls off rather sharply after around age 35, and intergenerational mobility tables are therefore sometimes restricted to respondents over this age.

The difference in approach between sociologists and economists is not, however, absolute. Sociologists have studied intergenerational social mobility on the basis of correlations of parents' and children's 'socioeconomic status' scores (Blau and Duncan, 1967; Featherman and Hauser, 1978); and, following the pioneering work of Atkinson, Maynard and Trinder (1983), several other economists have of late adopted contingency-table methods in analysing intergenerational income mobility, using income quantile groups as their categories (see e.g. Dearden, Machin and Read, 1996; Hertz, 2001). Björklund and Jäntti (2000: 24) have in fact recently called for further work of this kind, applying 'more flexible measures of association' in place of correlation (or regression) coefficients, on the grounds that 'There are, a priori, no good reasons to believe that the association between fathers' and sons' incomes is the same throughout, over e.g. the income range of fathers.'²

Operationalising Class

If the inheritance of inequality is treated in terms of class mobility, the question arises of how the concept of class is to be understood and made operational. As an initial point here, we would wish to distinguish the concept of class from that of 'socioeconomic status' which has been widely used in American social science - and sometimes as the basis for constructing occupational categories rather than an interval-level scale.

We would regard class positions as being determined by employment relations (for more detailed statements, see Erikson and Goldthorpe 1992: ch. 2; Goldthorpe, 2000: ch. 10). Thus,

² Atkinson, Maynard and Trinder (1983: 180) also make the important point that a contingency-table approach is able to bring out important asymmetries in mobility patterns - e.g. long-range upward movements being offset by more gradual 'trickling down processes' - that correlation or regression coefficients cannot capture.

a primary division is that between employers, self-employed workers and employees. However, employees, who make up the large majority of the workforces of modern societies, require further differentiation which can, we believe, be provided in a theoretically consistent way by reference to the mode of regulation of their employment. The problems employers face, ultimately on account of the essential ‘incompleteness’ of employment contracts and, more immediately, in regard to work monitoring and human-asset specificity lead to contracts of significantly differing form being offered to employees who are engaged to carry out different kinds of work. These range from the ‘labour contract’, a simple if recurrent spot contract for the purchase of a quantity of labour on the basis of piece- or time-rates, via various modified or mixed forms, through to the ‘service relationship’, an exchange of a longer-term and more diffuse kind in which compensation for service to the employing organisation involves important prospective elements: e.g. salary increments, expectations of continuity of employment or at least of employability, and promotion prospects and career opportunities.

A class schema, using employment status and occupation as indicators of employment relations, can then be drawn up on the general lines shown in Table 1. Versions of this schema have in fact been widely applied in studies of intergenerational mobility, and in other sociological research, since the 1980s, and the schema is now attracting increasing interest from national and international statistical agencies as a basis for official social classifications.³

[TABLE 1 HERE]

It is important to note that since the schema aims to capture qualitative differences in employment relations, the classes distinguished are not consistently ordered according to some inherent hierarchical principle, such as, say, the ‘general desirability’ of the positions

³ The schema has become known as either the EGP (Erikson, Goldthorpe and Portocarero) or CASMIN (Comparative Analysis of Social Mobility in Industrial Societies) schema, the latter being the name of a project directed from the University of Mannheim by Walter Müller and John Goldthorpe from 1984-90. Since 2000, a new instantiation of the schema has in fact been adopted as the official British social classification under the (somewhat unfortunate) name of the National Statistics Socio-Economic Classification, and active consideration is presently being given to the use of the schema as the basis for a general EU social classification. One valuable spin-off of such official interest is that resources have been made available to test the validity of the schema: i.e. the extent to which, as implemented via information on employment status and occupation, it does in fact capture the kinds of differences in employment relations that it is conceptually supposed to capture. The results of such tests have been generally encouraging (for Britain, see Rose and O’Reilly, 1997, 1998)

they comprise. Their members may be relatively advantaged or disadvantaged in different ways. Thus, routine nonmanual employees in Class IIIa may have lower average incomes than small shopkeepers in Class IVb or technicians and foremen in Class V, but more stable levels of income than the former and better chances of promotion than the latter. However, so far as overall 'economic status' is concerned individuals in Classes I and II, representing the 'service class' or 'salarial', could in fact be regarded as generally advantaged over individuals in Classes IIIb, VI and VIIa and VIIb, representing the working class, in at least three ways that follow directly from the mode of regulation of their employment and that, together, we would see as being of at least comparable importance to current income alone. Members of the salariat are advantaged over members of the working class in that they experience:

(i) greater long-term security of income through being less likely to lose their jobs and to become unemployed;

(ii) less short-term - i.e. week-to-week or month-to-month - fluctuation of income through being less dependent on piece-rates, shift premiums, overtime payments etc. and less exposed to loss of pay on account of absence or illness.

(iii) better prospects of steadily increasing income over the life-course - into their fifties rather than their thirties - through having employment contracts that are conducive to an 'upwards-sloping age-earnings profile' (cf. Lazear, 1995) with in turn better prospects for the accumulation of wealth.⁴

One last point that needs to be made here is the following. Sociologists are interested in class and class mobility not only as dependent, but also as independent, or explanatory, variables: ones that can be set in competition with other variables, including income and income mobility, in their capacity to account for variation in a wide range of life-chances (e.g. health) and life-choices (e.g. political partisanship). Empirically, class 'effects' on such outcomes tend to persist even when income is controlled. It is possible that class, as operationalised on the lines indicated above, serves as a good proxy for 'permanent' income. In addition, though, we believe that its explanatory power stems from the fact that it is able to capture important aspects of the social relations of economic life.

⁴ Moreover, even in so far as the classes cannot be perfectly ordered, we do not believe that this makes the question of mobility between them irrelevant to issues of equality of opportunity and social justice. For discussion of this point, see Marshall, Swift and Roberts (1997: Appendix E).

Analysing class mobility

To measure the association between class origins and class destinations, sociologists most often use the odds ratio. For the simplest possible mobility table, that with only two classes of origin and destination, say class 1 and class 2, the one calculable odds ratio is given by

$$\frac{f_{11}/f_{12}}{f_{21}/f_{22}}$$

where f_{11} is the frequency in cell (1,1), that referring to *immobility* within class 1, f_{12} is the frequency in cell (1,2), that referring mobility to from class 1 to class 2, and so on. So in this case the odds ratio gives the chances for an individual originating in class 1 being found in class 1 rather than in class 2, relative to the same chances for an individual originating in class 2. An odds ratio with the value of 1 thus indicates the absence of association between origins and destinations (or their statistical independence).

The odds ratio is attractive because it is a ‘margin insensitive’ measure of association (Bishop, Fienberg and Holland, 1975): i.e. it is invariant to the multiplication of any row or column of a contingency table by a (non-zero) constant. In an intergenerational mobility table, what might be called the gross association between origin class and destination class will be conditioned by differences in the overall distributions of these variables - the ‘marginal’ distributions of the table - that reflect changes in the proportions of individuals found in different class positions across generations. For example, in the course of economic development fewer children than fathers will become farmers but more will become managerial and professional employees. Thus, some intergenerational mobility will of necessity occur in the form of outflow from the class of farmers and inflow to that of managers and professionals. For many purposes, this mobility will be of interest in itself.⁵ But odds ratios provide a measure of the association of origins and destinations that is net of the effects of such class structural change and that can therefore remain constant even when such change is extensive or, conversely, that can alter even when such change is absent.⁶

⁵ Sociologists do in fact analyse outflow and inflow rates in simple percentage terms: i.e. by considering the percentage distribution of all individuals of a given class of origin across all destination classes or, conversely, the distribution of all individuals in a given class of destination across all origin classes. But it is important to distinguish these ‘absolute’ mobility rates from the ‘relative’ rates captured by odds ratios.

⁶ The motivation here could be thought of as somewhat similar to that behind the Galton measure of intergenerational correlation in income which normalises for changes in the mean

In mobility tables with more than two categories, more than one odds ratio will, of course, be calculable - in fact, one for every possible pair of origin categories considered in relation to every pair of destination categories. Thus, the number of odds ratios implicit in a square mobility table with k categories will be given by

$$\frac{(k^2 - k)^2}{4}$$

although it can be shown that a ‘basic set’ (cf. Goodman 1979) of $(k - 1)^2$ odds ratios can be specified that will determine the remainder.

The full set of odds ratios implicit in a mobility table is taken to constitute the ‘endogenous mobility regime’ or, alternatively, the underlying ‘pattern of social fluidity’. For testing substantive hypotheses about endogenous mobility regimes loglinear or logmultiplicative models, the parameters of which are odds ratios or functions of odds ratios, are chiefly used (Hout, 1983). Such models can serve to represent particular hypotheses - e.g. that odds ratios are unchanged in a society over a period of time or are the same across a number of societies, or that they change or differ in particular ways - and the fit of selected models to the actual data of mobility tables can then be assessed via standard statistical procedures.

When the main empirical features of endogenous mobility regimes have been established and attention shifts to the actual processes of mobility that underlie these regimes, loglinear models for the grouped data of mobility tables can be rewritten as multinomial logistic regression models for individual-level data (cf. Logan, 1983; Breen, 1994). Class position is the dependent variable, and class origin figures as one of a set of independent variables, also including, for example, measures of individual IQ, effort, educational attainment etc. It thus becomes possible to examine how far the inclusion of such variables in the analysis leads to the dependence of class of destination on class of origin being reduced or, in other words, how far mobility regimes may be thought of as ‘meritocratic’.

Theories

and standard deviation of the income distribution over time. When intergenerational income mobility is studied via a contingency table approach, using income quantile groups as the categories, the problem of controlling differing marginal distributions obviously does not arise.

Theories concerning absolute mobility are usually given short shrift. The best known of them is the Lipset-Zetterburg (or 'LZ') theory that 'the overall pattern of social mobility appears to be much the same in the industrial societies of various western countries' (Lipset and Zetterberg 1959:13). But the social mobility that we observe in a mobility table depends on the pattern of social fluidity and on the marginal distributions of class origins and destinations. As noted below, although some authors have argued that the pattern of social fluidity seems to show little variation between countries or through time, the marginal distributions of mobility tables do appear to vary sufficiently as to invalidate the LZ thesis. Erikson and Goldthorpe (1992:375) for example, write 'the structural contexts of mobility that are created by the development of industrial societies vary substantially – and so, in turn, then do their absolute mobility rates.'

There are two long established hypotheses about how patterns of social fluidity might be expected to vary through time, and from these it is also possible to derive some suggestions of how countries might differ in this respect. Perhaps the best known is the 'Featherman Jones Hauser' (FJH) hypothesis which states that a basic similarity will be found in social fluidity in all industrial societies 'with a market economy and a nuclear family system' (Featherman, Jones and Hauser 1975: 340).

The implications of this are that we should expect to find rather little in the way of variation either over time or between countries in their patterns of fluidity; and that patterns of social fluidity are likely to be largely resistant to attempts to change them by political, or indeed most other, means. This contrasts with the predictions of the slightly earlier 'liberal theory of industrialism' or modernization hypothesis, often associated with the work of functionalist sociologists (Parsons 1960; Kerr et al 1960). Here it is argued that economic development will of itself lead to higher rates of absolute mobility. But, in addition, increasingly intense economic competition associated with development will force employers to recruit individuals to positions on the basis of meritocratic, or achieved, rather than ascribed, characteristics. As a consequence educational qualifications will become a more important determinant of an individual's class position and (because educational attainment will also become more meritocratic) the qualifications that someone attains will depend less on parental status (see, for example, Treiman 1970: 218). Furthermore, the increasing complexity of modern labour forces and the shift in the occupational structure towards industrial and then to service employment should also weaken the tendencies towards direct inheritance of class

position. The overall result should then be a general trend, associated with modernization and development, towards the weakening of the association between an individual's class origins and her or his own class position.

But one might also argue for a third possibility: namely that nations have come to follow increasingly different trajectories, with some possibly showing increased fluidity but others the opposite tendency, and, as a consequence, there will be a growing divergence between them. One characteristic of mobility analyses is that the data they have used have, for the most part, come from advanced industrial nations during the period of the so-called Golden Age of Capitalism (from the end of the Second World War until the mid-1970s). This period was characterised by, among other things, economic growth, full employment, the initiation and development of more or less extensive welfare state programmes, and educational reform, all undertaken within the broad framework of Keynesian economic management. But starting in the late 1970s, and accelerating in the 1980s, countries began to follow rather more divergent paths, a very simple characterisation of which might be to say that the English-speaking countries began to pursue, or pursued with greater purpose, a policy of deregulation and extension of market principles to more sectors of the economy and society, while the non-English speaking countries by and large did not, or began to do so much later. The consequences of this are evident in many spheres – for example in patterns and rates of economic growth, levels of income inequality, and the rate and distribution of unemployment. We might reasonably expect to see similar variation in mobility outcomes. Furthermore, the extended periods of low economic growth and the occurrence of several recessions during the final quarter of the twentieth century – more generally, the more variable and less uniformly benign economic situation – may well have made national variations in institutions and policies more consequential for patterns of social mobility.

Major studies of social mobility

In the CASMIN (Comparative Analysis of Social Mobility in Industrial Nations) project, which culminated in *The Constant Flux* (1992), Erikson and Goldthorpe used cross-sectional data (that is, one mobility table per country) drawn, for the most part, from the late 1960s and early/mid 1970s, to compare patterns of social mobility between, initially, nine European countries: England and Wales, France, Northern Ireland, Scotland, The Republic of Ireland, West Germany, Sweden, Poland and Hungary. Supplementary analyses were also carried out

on data from Czechoslovakia, Italy and the Netherlands (though these data came from the 1980s rather than the 1970s) and also from the USA, Australia and Japan (again using data from the early 1970s).

By and large, the weight of evidence from mobility research leans more towards the FJH than to the modernization thesis. In particular,³: 162), on the basis of their comparative analyses, argue for a slightly amended version of the thesis as follows:

... a basic similarity will be found in patterns of social fluidity ... across all nations with market economics and nuclear family systems where no sustained attempt has been made to use the power of the modern state apparatus in order to modify the processes, or the outcomes of the processes, through which class inequalities are intergenerationally reproduced.

Thus, Erikson and Goldthorpe, although largely concurring with the FJH hypothesis, nevertheless leave open the possibility that state intervention in appropriate areas (notably in areas which affect equality of condition and of opportunity) will be able to influence relative mobility.

In addition to the absence of major differences between countries, they also claim that there is little systematic temporal variation in patterns of social fluidity within countries – again lending support to FJH. But this result is based on analyses by age group which are taken to represent historical cohorts. As Breen and Jonsson (2003) have pointed out, this approach confounds lifecycle and cohort effects and makes no allowance for either selective mortality or recall errors. In an assessment of the reliability of measures of class origin and class destination in mobility tables, Breen and Jonsson (1997) found that reliability was lower for origin information from older age groups, implying that the common practice of using age groups to draw conclusions about cohort change over time in mobility regimes may be unsound.

Nevertheless, their findings of little variation in social fluidity either between countries or through time, lead Erikson and Goldthorpe to argue that inequalities in mobility chances have a self-reinforcing quality. They write (1992:393): ‘we see [the lack of variation in class inequalities] ... as the outcome of individuals and groups acting in pursuit of their interests

and goals and, in particular, of the actions of those who are relatively advantaged and powerful ... seeking to use their power and advantage precisely in order to maintain their position.’ Thus the ‘constant flux’ to which Sorokin (1959) drew attention can be seen as the outcome of individuals and families pursuing their own goals within the changing circumstances to which economic and political developments (and their own actions) give rise.

Set against this, one widely cited study that makes the case for the modernization thesis, is that of Ganzeboom, Luijckx and Treiman (1989). They use 149 mobility tables for men drawn from 35 countries spanning the period 1947-86 to analyze variation between countries and over time.⁷ Their analyses shows that ‘although ... there is a basic similarity in mobility *patterns* ... at the same time there are substantial cross-national and cross-temporal differences in the *extent* of mobility... about a third of the variance across mobility tables is attributable to societal differences in mobility regimes.’ Furthermore, ‘a smaller but significant part of the variance in mobility regimes can be explained by the trend towards increasing openness over time’ (Ganzeboom, Luijckx and Treiman 1989: 47). They suggest that this trend is a reduction of the order of a one per cent per annum in the association between class origins and class destinations.

The advantage that Ganzeboom *et al* enjoy over Erikson and Goldthorpe is that the former have data that allow for proper tests of change over time. Nevertheless, the results of their analyses and thus the conclusions they draw have been challenged on grounds of data quality and model choice (these are summarised by Erikson and Goldthorpe 1992: 100-1) and a reanalysis by Wong (1994) fails to support their findings about a general trend towards increasing openness. ‘Even as temporal change is significant (but small) in a number of countries, the model of temporal invariance cannot be rejected for a majority of countries. Of the six countries that indicate possible changes over time, Hungary and Sweden are the only countries giving irrefutable evidence of temporal variation.’ (Wong 1994: 138).

The FJH hypothesis, and its slight modification by Erikson and Goldthorpe, would thus suggest little variation between countries in their patterns of social fluidity and no change – at any rate no systematic change – over time. But variation in observed mobility rates is

⁷ The 35 countries each account for a highly variable number of tables. Some countries – such as New Zealand and Ireland – contribute only one each, while the USA contributes 20.

expected to demonstrate no particular similarities between countries nor to be reducing. Modernization theory or the liberal theory of industrialism, on the other hand, suggests that, to the contrary, we should observe a trend towards greater openness in social fluidity and, because this will be a common trend, we should also expect some degree of convergence between countries.⁸ Similarly, on some accounts associated with the liberal theory (e.g. Treiman 1970: 215-6), different countries' class or occupational structures should be growing increasingly similar. Taken together these imply a convergence in absolute mobility rates too.

The NPSM study

A recently completed study, known as NPSM (National Patterns of Social Mobility: Convergence or Divergence?) arrives at conclusions that differ in some important ways from those of earlier research.

NPSM marries the comparative analysis of social mobility to the study of temporal change, reporting, as it does, on social mobility in 12 countries over a period of almost 30 years. The 12 countries represented are the USA, Britain, France, Ireland, West Germany, the Netherlands, Italy, Sweden, Norway, Poland, Hungary and Israel and the period covered is from the early or mid-1970s to the mid- or late 1990s. The forthcoming book based on this research (Breen, forthcoming) contains chapters dealing with each country, written by an author or authors from that country. In each case the authors base their analyses on data sets comprising as many as possible high quality, nationally representative surveys carried out during this period. But, in addition to the 12 single country chapters, there is a further chapter (Breen and Luijkx, forthcoming), the aim of which is explicitly comparative. Here the data sets from all the countries have been put together to allow formal analyses of differences between countries and changes through time.⁹ By using this design it was hoped to marry the advantages of an edited collection of country chapters (namely the insight that can be brought by authors who have extensive knowledge of their own language, culture and institutions) to

⁸ Of course, a common trend beginning from different starting points will maintain variation, rather than causing convergence. But in this case 'common' should be taken to mean 'in the same direction' rather than necessarily 'at the same rate' (though Ganzeboom, Luijkx and Treiman do claim a similar rate as well as a similar direction of change among countries) since it seems implicit in the liberal theory that the end point will be countries with rather similar patterns of fluidity and, indeed, of observed mobility.

⁹ The data used comprise 133 mobility surveys from the 12 countries covering the period 1970 to 2000.

those of a proper comparative study (the ability to test, rather than simply hypothesize, patterns of similarity and difference between societies and of variation over time).

As far as absolute mobility is concerned, the evidence for men seems to point to a gradual convergence, so that the class structures of the countries, and the intergenerational flows of men between classes, are becoming more similar. The former trend has two main components: the continued decline of farming occupations in those countries where agriculture has long persisted as an important sector of the economy, and the increase at the top of the class structure in the service classes, I+II. Most of the change occurred in the 1970s and 1980s, and convergence has been by no means complete: in the 1990s countries still differed, sometimes in quite marked ways, in their class structures.

The strength of convergence of intergenerational mobility flows is impressive. Of necessity, convergence requires that different countries display different trends and difference in the rate of growth or decline within a common trend. So, the rate of mobility has clearly become more similar, and this is mainly due to change in three countries: rates of mobility increased to bring Ireland and Poland closer to the average, while those in Hungary declined with the same effect. In the other countries there is an impressive degree of stability in this particular measure. On the other hand, the trend in the rate of vertical mobility is driven by a more widespread convergence, with several countries' rate of vertical mobility moving closer to the mean by a few percentage points. Much the same is true of the rates of upward and downward mobility.

The evidence of convergence in class structures and mobility flows is, if anything, clearer among women.¹⁰ To some extent this is because the differences between countries in the 1970s were larger for women than for men. There has been a trend towards a common class distribution in which women are heavily concentrated in classes I+II and III, and movement towards this has been more rapid in those countries (such as Hungary and Poland) where the class distribution in the 1970s differed most from this pattern. The very substantial convergence that we see in mobility flows is largely (but not entirely) due to changes in Poland, Hungary, Israel and, to a lesser extent, France. In France, Poland and Hungary, the decline in the farming sector (classes IVc and VIIb) is the driving force behind change, while

¹⁰ The results summarised here relate to women in the labour force and not to the whole female population aged 25-64 as is the case for men (except in Britain where the age range is 24-49).

in Israel the decline in the percentage of women in the petty-bourgeoisie (IVab) plays a similar role.

Our analysis of men's social fluidity suggested three main conclusions: first, there is variation, albeit limited, between countries in their social fluidity; secondly, different countries have experienced different temporal trends but, where change has occurred, this has been in the direction of greater social fluidity; thirdly, the effect of this has been to reduce the variation between countries. In the 1970s, rates of social fluidity were lowest in Germany, France, Ireland, Hungary and the Netherlands, and highest in Britain, Sweden, Poland and the USA. Over the three decades fluidity almost certainly increased in France, Sweden and the Netherlands, and possibly in Hungary and Poland too.¹¹ The increases in the last three of these were particularly marked. These different trends, however, have left several countries – the USA, Sweden, Poland, Hungary and the Netherlands with, as far as we can tell, rather similar rates of fluidity, followed, in order of declining rates, by Britain (where the absence of change has led to shift in its relative position), Ireland, France and Germany, which remains the country with the strongest association between class origins and class destinations. But the consequence of this has been some measure of convergence with much lower variation between countries in their fluidity in the 1990s than in the 1970s, and this convergence has been towards a higher mean level of fluidity.

Variation in rates of female labour force participation, and our inability to distinguish between part-time and full-time workers, caused difficulties in making comparisons among women. But notwithstanding this, trends in women's social fluidity appear very similar to men's. We observe a reasonably unambiguous increase in fluidity in France, Sweden and the Netherlands and possible increase in Hungary and Poland. Furthermore, there seem to be similarly convergent trends. It was not possible to rank countries in order of more or less social fluidity among women, even in the approximate fashion that we did so for men. But we were able to establish a trend of convergence in social fluidity towards a higher mean level.¹²

¹¹ 'Possibly' because we have only three mobility surveys from Poland and four from Hungary and in both the downward trend in the association between origins and destinations depends entirely on the first observation.

¹² As we noted earlier, convergence requires different trends: a corollary of this is that convergence among countries towards higher rates of social fluidity does not imply that fluidity has everywhere increased. Britain is a case in which no increase has been observed.

Nevertheless, 95 per cent of men are correctly classified by a model of common (across countries) and constant (over time) fluidity and the same is true of women.¹³ Any discussion of cross-national differences and convergent trends must, therefore, be seen against the background of the very substantial commonality across time and countries that characterizes men's and women's fluidity.

The main features of the cross-national commonality in mobility regimes are the following. First, there is a general propensity for intergenerational class *immobility* through the operation of what might be called 'class-specific' inheritance effects. These effects are relatively strong within Classes I and II, the salariat, and Classes IVa and IVb, small employers and self-employed workers, and strongest of all within Class IVc, that of farmers. But all these tendencies are far stronger among men than women. Because women's occupations are heavily clustered in classes I, II and III, the degree of class inheritance among them, especially in the petty bourgeoisie, farmers and the working classes, is much less. Second, there is a general propensity for mobility to be reduced by 'hierarchy' effects - i.e. those deriving from the overall advantages and disadvantages associated with different class positions - and especially as these effects operate between Classes I and II, on the one hand, and Classes VIIa and VIIb, the nonskilled division of the working class, on the other. To give some indication of the importance of class inheritance and hierarchy effects together, the odds of a man originating in the salariat being himself found in the salariat rather than in the nonskilled working class, relative to the same odds for a man originating in the nonskilled working class, would, across modern societies, be of the order of 15:1.¹⁴

Educational attainment is a major - probably *the* major - mediating factor in class mobility (Ishida, Müller and Ridge, 1995; Marshall, Swift and Roberts, 1997), although this is more apparent when education is measured by highest level of qualification achieved (academic or vocational) rather than by number of years of education completed, as is the usual American

¹³ The deviance is 7348.26 with 3696 df among men and 5427.31 with 3588 df among women. \bar{A} for both is 5.0 per cent.

¹⁴ Sector effects, operating between the classes of farmers and agricultural workers and the rest, reduce propensities for mobility still more strongly than do hierarchy effects and were indeed a major feature of the mobility regimes of many modern societies even up to the middle decades of the twentieth century, although they are by now of much reduced importance overall.

practice.¹⁵ In the British case, the tradition of birth-cohort studies provides data-sets that allow for the effects of IQ and of effort (in the sense at least of academic motivation as measured on standard psychological scales) to be reliably compared with that of education. The latter proves to be clearly stronger and, further, the effects of IQ and effort appear to operate largely *via* educational attainment, at all events so far as the mediation of early-life mobility (up to around age 30) is concerned (Breen and Goldthorpe, 1999).

The NPSM project found increasing fluidity among both men and women in France, Sweden, the Netherlands, Hungary and Poland. In these countries, and elsewhere where fluidity has increased, education may be implicated through a decline in the OE (class origins – educational attainment) association. The Blossfeld and Shavit (1993) volume suggested that in only Sweden and the Netherlands had class inequalities in education declined, but more recent research (by Thelot and Vallet 2000 and Jonsson, Mills and Müller 1996, respectively) has shown declining inequalities in France and Germany too.

However, a change in the association between social origin and educational attainment is not a necessary condition for a change in social fluidity. If the association between origin and destination class is weaker at higher levels of education, then an increase in educational attainment in the population may produce increasing social fluidity. Hout (1988: 1388), for example, attributes some of the increase in social fluidity he observes in the USA to a compositional change arising from the entry of more highly educated cohorts among whom origins and destinations are more weakly related; and Vallet (forthcoming) has reported the same result for France as have Breen and Jonsson (2003) for Sweden. A third recent result in this area (Jonsson, 1992; Breen and Goldthorpe 1999, 2001; Goldthorpe and Mills, forthcoming; Vallet, forthcoming) is that the effect of education on class position, when controlling for the effect of class origins, is declining over time.

Modern societies are not, however, ‘meritocracies’ in the sense that, once educational qualifications (and other ‘merit’ variables) are controlled, class of destination is no longer dependent on class of origin. To the contrary, a significant and often substantial dependence remains (Marshall, Swift and Roberts, 1997; Breen and Goldthorpe, 1999, 2001) - and in some cases, for example, Sweden, the persisting effect of class origins has been shown to

¹⁵ The standardised measure that is chiefly used here is the CASMIN educational classification (König, Lüttinger and Müller, 1988; Brauns and Steinmann, 1999).

extend to income also (Erikson and Jonsson, 1998). Thus, as Breen and Goldthorpe have put it (1999: 21) ‘children of disadvantaged class origins have to display *far more merit* [as indicated by educational attainment or by IQ and effort] than do children of more advantaged origins in order to attain similar class positions’.

The mediating role of education varies significantly in its importance from one type of intergenerational transition to another. Thus, educational qualifications have been shown (Ishida, Müller and Ridge, 1995) to be of no importance at all in mediating intergenerational immobility (for which there is a high propensity) within any of the subdivisions of Class IV: i.e. among small employers, self-employed workers or farmers. What appears crucial here is the direct intergenerational transmission of ‘going concerns’ or of economic capital in other forms. Further, several studies now in progress suggest that educational qualifications are of greater importance in ‘long-range’ upward mobility - as, say, from working-class origins into the salariat - than they are in intergenerational immobility within the salariat (see e.g. Guzzo, 2002). Here in particular the advantages of a ‘disaggregated’, contingency-table approach can be seen. Effects that bear on mobility from specific origins to specific destinations can be shown up in a way that would not be possible if the same regression rules were simply assumed to apply ‘across the board’.

Table 1: The class schema

Class	Description	Employment relations
I	Higher-grade professionals, administrators and officials; managers in large industrial establishments; large proprietors	Employer or service relationship
II	Lower-grade professionals, administrators and officials; higher-grade technicians; managers in small industrial establishments; supervisors of non-manual employees	Service relationship
IIIa	Routine non-manual employees, higher-grade (administration and commerce)	Intermediate
IIIb	Routine non-manual employees, lower-grade (sales and services)	Labour contract
IVa	Small proprietors, artisans, etc., with employees	Employer
IVb	Small proprietors, artisans, etc., without employees	Self-employed
IVc	Farmers and smallholders; other self-employed workers in primary production	Employer or self-employed
V	Lower-grade technicians; supervisors of manual workers	Intermediate

VI	Skilled manual workers	Labour contract
VIIa	Semi- and unskilled manual workers (not in agriculture, etc.)	Labour contract
VIIb	Semi- and unskilled manual workers in agriculture	Labour contract

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State of the Art and Current Issues in Comparative Educational Stratification Research

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Over the twentieth century dramatic increases in the supply of formal education have occurred for successive birth cohorts in industrialised societies, i.e. these societies have been characterized by a considerably enlarged distribution of schooling. In most of them, educational reforms have also been implemented during the second half of the century to provide children from all social backgrounds with increased education and to promote equality of educational opportunity. Sociologists have therefore tried to assess whether or not educational attainment has gradually become less dependent on ascriptive individual characteristics (especially social origins) and whether or not a less unfair allocation of schooling has progressively emerged in modern societies. In this chapter, we briefly review the main achievements and limitations in this research field from a comparative perspective over the last two decades and we also endeavour to identify current issues and issues it would be worth the effort to pursue in the near future. We begin by describing the main conceptual and statistical methodologies which have been used emphasizing their differences and the centrality of the educational transition approach. Then we review two comparative research programs, paying special attention to the most recent one and summarizing the results of educational stratification research as regards comparisons across time and nations. In the third section, considering the French case as an example, we demonstrate that conclusions about the dynamics of inequality of educational opportunity (IEO) crucially depend on the use of 'global' (or unconditional) or 'local' (or conditional) statistical approaches. Finally, from a more theoretical perspective, we examine the common features of several attempts which have tried to account for the considerably persistent IEO.

Several generations of comparative educational stratification research

The dynamics of socio-economic IEO in modern societies is a research question with a long-standing interest in sociology which has been studied using various conceptual and quantitative frameworks. It is indeed worth emphasizing that its statistical methodologies have been strongly reshaped over the last three decades. Till the end of the 1970s the linear regression model of educational attainment was the unique approach. Using a metric dependent variable to measure the final amount of schooling, the first period typically

answered the following research question: what has been the change over time in the effect of social origin variables on the mean number of school years completed? The empirical evidence was somewhat mixed. Reporting regressions of highest grade of school completed on father's occupation, parental income, father's and mother's schooling and three other control variables for American white males born between 1907 and 1951, Mare (1981) reported little change in the educational attainment process: only the effect of father's occupational socio-economic index had declined slightly from early cohorts to more recent ones. More generally, summarizing the results of a comparative project on thirteen countries, Shavit and Blossfeld (1993: 16) concluded that the effect of father's education declined over time in five countries and remained unchanged in the others (except for a country where the effect first declined then increased), and that the effect of father's occupation remained unchanged in nine countries, declined in three and increased in one. However, as emphasized more recently by Treiman and Ganzeboom (2000), in six of the eight nations for which linear regressions were reported cohort by cohort, a downward trend was apparent in the proportion of variance explained by background variables. For France which did not belong to the countries studied in the aforementioned project, Duru-Bellat and Kieffer (2000) also reported a steady fall in the explanatory power of father's and mother's socio-economic group, father's and mother's highest diploma and gender: R^2 decreases from 32.3% for men and women born before 1939 to 20.3% for the most recent (1964-1973) birth cohort. It seems therefore more and more acknowledged that the enlarged distribution of schooling in modern societies has resulted in a historical decline in the dependence of educational attainment on social origins, as evaluated with linear regression models.

The second period of educational stratification research began with the proposal of the sequential logistic regression model of educational transitions (Mare, 1980). Decomposing the intrinsically discrete and sequential nature of an educational career in a series of successive branching points – an idea also outlined by Boudon (1974) – this model assesses the net effect of social background variables on the odds of “surviving” each specific transition. With this model it has widely been observed that social origin effects decline steadily from the earliest school transitions to the latest (Müller and Karle, 1993; Shavit and Blossfeld, 1993; Rijken, 1999). This result has often been attributed to a process of differential selection: from the earliest to the latest school transitions, differential dropout rates systematically reduce heterogeneity between children from different social origins on unmeasured determinants of school continuation such as ability or motivation, and greater homogeneity on unmeasured

factors at higher levels of schooling reduces the effects of observed social background variables (Mare, 1981: 82). According to a related argument, as educational expansion increases the proportion of the total population at risk at a given transition, its heterogeneity on unmeasured determinants of school continuation grows and, as a consequence, the effects of social background variables on the odds of surviving that transition are likely to increase between cohorts.

As regards temporal change in IEO, the linear regression model of highest educational level attained and the sequential logistic regression model of educational transitions may tell us different, albeit reconcilable stories. While the latter is only sensitive to the relative allocation of schooling between social groups (because associations estimated under logistic response models are invariant under changes in the marginal distributions of the variables), the former is also affected by the marginal distribution of schooling and change in it, notably increased average educational level as a consequence of educational expansion (Mare, 1981). For instance, for American white males born between 1907 and 1951, quasi-stable linear effects of parental socio-economic characteristics on highest grade attained were produced by the combination of inter-cohort increases in school continuation rates (which by themselves imply declining background effects on educational attainment) and temporally increasing social origin effects on the odds of surviving some educational transitions. Conversely, in the Philippines, Smith and Cheung (1986) demonstrated both declining social background effects in the linear model of educational attainment and stable background effects on each of the educational transitions. It might thus be said that, while the linear model provides a general picture of temporal change in the dependence of educational attainment on social origins (De Graaf and Ganzeboom, 1993), the sequential logistic regression model yields a more structural or “pure” measure of IEO as it is unaffected by historical change in the marginal distribution of schooling (Mare, 1993). This provides an understanding of its impressive centrality in comparative educational stratification research over the last two decades which also comes from the fact that the discrete model corresponds to the way persons accumulate formal schooling, namely, in a sequence of irreversible steps.

Recent research has nonetheless scrutinized several limitations of the educational transition model. Firstly, it assumes that individuals progress through the educational system in a unilinear sequential mode whereas many school systems – notably those of European

societies – contain parallel branches of study that are most fruitfully seen as qualitatively different alternative pathways with different probabilities of school continuation attached to them. Within the Mare model it is therefore difficult to take account of possibly existing second-order differences such as the decision between vocational studies and academic studies within secondary education and this feature recently led Breen and Jonsson (2000) to propose a multinomial transition model. Secondly, as the model of educational transitions belongs to the class of discrete-time hazard models for school attrition, its estimates of the effects of social background variables can be affected (and biased) by unmeasured heterogeneity, i.e. determinants of the hazard that are unobserved by the analyst. So, over the last decade a debate has concentrated on whether or not the “waning effects pattern” (Lucas, 1996), i.e. the decline of social background effects across transitions, can receive a meaningful interpretation. After a first discussion of the incidence of unobserved heterogeneity on modelling school continuation decisions (Mare, 1993), research by economists strongly criticized the dynamic selection bias faced by the Mare model and, more generally, sharply questioned the usefulness of this model (Cameron and Heckman, 1998). In the most recent contribution, Lucas (2001: 1653-62) convincingly defended the educational transition approach and proposed to solve the identification problem by using time-varying covariates.

By relying on log-linear modelling of contingency tables cross-classifying birth cohort, social origins and highest qualification attained, some (rather scarce) research has also retained the margin-insensitive measure of IEO while abandoning the sequential perspective. For instance, on the basis of hierarchical models, Garnier and Raffalovich (1984) stressed little change in the pattern of association between social origins and educational certification in France over six ten-year birth cohorts. Interestingly, this first conclusion was subsequently challenged in a second paper which, by using the more powerful Goodman’s association model, demonstrated “a notable decline among cohorts born in the 1940s in the strong association between father’s occupation and highest degree obtained, and few sex differences in the trend in this association” (Smith and Garnier, 1986: 339). As regards its micro-sociological foundations, a drawback of what we can call the contingency table approach to education proposed to analyse how the association between two variables depends on a third variable (Goodman and Hout, 1998, 2001). In the French case, it has proved a sensible instrument to trace change in strength and pattern of association between social origins and highest qualification attained over thirteen five-year birth cohorts (Vallet, 2002) and it could be certainly used more intensively

in comparative educational stratification research in the coming years.

Two comparative educational stratification research projects

The comparative project directed by Shavit and Blossfeld on a set of thirteen countries (Czechoslovakia, Great Britain, Hungary, Israel, Italy, Japan, the Netherlands, Poland, Sweden, Switzerland, Taiwan, USA, West Germany) relied heavily on the Mare model to test several hypotheses regarding change in the effects of social origins on educational transitions from earlier to later cohorts: (i) the effects of social origins on all transitions decline (Modernization hypothesis); (ii) the effects of social origins decline on earlier transitions but not on later transitions (Reproduction hypothesis); (iii) the effects only decline at those transitions for which the attendance rates of the privileged classes are saturated ('Maximally Maintained Inequality' (MMI) hypothesis (Hout, Raftery and Bell, 1993)); (iv) socialist transformations bring about an initial reduction in the effects, then increased effects (Socialist transformation hypothesis); (v) the effects decline across transitions but are stable across cohorts (Life-course hypothesis (Müller and Karle, 1993)); (vi) the effects decline across transitions but those on later transitions increase across cohorts (Differential selection hypothesis).

The major result of the project was that it found little change in socio-economic ieo, i.e. virtual stability across cohorts in the association between social origins and educational transitions, which the editorsrigins on all transitions decline (Modernization hypothesis); (ii) the effects of social origins decline on earlier transitions but not on later transitions (Reproduction hypothesis); (iii) the effects only decline at those transitions for which the attendance rates of the privileged classes are saturated ('Maximally Maintained Inequality' (MMI) hypothesis (Hout, Raftery and Bell, 1993)); (iv) socialist transformations bring about an initial reduction in the effects, then increased effects (Socialist transformation hypothesis); (v) the effects decline across transitions but are stable across cohorts (Life-course hypothesis (Müller and Karle, 1993)); (vi) the effects decline across transitions but those on later transitions increase across cohorts (Differential selection hypothesis).

The major result of the project was that it found little change in socio-economic IEO, i.e. virtual stability across cohorts in the association between social origins and educational transitions, which the editors consider a clear refutation of the modernization hypothesis. Only two countries (the Netherlands and Sweden) experienced a decline in social origin effects for transitions within secondary education, and in both cases that decline occurred before the attendance rates of the upper classes were saturated (which contradicts the MMI hypothesis). In the chapter on Sweden it was suggested that the effects of improved living conditions, school reforms and reorganization, and the equalization of the standard of living in this country were probably the major explanations for the declining association (Jonsson, 1993). These conjectures have been confirmed ever since by demonstrating the importance of, primarily, decreasing income differences and increasing income security, secondarily, the comprehensive school reform (Erikson, 1996; Jonsson and Erikson, 2000). Yet, Shavit and Blossfeld (1993) stressed that, in all the countries examined, the transformations of the educational system did not lead to a reduction in the association between social origins and any of the educational transitions. The results of the comparative project did not afford any convincing support for the socialist transformation hypothesis. Finally, they were more in favour of the life-course hypothesis (according to which older students are less dependent on family resources in their educational decision-making) than of the differential selection hypothesis because it was not observed that the effects of social origins on later transitions systematically increase across cohorts.

As it has attracted considerable attention, the results of this comparative project have been accurately scrutinized. Reviewing the book, Heath (1995) firstly emphasized that it is a considerable challenge to explain the differences between the Dutch and Swedish results and those of the other countries as all these societies share the same broad social trends to a considerable extent. Secondly, he mentioned that, by using larger datasets and longer time periods, the Dutch and Swedish analyses have more statistical power than many others to detect declining trends in IEO. Thirdly, in all the studies the number of respondents who survive to the final transition (tertiary education) is rather small so that an increase in the effects of social origins may have occurred at this transition in at least some countries while remaining undetected. Finally, it is worth noting that the 'persistent inequality' conclusion reached for eleven countries (among thirteen) was subsequently challenged for two: Germany, as we mentioned above, and Italy for which a reanalysis of the data revealed declining effects

of father's education on the odds of completing the lower levels of the educational hierarchy (Shavit and Westerbeek, 1998).

In the second research project (Rijken, 1999, chapter 3), variations of IEO between four succeeding transitions within the school system were compared over five-year birth cohorts (from 1900-1904 to 1965-1969), between twelve countries and between men and women, using a two-step regression analysis design on a very large dataset. The research problem aimed to explain variations in IEO by contextual conditions faced by students about to make a transition. Four contextual conditions were examined: educational expansion (measured as the percentage of students at risk at a given transition), the institutionalised timing of a transition within the school system (measured as the formal age at which the transition is supposed to be made), the level of modernization (measured as an index composed of relevant economic indicators from several time series), and political conditions (measured as the difference between a state socialism context and a market regulation context at the time a transition is made). Correspondingly, the author expressed four hypotheses closely related to those put forward by Shavit and Blossfeld: (i) the larger the relative number of students at risk, the stronger the effects of social origins on school continuation probabilities (Differential selection hypothesis); (ii) the later the timing of a transition within the organization of the school system, the weaker the effects of social origins on school continuation probabilities (Timing hypothesis, linked to the above-mentioned life-course hypothesis); (iii) the higher the level of modernization, the weaker the effects of social origins on school continuation probabilities (Modernization hypothesis); (iv) under state socialist conditions, the effect of social origins on school continuation probabilities at a given transition is weaker than under market conditions (State socialist hypothesis).

The results show that the effect of social origins on school continuation probabilities declines over transitions and that an increasing percentage of students at risk enhances the effects of father's occupation (which confirms the differential selection hypothesis). Over cohorts, inequalities in school continuation probabilities also diminish, but the level of modernization does not provide a satisfactory explanation for that decline (which contradicts the modernization hypothesis). Furthermore, as the over-cohort decline is largely offset by the growing IEO caused by educational expansion, a remarkable conclusion of this study is that the 'persistent inequality' conclusion emphasized by Shavit and Blossfeld would in fact be

produced by the combination of two contradictory trends. According to Rijken's research, the results do not support the timing hypothesis that students become less dependent on parental resources as they grow older and therefore experience less effect of social origins on their school continuation probability if comparable transitions are made at an older age. Finally, compared to market regulation conditions, state socialist conditions largely favour the offspring of lower class parents relative to those of higher social origin (which confirms the state socialist hypothesis). Hence, as regards the four hypotheses jointly examined by comparative educational stratification research, both projects have converged on falsifying the modernization hypothesis, but have produced clearly opposite results about the others.

Should we adopt 'global' or 'local' margin-insensitive measures of IEO?

A tentative assessment of our review would therefore conclude that recent educational stratification research has overwhelmingly favoured the "pure" or margin-insensitive measure of IEO, and simultaneously, has heavily relied on the educational transition approach. This implies that considerable less emphasis has been put on 'global' or 'unconditional' analyses which are representative of the whole population than on 'local' or 'conditional' analyses, that is, analyses which, except for the very first transition, do not include the entire population (or birth cohort) in the population 'at risk' and which provide us with transition-specific measures of social origin effects. This is indeed the major achievement of the educational transition approach to be able to trace the dynamics of IEO along the educational career (temporarily disregarding the complex issue of unmeasured heterogeneity). However, from a historical perspective at the societal level, the sequential model leaves the following question entirely unanswered: if, in a given country, social origin effects decline over birth cohorts for some transitions, but remain stable or even increase for some others, what is the final outcome as regards temporal dynamics in the intrinsic (or margin-insensitive) association between highest educational level attained and social origins in that country? We suggest that future research in comparative educational stratification awards more attention to this issue and more systematically investigates the unconditional consequences of changing social origin effects revealed in conditional analyses.

To illustrate this issue Figures 1 to 3 demonstrate the extent to which unconditional and conditional analyses may lead to different results when they are applied to the same data. The French pooled data set we consider cross-classifies social origin and educational destination

over thirteen five-year birth cohorts. Social origin is defined as an eight-category variable on the basis of father's occupation: farmers and smallholders; artisans and shopkeepers; higher-grade professionals and managers; teachers (in primary, secondary or tertiary education) and assimilated occupations; lower-grade professionals and technicians; routine non manual workers; foremen and skilled manual workers; agricultural and unskilled manual workers. Educational destination is defined as a seven-category variable on the basis of highest degree obtained: no diploma (or no information); primary education certificate (Certificat d'Études Primaires); lower secondary education diploma (without vocational qualification) (Brevet élémentaire, BEPC); lower vocational education diploma (Certificat d'Aptitude Professionnelle, Examen de Fin d'Apprentissage Artisanal); upper secondary or technical education diploma (Baccalauréat or assimilated diploma); lower tertiary education degree (one or two years after Baccalauréat); upper tertiary education degree (at least three years after Baccalauréat).

Figure 1 displays the log-multiplicative parameters estimated by applying the Unidiff model to the thirteen 8×7 two-way contingency tables, i.e. it reveals the historical dynamics in the general strength of the intrinsic association between social origin and educational destination. There is a clear downward trend in IEO with a fall of more than 35% in the logged odds ratios which is especially marked between the 1933-1937 and 1948-1952 birth cohorts (consistently with historical analyses by Prost (1990)).

Figure 2 also applies Unidiff models to the same data in the context of the educational transition approach. For this purpose, we assume that the educational destination results from a sequence of school continuation decisions which can be described by five transitions: getting any diploma versus no diploma at all (first transition); among those who succeeded in any diploma, getting at least a lower secondary or lower vocational education diploma versus getting only a primary education certificate (second transition); among those who survived the second transition, getting at least an upper secondary or technical education diploma versus getting only a lower secondary or lower vocational education diploma (third transition); among those who survived the third transition, getting a tertiary education degree versus getting only an upper secondary or technical education diploma (fourth transition); finally, among those who succeeded in a tertiary education degree, getting an upper as opposed to a lower tertiary education degree (fifth transition). As regards the first transition, a downward

trend in social origin effects clearly appears from the early decades of twentieth century. A decline is also visible in the second transition from the 1938-1942 birth cohort to the last one – the parameter falls from 0.997 till 0.742. On the contrary, remarkably constant social origin effects characterize the third transition between the 1928-1932 and 1968-1972 birth cohorts – all the estimated parameters lie between 1.196 and 1.124. Finally, a slow but nearly monotonic increase in social origin effects appears for the fourth transition from the 1938-1942 birth cohort and there is also a sharp rise over the last three cohorts in the fifth transition. As expressed by the differential selection hypothesis, these upward trends in social origin effects may be related to the educational expansion which, by increasing the proportion of the total population at risk at a given transition, also increases its heterogeneity on unmeasured determinants of school continuation that are positively correlated with social origin.

However, it must be emphasized that declining trends in social origin effects in early transitions involve consequences for (unconditional) odds ratios associated with attainment of upper diplomas. This result can be highlighted by collapsing all educational destinations in only two categories, then comparing different dichotomies, or cut-off points, in the educational system. We examined three dichotomies: at least lower secondary or lower vocational education diploma versus less than that; at least upper secondary or technical education diploma versus less than that; at least lower tertiary education degree versus less than that. Figure 3 displays trends independently estimated for each dichotomy using the Unidiff model again: although the first dichotomy is the only one specifically associated with the first and second transitions characterized by declining social origin effects, equalization trends also appear for the second and third dichotomies.

Explaining persistence in IEO

Following pioneering work by Boudon (1974) in the context of rational action theory, several authors have recently proposed theoretical and formal models to account for the high degree of inertia in IEO despite educational expansion (Erikson and Jonsson, 1996; Breen and Goldthorpe, 1997; Jonsson and Erikson, 2000) and empirical tests of these models have begun to be published (Becker, 2003). Here we will not review the (somewhat subtle) differences that exist between these theoretical efforts and will only insist on what they hold in common.

Explaining educational inequalities needs to distinguish between ‘primary’ and ‘secondary’ effects. Primary effects are all those that are expressed in the empirically observed association that exists between children’s social origins and their average level of academic ability: children of more advantaged backgrounds perform better, on average, than children of less advantaged backgrounds; such a difference appears rather early at school and is cumulative, i.e. the gap tends to increase along the educational career. Assuming that any difference in academic ability is controlled, secondary effects are those effects that are expressed in the actual choices and decisions that children and their families make in the course of the educational career within the school system – including the choice of exit. Several factors affect these choices and decisions: the perceived cost associated with continuing in education, the perceived benefit associated with continuing in education and the perceived risk associated with continuing in education. These assessments of cost, benefit and risk depend on the family position in the social structure. The perceived cost associated with continuing in education is higher in less advantaged families (in terms of financial effort, earnings foregone and so on). Conversely, the perceived benefit associated with continuing in education is lower in these families than in more advantaged ones because further education is not a *sine qua non* condition for the former to avoid social demotion and to maintain the family position in the next generation. Finally, less advantaged families are more responsive to the risk of failure associated with continuing in education, especially when the academic performance of the child is medium. The structural and quasi permanent nature of these differences in the assessment of cost, benefit and risk associated with school continuation would explain the persistence of secondary effects, the stability of the relative importance of primary and secondary effects and, by that way, the considerable inertia that characterizes socio-economic IEO.

Figure 1 – Change in the general strength of association between social origin (8 categories) and educational destination (7 categories) – Unidiff model estimated over thirteen five-year birth cohorts (N=240,367)

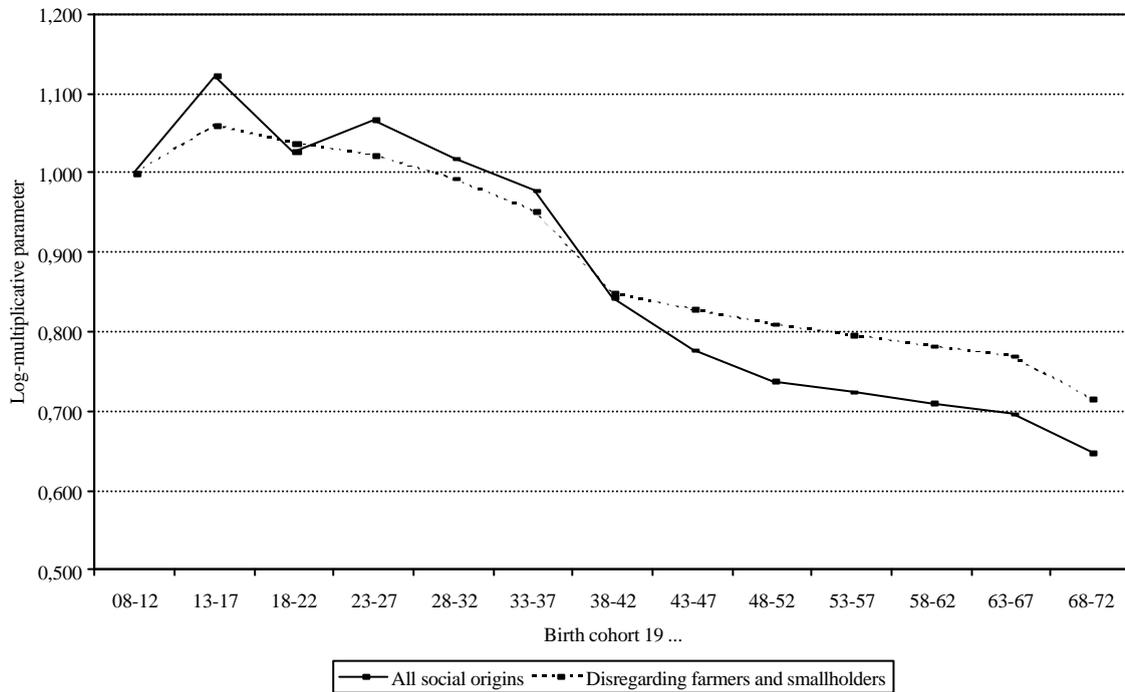
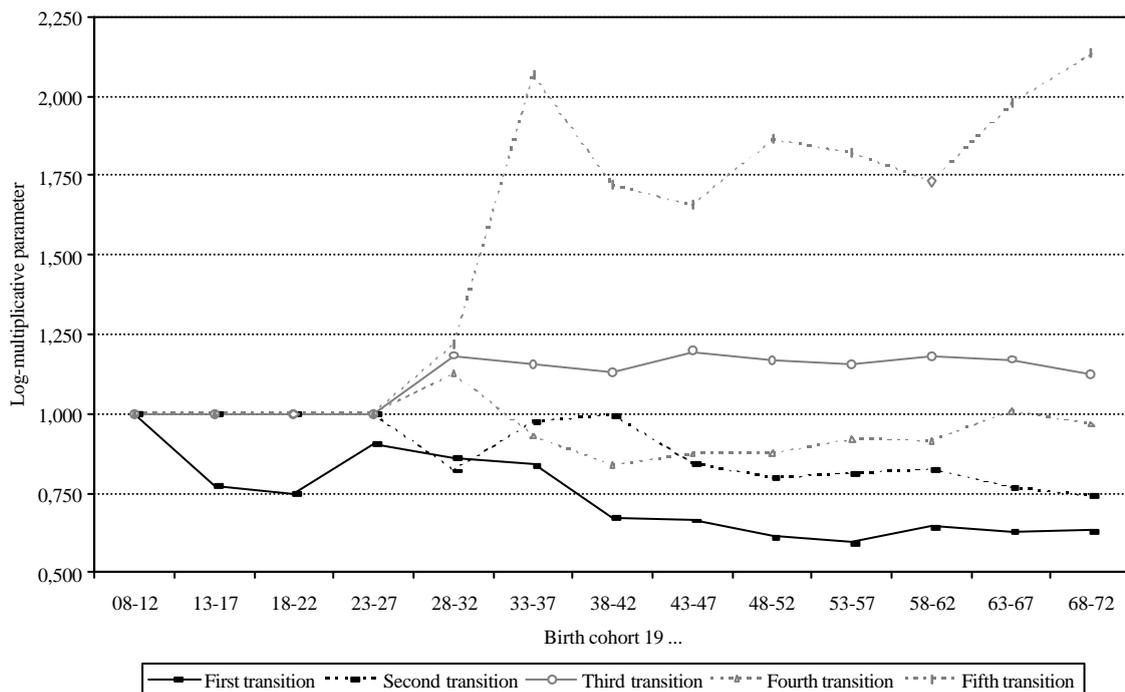
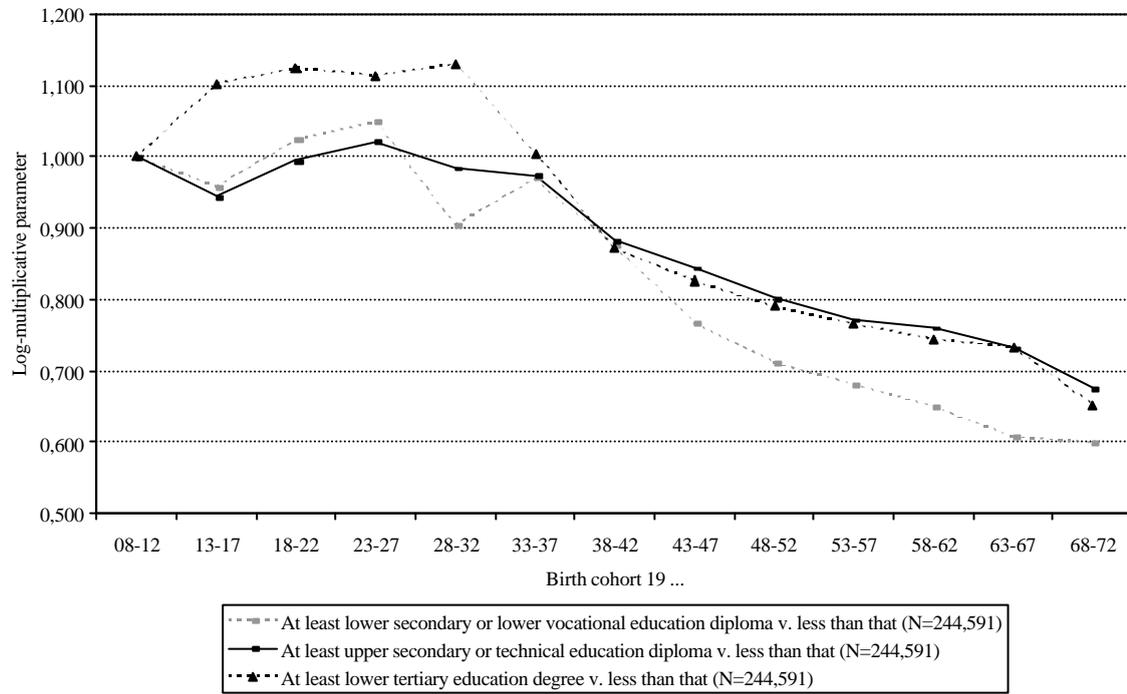


Figure 2 – Change in the general strength of association between social origin (8 categories) and surviving an educational transition – Unidiff model estimated considering five successive educational transitions



For the second, third, fourth and fifth transitions, the log-multiplicative parameter has been constrained to be the same for the first four five-year birth cohorts in order to get more reliable estimates of the temporal pattern over the whole period. This is clearly insufficient for the fifth transition, so the very sharp rise between the 1928-1932 and 1933-1937 birth cohorts must be considered an artefact, but this does not impede comparability of parameters estimated for the most recent cohorts.

Figure 3 – Change in the general strength of association between social origin (8 categories) and educational destination – Unidiff model estimated independently considering three different educational dichotomies



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TRANSITIONS FROM EDUCATION TO WORK: A Review¹⁶

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With the transition from school to work one generally refers to the stage in individuals' lives when they conclude education and enter in their first job in the labour market. From this point onwards, individual's location in the class structure is increasingly based on their own work position and less on their parents' class. Much research has shown that an individual's position in later career stages strongly depends on this first position in the labour market. It is certainly recognized, that social origin also affects the course of an individual's later work careers, but even the labelling of such effects as delayed effects (Blau/Duncan 1967) indicates the limited significance that they are thought to play. One could take this as saying, that with education and first job, most of the intergenerational inheritance game is played.

The main question to be answered then is, how and why does education affect first job, first job being conventionally measured in terms of status or class of first job (depending on the preferred and adopted theoretical conception of the stratification order). But exactly what is the first (significant) job? The theoretical conception and empirical operationalisation of first job has never been easy and well-defined. It became even more difficult as in many countries the transition from school to work ceased to be a clear-cut step of leaving school and definitively entering into working life.

Over the past decades, embarking on working life became more varied and less standardized, at least in comparison to the relatively smooth transitions from full-time education to full-time employment typically experienced by young men during the post-war economic boom. Partly due to higher levels of unemployment transition processes have been prolonged, and it takes young people longer to establish themselves in the labour market. Between leaving full-time education and arriving at a stable position on the labour market, young people may experience extended or repeated periods of unemployment, joblessness or attachment to marginal forms of employment. More frequently than before, they return to education or training and pass through successive schooling and working episodes or deliberately take time out between education and work for leisure, travelling or other experiences.

¹⁶ The review draws heavily on Walter Müller and Markus Gangl, The transition from school to work: a European perspective, in: Walter Müller and Markus Gangl (eds), *Transitions from Education to Work in Europe: the Integration of Youth into EU Labour Markets*. Oxford: Oxford University Press, in print; on Markus Gangl, Walter Müller and David Raffe, Conclusions: Explaining Cross-National Differences in School-to-work Transitions, in: ibd.; and on David Raffe and Walter Müller, An Overview of the Catewe Project: Comparative Analysis of Transitions from Education to Work in Europe. Paper to the European Research Network on Transitions in Youth, Florence 2002.

With the transition becoming a more varied process the research agenda also turned into a more differentiated research programme of its own reaching clearly beyond the earlier concerns. Research has moved away from the analysis of a single step into the study of complex process potentially extending over a lengthy period of time and including the period between the end of individuals' primary involvement in education or training and their stable settlement in a work position. Research became reoriented into the study of the gradual integration of school leaving cohorts into the labour market. Class allocation or status attainment in the first job is just one element of a much broader research field including e.g. the study of

- the occurrence of combined education and work activity and the implications of student work for the later search of stable employment (Carr/Wright/Brody 1966; Hutson/Cheung 1992; van der Meer/Wielers 2001; Wolbers, in print);
- the length of waiting time until first (stable) employment and the experience of unemployment in the transition period (Schizzerotto 2002; Scherer 2001b; Kogan/Schubert 2003; Bernardi, in print);
- the degree of precariousness or instability in the sequence of first jobs, indicated e.g. in repeated cycles of short term employment and shorter or longer unemployment episodes (Iannelli/Soro Bonmati, in print, Scherer 2001b);
- the study of transition pathways (Scherer 2001a);
- the interconnectedness of transitions into working life with other transitions into adult life such as partnership and family formation (Shannahan 2000; Lucchini/Schizzerotto 2002);
- the effectiveness of various government schemes to counteract socially undesirable developments and to smooth transition patterns (Breen 1991; Ryan 1997; O'Connell/McGinnity 1997, Werquin 1997).

This report cannot give a full account of this wide research field. It will concentrate on issues that appear most relevant to the more specific concerns of the intergenerational inheritance topic and to the particular contribution of the field for understanding cross-societal differences in the processes concerned. However, in addition to the emphasis on the association between education obtained and job characteristics in the early career in terms of status and class position, I will also address the issue of unemployment in early working life because this is a serious social risk unequally distributed in society and strongly dependent on education. My

report is particularly interested in the comparative study of these phenomena and neglects many interesting studies done at the national or local level.

For several reasons the transition stage from school to work is of particular interest for the comparative study of the education—labour market/class outcome linkage. At this stage, in a sense, the association between education and work can be studied most purely because—in contrast to later career stages—the association between education and work is not mediated, affected or disturbed by intervening events, individual actions or experiences. For similar reasons, at this stage, the impacts of nationally varying institutional conditions shaping the education-labour market/class link—such as nationally varying systems of education and training, nationally varying labour market regulations or welfare institutions—should become most clearly visible. Finally, social change to a considerable degree occurs via cohort succession. Hence, the impacts of the dramatic recent growth in educational participation on labour market and stratification outcomes is probably also most aptly studied at the very juncture of education and work.

1. *Theoretical models*

Understanding effects of education on job allocation processes presupposes theoretical models explaining in general terms why education should affect labour market outcomes. Ideally such models should be able to explain associations between education and different kinds of labour market outcomes (such as search time, unemployment, wages, status or class position) and they also should be able to account for differences in these associations between countries, across time or between gender. Such an encompassing theoretical account has not been established so far, even though in fact only a rather limited number of general theoretical models compete with each other in explanatory attempts of the empirical reality observed in the area (with assumptions of human capital theory and of signalling theory dominating in the field). The most promising account of a variety of phenomena is probably provided by matching models. Matching models describe the outcomes of two-sided allocation decisions as resulting from the interplay of opportunity structures and actor preferences (cf. Logan 1996; Granovetter 1981; Kalleberg/Sørensen 1979). According to such models—when applied to understand the association between education and job characteristics—, matches between individuals (with specific educational qualifications) and jobs (requiring particular tasks to be fulfilled) will form if employers perceive suitable job applicants for the particular position in question against the alternative of non-contracting and, at the same time, young applicants consider job conditions appropriate over and against the alternative of

unemployment or continued participation in training activities. Plausibly, young people leaving the educational system strive to obtain jobs promising adequate returns for their investments in education, be it in terms of job quality, monetary and non-pecuniary rewards or in terms of using the first job as a stepping stone to better employment in the future. Employers, for their part, can be expected to recruit those applicants they consider to be both most productive and least costly for the kind of work required by the job. The overall outcome of such joint decision and allocation processes will then be reflected in the social stratification of transition processes by factors like qualifications, gender or social and ethnic background. Matching models are useful because they take supply and demand conditions into account at the same time. In principle they can also accommodate the school leaver's position in the competition with more senior and more experienced workers on the market. While for reasons of parsimony one should assume that the general mechanisms that lead to matches between an individual school leaver and a job or a series of successive jobs are basically the same in the different countries, the institutional and structural conditions under which decisions are made by individual actors can vary substantially over time and between countries. One needs to understand the *interplay* between the contextual conditions in which decisions are made and the aims, resources and mechanisms that guide the decisions of individual actors.

In the following I will only briefly sketch the considerations likely relevant for employers and how these might lead to different patterns of school to work transitions, given different institutional conditions in different countries. Employers try to select those individuals for specific jobs whom they expect to fulfil best the tasks of a given job with the lowest costs. Beside salary, an important part of the costs are expected training costs and the expected risks and uncertainty associated with the selection. Employers' hiring decisions are decisions made under uncertainty conditions because the match between job applicants' capabilities and the skills required by the job in question is not something that can be readily determined, which means that employers face a screening problem (Spence 1973; Arrow 1973). Training costs will depend on the extent to which qualifications of job applicants are more or less ready-made to be used in vacant jobs. The screening problem can be solved by different means. But educational credentials most likely play an important role. If they are used, the costs associated with insecurity on the one hand will depend on the signalling capacity of credentials and their reliability, on the other hand they will depend on the costs involved in dismissing hired workers who do not satisfy expectations. Training costs and signalling capacity (affecting a part of insecurity costs) can be assumed to depend on the institutional set-up of the educational system and the extent to which qualifications produced fit a job's

qualification requirements. A second part of insecurity costs depends on labour protection regulations, as they determine how easy or how costly it is to dismiss workers.

Characteristics of educational systems and the relatedness of qualifications produced with jobs in the labour market and labour protection should therefore constitute prominent institutional factors that influence differences between countries in patterns of transition from school to work. These factors should play a particularly strong role for new entrants to the labour market, as for inexperienced workers both training costs and the insecurity whether they will fulfil job and productivity expectations are higher than in hiring experienced workers. Employers may be particularly reluctant to hire young people if they see little connection between the skills taught in education and training and those required at work (Bills 1988, 2002; Rosenbaum et al. 1990). For new entrants educational credentials should also be more important than for experienced workers, as for the latter productivity signals from their earlier work career are additionally available.

2. *The institutional and structural bases of labour market entry patterns*

Educational institutions and their relatedness to the labour market

Concerning the role played by the set-up of educational institutions, an early theoretical starting point was Maurice, Sellier and Silvestre's (1986) distinction between organisational and occupational space, and related distinctions such as that between internal and occupational labour markets (Marsden 1986) and Garonna and Ryan's (1991) typology of modes of exclusion and inclusion in youth labour markets. In occupational spaces labour markets are dominantly structured along occupational segments related to corresponding tracks of vocational training in the education and training system (Germany's apprenticeship system representing a prime example). In countries that cannot rely on similar encompassing and employment related training systems training of the workforce is more firm specific and tied to the specific needs of individual firms and their firm internal labour markets. Another starting point was the classification of education and training systems, notably Allmendinger's (1989) analysis of two dimensions of education systems: stratification, and the standardisation of curricula, teaching standards and certification.

During the 1990s several research studies used these starting points, and related theoretical frameworks, to explore the effects of national institutional arrangements on education-work transitions. Müller and Shavit (1998) studied the effect of three institutional characteristics of education and training systems, their degree of standardisation, stratification, and occupational specificity. *Stratification* refers to the extent and form of tracking in educational

systems. *Standardisation* relates to the degree to which the quality of education meets the same standards nationwide. *Occupational specificity* relates to the extent of training for specific occupational competencies. All of these characteristics have been assumed to enhance the signalling capacity of qualifications obtained in the educational system and hence contribute to reduce uncertainty in hiring decisions. Beyond that occupational specificity has been thought to be relevant to provide graduates with qualifications of direct use in labour markets organised along occupational lines, reducing training costs of employers, enhancing the competitive position of young labour market entrants with experienced workers and strengthening the association between the qualifications acquired in the education and training system and the skill level of jobs obtained in the labour market. In their analysis of thirteen countries varying along these dimensions Müller and Shavit (1998) found, that the association between educational qualifications of individuals and status and class position in their first job increases with the degree of stratification and occupational specificity of the country's educational system, while effects of standardisation disappear when one of the other two characteristics is controlled. In short, this means, that status or class position in first jobs depends more on education obtained in countries with educational systems that are highly stratified or/and have a high degree of occupational specificity.

Hannan, Raffae and Smyth (1997) reviewed research in the field and concluded that three dimensions of transition systems tended to be important: standardisation, educational differentiation and the strength of linkages between education and employment. However these dimensions were themselves related: a matrix which classified countries on these dimensions showed a tendency for countries to cluster along the diagonals. To a significant extent, it appeared, variations in transition systems could be expressed in terms of a single broad continuum of national variation. Other analysts have drawn similar conclusions. The interim report of the OECD's Thematic Review of the *Transition from Initial Education to Working Life* contrasted two types of countries: those with institutionalised, holistic vocational education pathways more tightly connected to occupationally organised labour markets, with safety nets for those who fall through the cracks; and countries with 'relatively open labour markets that value generic employability attributes, rather than specific occupational qualifications' (OECD 1999a, p.19). Heinz (1999, p.19) interpreted comparisons of Canada, Germany, the US and the UK in terms of a contrast between transition systems with 'formalised training arrangements that are connected with an occupationally centered labour market' and systems based on 'comprehensive schools and liberal arts colleges that at best have weak linkages to the labour market'. And Kerckhoff (2000) contrasted 'Type 1'

societies, with stratified and standardised education systems offering progressive specialisation into occupationally specific streams, with little opportunity to change direction, and ‘Type 2’ societies where education systems are less standardised, less stratified and more flexible, and where the linkages between education and the labour market are much weaker. In all these contrasts, Germany is an example of the first type, and the US of the second type, with countries such as France and the UK in between.

However, the suggestion that national institutional variation can be reduced to a single continuum, or even a small number of dimensions, may be optimistic. The interim report of the OECD Transition Review, cited above, was based on the first five countries to be reviewed. The final report, based on all fourteen countries, was more sceptical about the possibility of reducing cross-national variation to a simple typology or a small number of dimensions (OECD 2000). As the number of countries increases, so, it would seem, does the difficulty of explaining cross-national variation. Moreover, most cross-national studies of transition have been based on a narrow range of countries as well as a small number: smaller and more peripheral countries, and especially Southern European countries, have been under-represented in this research (Raffe 2002).

On a more operational basis, and in particular for the secondary level of education the distinction between *general/academic educational tracks versus vocational training tracks* has been prominent (Allmendinger 1989; Kerckhoff 1995, 1996, 2000; Shavit/Müller 1998, 2000). Completing a vocational training programme or track can be expected to provide school leavers with qualification resources of different labour-market value from those attained by completing more academically oriented tracks. In a further elaboration of vocational training, the distinction according to its organisational form—*school based* vs. a *combination of training and working*—is perhaps the single dimension of training systems that has received the most attention in previous comparative research on school-to-work transitions (Allmendinger 1989; Kerckhoff 2000; Shavit/Müller 1998, 2000; Ryan 2001). If these different types of training imply different experiences upon entering the labour market, then transition patterns will consequently vary between countries employing various mixes of training strategies. Apprenticeships are often assumed to reduce unemployment incidence in the early career stages, to achieve better matches between persons and jobs and to reduce labour market volatility at the micro level of individual workers. If this is true, then these features should also figure prominently in a comparison of aggregate transition patterns between countries running large-scale apprenticeship systems and those that favour different training institutions.

Labour market regulation

Labour market regulation include a variety of measures. For the integration of school leavers into the labour market,—somewhat ironically—restrictions on worker dismissal may be particularly important. They may contribute to generating an insider-outsider situation on the labour market. Jobs held by “senior” workers are strictly protected, while employers refrain from hiring additional staff because of the high (hiring) standards implicitly required to compensate for the risk of hiring people with inadequate skills (Lindbeck/Snowder 1988; Flanagan 1988). Again, such hiring reservations can be expected to pose particular problems with respect to youth transitions, as both market entrants’ need for additional training and the higher level of uncertainty inherent in recruiting inexperienced school leavers work to the disadvantage of new entrants. Finally, labour market regulation may have detrimental effects on youth labour market chances as employment protection tends to reduce the dynamics of the labour market and hence affects the job-finding rates among job seekers in general (Gregg/Manning 1997; Bertola/Rogerson 1997). This again is likely to contribute to employment problems, notably for young people entering the market. Low levels of mobility in the labour market may also lead—as has been argued in particular for the Italian case (Schizzerotto 2002)—to long searching times of first-time job seekers because of individuals anticipation of restricted mobility opportunities once they have accepted a job below their level of qualifications. Breen (2003) has developed a formal model to explain and test the risks of unemployment of workers at school leaving age compared to the risks of the experience work force. The model shows how these risks should vary between countries with different signalling capacity of the education and training system and with a different extent of labour protection in the countries.

Historically, labour market regulation has been more pronounced in Europe than, say, in the United States (Esping-Andersen/Regini 2000). But wide variation exists between European countries in the stringency of employment protection in general, the regulation of individual and collective layoffs, wage setting mechanisms, the regulation of work hours and minimum pay or the provisions for non-standard forms of work contracts (cf. Grubb/Wells 1993; Hartog/Theeuwes 1993; Büchtemann/Walwei 1996; OECD 1999b; Anxo/O’Reilly 2000). In general, Britain and Ireland are considered to be countries exhibiting fairly low worker protection standards against market forces, whereas labour market regulation is more pronounced in Continental Europe, even though the instruments differ. In addition, the stringency of labour market regulation varies across worker categories, with countries like

France or Spain tending to implement lower protection standards or special provisions for non-standard forms of employment contracts offered to market entrants (Ryan 2001).

Yet labour market regulation may also involve potentially positive effects on school-to-work transitions. Notably such outcomes may be expected if strong union presence, in conjunction with a centralized system of collective bargaining and cooperative relationships between corporate partners, can be employed in ways that generate economically viable institutional structures of youth labour market integration (Ryan 2001; Soskice 1994). Collective, corporate efforts might include specific wage moderation policies to enhance youth labour market integration both at the level of particular firms or industries and also across the whole economy. Other forms include efforts to establish common training standards for certain occupations or industries or to involve corporate bodies in the formulation and implementation of training curricula (Hannan et al. 1999). Clearly, corporatist involvement in training systems is most strongly developed in the context of apprenticeship-based dual systems in e.g. Germany or Austria, where employers and unions are actively engaged in both the conceptualisation and provision of training. Similar arrangements can also be found in the Dutch vocational training system, which, although primarily school-based, still actively involves corporate bodies in the design of training tracks and curricula.

Educational supply and demand

Finally, individual job outcomes will also depend on the resources of young entrants to the labour force in comparison to the level of labour market resources acquired by the cohort at large. School-leavers may find themselves in situations where, although they have individually acquired decent qualifications they find those qualifications devalued upon entering the labour market by virtue of the fact that many others have made the same educational choices (Boudon 1974; van der Ploeg 1994; Erikson/Jonsson 1996). Educational expansion may lead to processes of displacement from the top as graduates with higher qualifications enter into jobs previously held by less qualified workers. However, the extent to which such processes will occur depends on the developments on the demand for qualifications and the extent to which educational expansion is paralleled by upgrading of the occupational structure.

Active labour market policies and youth programmes

Faced with rising youth unemployment in the early 1980s, public policy in many European countries turned to more direct forms of active intervention into youth labour markets. Several countries, notably France and Britain, developed a broad array of programmes

designed to assist youth transitions into the labour market through various blends of job search assistance, work experience, remedial education and vocational training. In Britain, active labour market policies for youth focused on the Youth Training Scheme and its subsequent variants, while France has built up several different kinds of programme and specific youth contracts that serve different goals and various target groups (cf. Werquin 1999 for an overview). While the different programmes thus clearly aim to increase educational participation, employment, job stability and wages among the more disadvantaged youth, the empirical evidence as to how far the programmes actually have achieved these goals is still disputed and essentially an open question, although in general terms the scant evidence on European programmes seems to differ favourably from the bleaker U.S. evaluation results (Ryan 2001; Heckman et al. 1999). Still, even if youth programmes have had moderate effects on subsequent youth employment experiences, the introduction of fairly large-scale programmes has nevertheless affected the structure of transition processes in many European countries due to institutional lock-in effects (e.g. Ryan 2001). As participation in youth schemes has become more and more institutionalised over time, they nowadays constitute an important element of youth transitions in Europe, particularly among the less qualified and disadvantaged youth.

Family support

Finally, different family cultures have variously been suggested as a significant factor to explain notably the slow integration of young people into the labour market in Southern Europe, in particular in Italy and Spain. According to Cavalli and Galland (1995) this is part of the Mediterranean model of young people's transition to adulthood, in which in contrast to the Northern European model and the British model, young people spend longer studying, need more time to find a job and live longer with their parents (for similar empirical evidence, but interpreted differently, see Lucchini/Schizzerotto 2002). In their study of transition into the labour market in Italy and Spain Iannelli/Soro Bonmati (in print) indeed show long term support of the family for children in extended periods of job search and unstable employment. It is, however, difficult to assess what is cause and what is effect.

3. Design and data of recent comparative studies

In connection with high levels of youth unemployment and political measures to combat it, in a number of countries the integration of school leavers into the labour market has been intensively researched. Perhaps the most extensive research has been done in France through the series of Céreq's school leaver surveys (for a summary of research in France see

Grelet/Mansuy 2003) The OECD has produced a number of country reports on the pathways from education to work. Results of these studies are very difficult to compare systematically between countries as they often are accommodated to specific characteristics of the education and training system or focus in their design to specific problem groups. These studies will not be covered in the following. Instead I will focus on core findings of several comparative studies, which have addressed the issue in recent years. As these studies considerably differ in their design and all of them have specific limitations to ideally cover the dynamic character of the school to work transition process, I begin with briefly noting the main features of the study designs.

The study of Shavit/Müller (1998) most closely fits into the standard design of intergenerational social mobility studies. It consists in a set of national case studies for thirteen countries, in which different measures of first job (in particular status and class) are regressed on individual's educational attainment and various indicators of social origin (father's class, parental education). In a meta-analysis the findings of these country case studies are systematically scrutinized to account—mainly in terms of characteristics of the countries educational system described above—for cross-country variation in the extent to which education predicts first job outcomes. Major drawbacks of this approach concern the static nature of the conception of first job and potentially also to the comparability of the original national study designs.

To some extent the CATEWE project was an attempt to counter some of these limitations. However, instead it had to accept other limitations that were again mainly tied to the structure of data used. The project has used two different sets of data. The LFS-part of the project used data from the European Labour Force Survey (EULFS). The EULFS comprises the data from the national LFS (or equivalent) of all EU member states, which collect yearly cross-sectional data on various dimensions of labour force participation and job characteristics supposedly following uniform standards of data collection. A series of 12 consecutive years of this data has been available allowing synthetic cohort analyses, in which—for cohorts who had recently left education and training—the evolution of individual's labour market activity and occupational status or class could be analysed for successive years following the year in which they left education and training. While with this design the gradual integration into the labour market and the early evolution of work careers could be studied, this was not possible in a truly longitudinal way. The time component that could be assessed mainly concerned effects of the length of labour force experience on various labour market outcomes. A further

significant disadvantage of LFS data for the study of intergenerational is the lack of data on social origin (Müller/Gangl, in print) .

The second source of data used in the CATEWE project were longitudinal data on early work experience gathered among cohorts of recent school leavers in national school leaver surveys (SLS). While this data, in principle, fits best research needs for process studies, their harmonization to comparative standards posed major problems because of incompatibilities of the national research design and measurements. Also school leaver surveys are available only for a very limited number of countries (France, England/Wales/Scotland, Ireland, the Netherlands, Sweden); similar data for countries which in terms of transition patterns in several respect represent polar types (Southern Europe vs. ‘apprenticeship countries’) are not available (Smyth et al. 2001).

Recently another large comparative database on school to work transitions has been collected through a topical module within the European Labour Force survey 2000 including all EU member states (except Germany) and Eastern European candidate countries. The database covers a rudimentary time calendar of activities between leaving education/training and first significant job, details on respondents education, first significant job and on parental education. Unfortunately, the number of variables, for which information is available is very limited, for some countries samples are very small, and quality and comparability of data varies considerably between countries (Iannelli 2002b). However, first analyses have shown, that the database allows (even though limited) novel time related analyses on the transition from education to work for quite a number of countries (Gangl 2002b; Iannelli 2002a; Kalter/Kogan 2002; Müller et. al 2002b; Smyth 2002; Wolbers 2002)

Finally, attempts have been made to harmonize for comparative analyses longitudinal data from retrospective life course studies and prospective socio-economic panel studies now available for various countries. Comparability is often difficult to establish, resulting samples, for which longitudinal analyses for the transition period can be performed generally remain small and research is mostly limited to two or three country comparisons (Scherer 2001a, Lucchini/Schizzerotto 2002; Büchtemann/Schupp/Soloff 1993).

In sum, several strategies have been used to create and exploit databases for more adequate comparative studies of the crucial early work career stage. None of the databases available so far provide really good data for ideal comparative studies of the dynamic processes that should be tackled in analyses of the transition phase. This phase is very much shaped by various idiosyncratic national institutional solutions in combining simultaneous or successive

elements of learning and working. This makes it very hard to catch all the particular circumstances with a standard design and standard data collection instruments. A lot of knowledge, experience and research is needed to understand the intricacies existing in different countries and to implement their adequate coverage in a comparative research design. One could have some hope for the future when EUROSTAT will repeat—as anticipated for 2004 or 2005—its school-to-work transition module in the European Labour Force survey and when in doing so it would follow the many recommendations for the further improvement of the module that have been made in the evaluation of it (Iannelli 2002b; Müller et al. 2002a).

4. A summary of results of recent research

In summarizing some major results of these studies I will first stress general findings and then review some conclusions concerning variation between countries. In order to integrate findings as much as possible, I will discuss together findings for different outcome dimensions whenever possible.

In terms of effects of education on labour market outcomes both level of education and type of education—understood in terms of general/academic vs. different kinds of vocational/practical tracks—are found to have strong effects on outcomes. The higher the level of education achieved the more favourable outcomes are in practically all dimensions considered in research (class position, status / prestige of job, income, autonomy, unemployment risk, stability of employment, job security). The educational gradients are often very substantial, with tertiary qualifications in general providing the strongest differential in advantage. One case that does not seem to fit into these patterns concern some of the countries of Southern Europe, where graduates with different levels of education differ less from each other in length of search for first job and unemployment in early careers than in other countries (Brauns/Gangl/Scherer 1999; Gangl, in print; Müller/Brauns/Steinmann 2002; Kogan/Schubert 2003; Iannelli 2003; Smyth/McCoy 2000;

Level of education in most dimensions is the more powerful predictor of outcomes than vocational vs. general type of education. However, this depends on the outcome dimension considered and also on the more specific kind of vocational training obtained. In terms of class position, status or income, differences between school leavers from general tracks and leavers from vocational tracks at the same level of qualifications are usually small. Outcomes of general/academic qualifications often tend to be more advantageous than outcomes of vocational qualifications. The extent of disadvantage in terms of class position or status of

former apprentices varies between countries according to the composition in the kind of manual and non-manual occupations for which apprenticeships are available (Gangl in print). In contrast, in particular at the secondary level of education, vocational qualifications tend to facilitate access into jobs and are related to lower risks of unemployment than general qualifications, and this is the more true, the more specific vocational qualifications are and the more employers are involved in providing training. Apprenticeship-type training provides the most clear-cut example. Chances of apprentices of later facing a relatively smooth transition into work are substantially higher than for graduates with general qualifications. Vocational qualifications, in particular apprenticeship-qualifications provide both a ‘diversion’ and a ‘safety net’: fewer vocationally-qualified leavers enter higher-status jobs or continue in higher education, but fewer run high unemployment risks or end in unqualified, secondary-sector jobs (Shavit/Müller 2000; Iannelli/Raffe 2000). Even though not much research is available so far on subject field of qualifications, the few studies, that exist, also show substantial effects on outcomes (often related to different demands for qualifications) (van de Werfhorst 2001; Kim/Kim 2003, Smyth 2002; Wolbers 2002)

In all countries those who leave the educational system with the lowest qualifications have by far the worst occupational prospects. They mostly only obtain unqualified jobs, they also have substantially higher risk of being unemployed, immediately after leaving school and extending over a longer period than school leavers with higher qualifications. Their unemployment spells tend to be longer in duration. When they secure employment, the least qualified are more likely to enter part-time, lower-status and/or lower-skilled jobs. (Grelet/Mansuy/Thomas 2000a, 2000b, Iannelli/Raffe, 2000, McCoy 2000a, 2000b, Smyth 2000b).

When we now turn to variation between countries, then a first general observation to be made is that labour-market outcomes differ much more across countries for young entrants to the labour market than they do for experienced workers. One of the most significant examples is unemployment. With European Labour Force Survey data, figure 1 illustrates how dramatically unemployment risks differ between countries in the very first years of labour market experience, while they are much more similar for experienced workers (where country-differences mainly reflect the general level of unemployment in a country). Another example—indicative of large cross-country variation at the very beginning of the work career and much less variation at more advanced career stages—is provided by indicators of job stability or job security in figure 2.

Here about figure 1 and figure 2

Secondly, to a large extent the substantial differences in transition patterns and outcomes observed between countries are compositional in nature; that is, in terms of labour market outcomes, given levels or types of education and qualifications have broadly similar consequences. The effects are similar, but countries differ to a large extent in the structure of educational systems and in the composition in terms of level and type of qualifications that are produced in the educational system. For instance, countries with large apprenticeship systems tend to have lower unemployment rates among labour-market entrants because large segments of young people enter the labour market via apprenticeships which provide smoother transitions into jobs. In recent decades, there has been some convergence in the *levels* of educational attainment. However, even within the EU one still finds large differences e.g. in the proportions of tertiary qualifications among recent school leaver cohorts (with Italy and Austria not much above 10%, while approaching 40% in Belgium or Ireland). There is no evidence of similar convergence in the *type* of education across countries: Germany and some of its neighbours (Switzerland, Austria, Denmark) continue to have large cohort proportions entering the labour market with apprenticeship type qualifications in specific occupations or with similar specific school based vocational training (the Netherlands). In most of Southern Europe very little of similar systematic vocational training does exist. In several other countries (Sweden, Finland, France, UK) substantial and partly increasing proportions of cohort members obtain vocational qualifications, but qualifications are mainly provided in schools, are less occupationally specific and / or those obtaining them represent a negative selection of students (France). A substantial component of cross-national differences in early labour market outcomes of education has thus been shown to be institutionally based in the sense, that national systems of education provide different educational opportunities (in terms of level and type), that are associated with systematically varying labour market prospects. These compositional differences account for a substantial part of cross-national variation in transition patterns.

The EULFS identified three ideal-typical groups of countries within Europe: countries with an extensive system of vocational training at upper secondary level (either apprenticeship-based as in Germany, Austria and Denmark or school-based as in the Netherlands) and consequently a high prevalence of labour market entrants with occupationally-specific qualifications; other

Northern European countries, such as Belgium, France, Ireland and the UK, with fairly large proportions of entrants having general rather than vocational qualifications; Finland and Sweden are also included in this group because vocational qualifications are less occupationally specific than in the first group of countries; the third group includes the Southern European countries with lower levels of overall educational attainment and less vocational specialisation. (Gangl 2001).

The educational systems with weaker track differentiation tend to put more emphasis on other forms of educational differentiation, for example through grades. Grades have a more significant effect on transition outcomes (unemployment rates) in the more general education systems of Ireland, Scotland and Sweden than in the more track-differentiated system of the Netherlands (Breen et al. 1995; Grelet/Mansuy/Thomas 2000a, 2000b, Iannelli/Raffe, 2000, McCoy 2000a, 2000b, Smyth 2000b).

Concerning effects of *employment protection* legislation on the chances of young people becoming integrated into the labour market, empirical evidence at first sight appears inconsistent. Work in the CATEWE project shows that the strength of employment protection within a country is at most weakly associated with a higher unemployment risk for new entrants to the labour market, and the effect vanishes once individual level characteristics, in particular apprenticeship qualifications, are controlled (van der Velden and Wolbers in print). Breen (2003), however, regressing aggregate level data of the ratio of youth to adult unemployment on OECD measures of labour protection and on proportions of school and work based training in upper secondary education finds a clear effect. Labour protection increases the extent to which unemployment of youth exceeds adult unemployment. However Breen also finds that the excess of youth unemployment on adult unemployment declines with the extent of school- and work-based training prevailing in a country, and this is the more true, the higher employment protection is in the country. The extent of school and work-based training is seen as an indicator of the signalling capacity of a countries educational system. A high signalling capacity reduces the risk of bad hires and can compensate for the costs associated with high employment protection. It is then understandable, that in the individual level models used by van der Velden and Wolbers (in print) effects of employment protection become smaller or disappear when types of qualifications are controlled. Breen's model accounts quite convincingly for the extremely high unemployment rate among labour market entrants in the countries of Southern Europe (having high employment protection but lacking ready to use and reliably signalled vocational qualifications) and for the fact that the rate in

Germany and other countries with similar training systems is low in spite of a high level of employment protection.

Variation between countries has also been shown to be related to *aggregate structural conditions*. Macroeconomic conditions have been shown to have a strong influence on unemployment risks while their influence on the quality of the job obtained (in terms of status or class) is at most weak. Unemployment risks of labour market entrants vary more with macroeconomic conditions than they do for the adult labour force, and the least qualified are most vulnerable to cyclical swings Gangl (2002a). Gangl's analyses have also shown evidence of effects of educational expansion on job quality. Educational expansion is associated with lower net returns to education in terms of occupational status and class. Within a given occupational level, better qualified school leavers tend to substitute for less qualified ones. The extent to which educational expansion has these consequences, however, depends on the extent of upgrading of the job structure in the labour force that counterbalances effects of educational expansion. In recent decades, countries varied in the extent to which both these trends counterbalanced each other (Gangl 2002a). All three of these aggregate structural conditions tend to have the most severe effects on school leavers with low qualifications. Economic downturns produce stronger growth of the unemployment risks among the least qualified; and also educational expansion and occupational upgrading tend both to increase the unemployment risks of the least qualified: educational expansion because the least qualified are at the lowest end of the displacement queue; occupational upgrading because jobs for unskilled workers disappear (Gangl 2002a).

There is no consistent trend for the effect of level of education on labour-market outcomes to become weaker or stronger over time, but there are tentative suggestions of declining returns in some countries and for certain labour-market outcomes. Heath and Cheung (1998) e.g. find declining returns for status and class outcomes for the UK, while Müller, Steinmann and Ell (1998) find no general trend of weakening associations between education and class or status in first job for Germany. If change takes place it is generally not change that affects returns to all qualifications alike; rather returns to some specific qualifications may decline or increase. A recent study of Germany, France and the UK found that returns to tertiary qualifications were less likely to decline from the 1980s to the 1990s than returns to secondary qualifications (Müller/Brauns/Steinmann 2002).

Most of the results considered so far, relate to the gross association between education obtained and the labour market outcomes considered. But how do they relate to the

intergenerational inheritance focus of this report? Evidently social background conditions affect most of the dimensions of the transition process. For the early stage of the career, however, most of the social origin effects appear mediated through education; direct effects of parental conditions on children's early career outcomes tend to be small (at least compared to those mediated through education). In the thirteen nation study of the 'From school to work' project extensive controls for family background factors have been made. Direct effects were small, and controlling for social background did not lead to substantial change in the coefficients for respondent's education. The most recent findings from the EULFS transition module for some fifteen countries from Western and Eastern Europe confirm this result. Parental education clearly influences various outcomes in the transition process, such as length of time between leaving education and starting the first significant job or occupational status in the early career. While again to a large extent these effects are found to be mediated through education, still a not negligible part operates independent of children's education, indicating, that even at the immediate juncture between education and work job allocation processes are embedded in social contexts in which family based resources and constraints influence early career outcomes. (Iannelli 2003).

So far only little evidence from a larger number of countries is available yet that for this juncture systematically relates the size of social background effects and the relative weight of direct and education mediated components to the previously discussed characteristics of educational and labour market institutions or other structural conditions of the societies concerned. An interesting finding in this respect has, however, emerged from the transition module data for the post-socialist societies of Eastern Europe. For several indicators of early career outcomes effects of parental education turned out to be considerably larger in these countries than in countries of Western Europe (Iannelli 2003). Further research must establish why this should be the case; whether it is due to the economic hardships of the period of post-socialist transition in which the cohorts studied experienced their education and transition into the labour market or whether some other conditions have lead to this unexpected result.

In view of change over time, the analyses based on the School Leaver Surveys found no evidence that educational and transition outcomes have become less structured over time by background characteristics such as gender, social class and ethnicity. (Mansuy and Schröder 2000, Smyth 2000a, 2000b). The time period under study in these surveys however was rather short. For a longer time horizon Müller (1999) found declining effects of parental class and education on status and class of first jobs in Germany.

5. *Future research needs*

Recent research has focused most on different characteristics of educational systems to explain the strength to which early labour market outcomes are tied to different levels and kinds of educational attainment. In this respect, it has reached a number of conclusions that appear quite consistently found with different data and methods. As always: many questions remain. I would like to single out three:

First, while a lot of research has focused on comparisons between countries, much less systematic comparative knowledge is available on long term trends over time. One could start with assessing the evidence from single country studies.

Second, educational effects on labour market entry relate to a very small slice in individual life courses. From single country studies we know, that entry positions are highly significant for the further course of work careers. One hypothesis advanced long ago conjectures that as a consequence of educational expansion individual's status or class position is increasingly more or less fixed at an early career stage and opportunities for upward worklife mobility decline (Goldthorpe 1984). Similarly one can assume that in countries with strong links between education and early career job characteristics worklife mobility is also more constrained than in countries in which labour market entry depends less on education. A few studies have addressed the latter hypothesis (e.g. König/Müller 1986; Scherer, in print; Groß, without year); studies are based on very small set of countries. In the life course studies approach a lot of research is available on the role of education in worklife mobility, but it lacks a broader comparative orientation. Furthermore, the intergenerational inheritance framework and the life course framework would profit from a closer integration of their research questions and perspectives.

Third, most research on school to work transitions rely heavily on observations of individual workers, their qualifications and other resources, labour market behaviour and jobs obtained on the labour market. Little is known about—and little attention is paid to—employer strategies in the labour market, particularly the way they evaluate qualifications of young people and their position in the competition with insiders. Researchers tend to make inferences about employer preferences and practices on the basis of the actual pattern of employment and unemployment of workers or from observed associations between education and job characteristics, rather than from direct evidence. Theoretically, this is probably the most serious limitation of research done so far. Little is known about the factors underlying employers' recruitment decisions, why they prefer certain workers to others for particular

positions, exactly what their strategies and practices are in the hiring (or firing) of young people compared to experienced workers. How do they in fact weight education, experience, cognitive, technical and social skills and other characteristics and resources in selecting their employees? Under what conditions do employers change employment practices and how are young people affected by such changes? In a few countries researchers have begun to collect the relevant information and to produce linked employer-employee databases (e.g. Kalleberg 1994; DiPrete et al. 2001; Abowd/Kramarz 1999; Bellmann et al. 2002; Jackson 2002).

Investments in the collection of comparative data would probably be one of the best investments for better understanding the basic mechanisms that lead to the matches between individuals and jobs as well as for better accounting for the differences between different countries that we observe in the associations between education and labour market outcomes.

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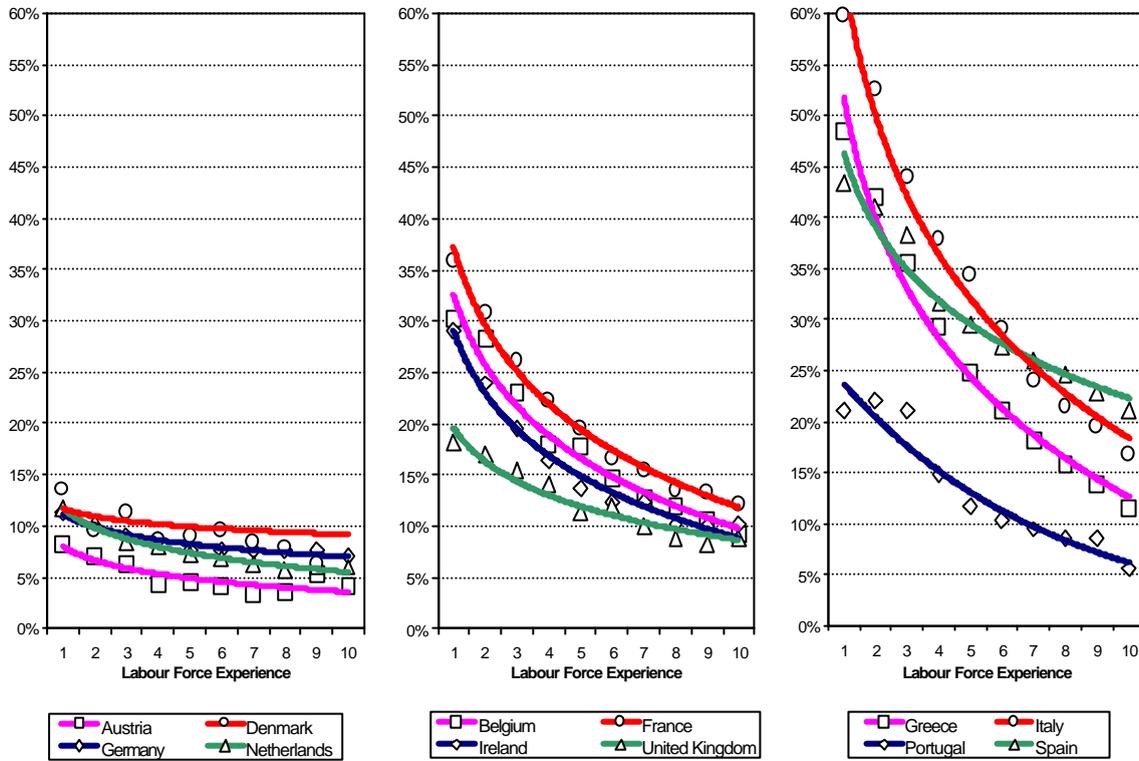
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Figure 1
Unemployment rates and labour force experience, ISCED 3 leavers



Notes:

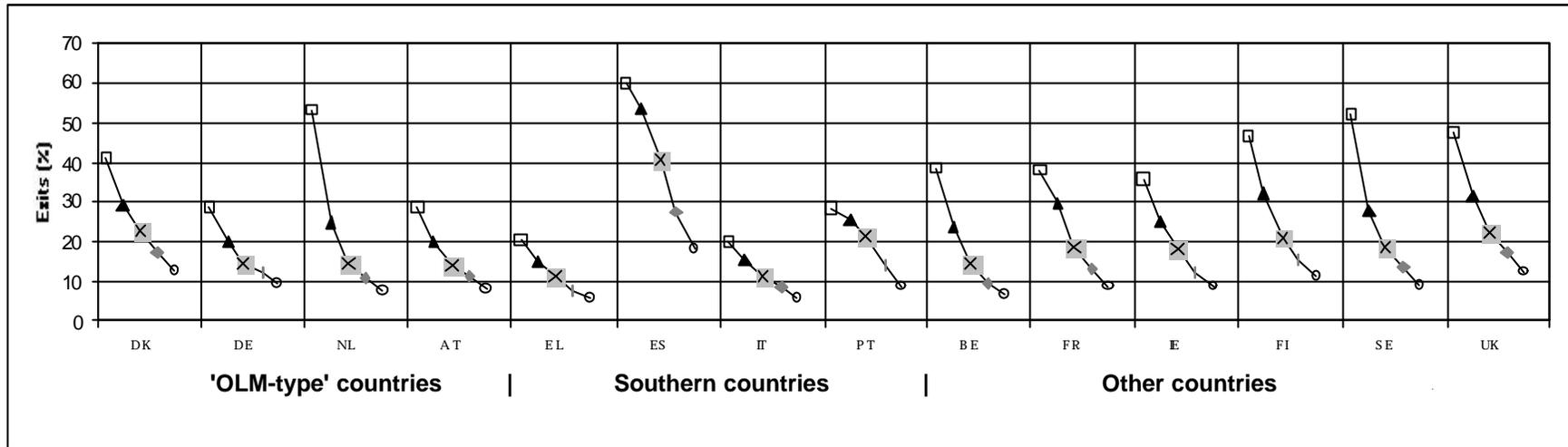
Lines represent smoothing of original estimates by logarithmic functions.

Sources:

European Union Labour Force Survey 1992-1997, country averages.

From: Gangl (2001)

Figure 2: Ratio of exit from job (people having left their job among people with same LM experience who held a job one year before)



Source: European Labour Force Surveys 1993-1997
 From: Couppié/Mansuy (in print)

Education and Meritocracy

Christopher T. Whelan and Richard Layte, ESRI

Introduction

What Jonsson (1993) has labelled the ‘Increased Merit Selection’ (IMS) hypothesis suggests that access to education becomes increasingly determined by class origin and that class destination is increasingly dependent on educational achievement, as the influence of characteristics associated with family background become irrelevant. It is on this latter relationship that we shall focus in this contribution. The liberal theory of industrialism held that economically advanced societies would exhibit a high level of social mobility because the increasing number of professional and managerial positions would be filled on the basis of meritocratic principles. ‘Achieved’ characteristics would displace ‘ascribed’ characteristics as determinants of social position and objective universalistic criteria would displace particularistic standards. (Blau and Duncan, 1967, Parsons, 1954, Treiman, 1970). In such circumstances what is to count as merit? Two main answers have been proposed. The first, which is of direct interest to us, suggests that merit should be equated with educational qualifications. The second definition, which must be addressed if we are to be in a position to interpret the evidence relating to the changing impact of education, views merit as constituted by the combined impact of IQ and effort. While, as Jackson (2002) notes, there has been a tendency to treat these two definitions as functionally equivalent, with education providing a proxy measure of IQ and effort, this view has been increasingly challenged,

The Role of Education

Recent research has challenged the view that educational qualifications are becoming a more important determinant of class destination. Here it is necessary to distinguish between absolute and relative effects. Educational qualifications have increasingly become a prerequisite of access to higher occupational positions. At the same time as such positions come to be increasingly occupied by individuals with the appropriate educational qualifications. However, as a consequence of the increasing numbers possessing such qualifications, we would expect to observe decreasing returns to any specific level of qualification. Thus as Boudon (1974) observes, the rational decision of individuals to acquire more education has an unforeseen effect at the aggregate level. However, our main concern here is whether there

has been a change in the underlying mechanism linking educational qualifications to class position. In fact the most recent evidence argues against any tightening bond. If anything recent evidence relating to Britain (Breen and Goldthorpe, 2001, Jackson *et al* 2002, France (Vallet forthcoming, Ireland, Breen and Whelan, 1993, Whelan and Layte, 2002), Sweden (Jonsson, 1996), suggests a weakening relationship.

As Goldthorpe (1996), notes if it is accepted that in modern industrial societies the educational system plays a crucial role in discovering talent and educational attainment is the prime indicator of merit, the results of the kind we have reported must seriously undermine the idea of increasing merit selection. Moreover, as Breen and Goldthorpe (2000) observe, such findings create difficulties not only for proponents of the IMS thesis, but for all who expect education to become crucial to employment prospects in industrial and post-industrial societies.

A further recent finding of some significance is the observation for some countries of a significant three-way OED interaction (Jonsson, 1992; Breen and Goldthorpe 1999, 2001; Goldthorpe and Mills, forthcoming; Vallet, forthcoming). Goldthorpe (forthcoming) notes that this interaction can be interpreted in two plausible ways. On the one hand, as proposed by Hout (1988), a weaker OD effect at higher levels of education, when taken together with educational expansion, could contribute to increased social fluidity entirely as a result of a 'compositional effect'. Thus education would be seen to play a central role in the creation of social fluidity, although by a rather different process than suggested by the proponents of the meritocratic thesis. However, as Goldthorpe notes, an equally valid interpretation of the OED interaction is that the dependence of destination on education is weaker for those with more favourable class origins. This raises the possibility of an alternative compositional effect whereby, as the proportion in the higher social classes increases, the ED association weakens. The differential impact of education by class background Goldthorpe notes is consistent with an interpretation which posits that among those denied access to higher qualifications resort to ascriptive resources- economic, cultural and social –is a more effective means of avoiding downward mobility than of achieving upward mobility

Breen in his contribution to this workshop notes that the available evidence relates to the partial ED/O relationship rather than the gross effect to which Goldthorpe's argument applies and for which case the British evidence supports his case. Breen concludes that, while

choosing between the competing explanations is difficult, a comparison of the changing marginal distribution of E and O, respectively, with the strength of the OD association at each E and the ED association at each O would allow one to assess whether these explanations can account for temporal change in the OD and ED relationships.

IQ + Effort

Is it possible that our conclusion relating to merit selection is a consequence of focusing on a version of the IMS thesis in which education is central and that our conclusion would be different if we were to focus on IQ + effort. In considering this possibility we make the assumption that IQ tests provide an acceptable measure of a general intelligence level. Saunders (1996, 1997, 2002) has sought to show that despite the evidence for substantial inequalities of opportunity in Modern Britain, social selection is primarily meritocratic in character. The observed inequalities do not necessarily reflect patterns of class advantage and disadvantage of an unfair kind. In response to authors who have shown that the impact of class origin persists even after controlling for education, Saunders (1997) maintains that educational attainment is a hopeless indicator of merit in the sense of IQ plus effort and an appropriate test of the meritocratic thesis requires the direct measurement of such variables. .

Saunders (1996) has sought to show that assuming a normal distribution of intelligence in the population, and a correlation of 0.5 between intelligence levels of parents and these of their children, existing patterns of social mobility in Britain correspond exactly with the patterns that would be found if class recruitment were based solely on differences of intelligence between individuals. In fact, as Jackson (2002) notes, most research shows that that advantages relating to family origins persist even after controlling for scores on ability tests. (Bowles and Nelson, 1974, Jencks, 1972, Savage and Egerton, 1997 Arrow *et al* 2002). Bowles and Gintis (2002) conclude that while the intergenerational transmission of both IQ and economic status is rather high, the transmission of IQ across generations account for only a small portion of the transmission of economic status. As Breen and Goldthorpe (2002) have noted, the challenge posed by the available findings on class mobility to 'latter day Social Darwinists' is to demonstrate that that the relationship between class origins and destination can largely be accounted for by individual cognitive and moral qualities. Thus, in their exchanges with Saunders, Breen and Goldthorpe have stressed that the crucial question is not, as Saunders appears to imagine, the relative importance of ability and class origin as predictors of class destination, but how far the overall origin-destination relationship can be

accounted for in terms of ability and effort or other 'merit' variables such as educational attainment. Breen and Goldthorpe conclude that while merit clearly does play an important role in the mobility process, children of lower class origins have to display far more merit than children of higher class origins to attain similar class positions. Moreover, and crucially for our current concerns, they conclude that educational qualifications play a more important role in mediating class inequalities in mobility chances than ability and effort which in turn tend to have their impact channelled through educational qualifications.

Education and Employers' Requirements

In attempting to explain their findings relating to the declining impact of educational qualifications in Britain Breen and Goldthorpe (2001) point to a number of developments that may have influenced this outcome in Britain, including reduction in the size of the public sector, declining levels of trade unionism, reduced regulation of the labour market and educational expansion. However, Whelan and Layte (2002) note that, with the exception of the final one, all of these tendencies are significantly weaker in the Irish case where a similar trend has been observed, suggesting that the declining impact of education is not dependent on the emergence of a neo-liberal regime. The more general argument implicit in the Breen and Goldthorpe explanation is that made earlier by Goldthorpe (1996) that merit must be socially constructed and in a market economy it will be constructed in a variety of ways. Thus as he notes, what would seem to underlie the virtual equation of educational attainment with merit is the idea that in a modern economy it is cognitive abilities that are crucial. However, little basis can be found for the claim that selection on the basis of education is prototypical of modern societies. In fact, as Goldthorpe argues, the available evidence that the criteria for employee recruitment and promotion applied by employers are quite differentiated. Crucially for our present concerns one principal axis of such differentiation is the extent to which educational attainment is regarded as being indicative of merit.

Jackson's analysis of British advertisements found that only 26% demanded qualifications although this rose to 70% for professional and managerial positions. There was also significant variation by functional group in the demand for educational qualifications within class groups. For example, educational qualifications were most frequently demanded in professional and ancillary occupations, whereas social skills were most frequently demanded in the managerial groups. While non-merit characteristics were required for occupations throughout the class structure this was particularly so in the more advantaged classes. The association between employers' requirements and functional groups appeared to be broadly

consistent with an emphasis on job relevant characteristics. Thus social skills and personal characteristics were associated with managerial, sales and personal services occupations. Conversely, where a wide range of skills and competencies were required, educational qualifications, which certified such generalised competence, were more likely to be required. Jackson's (2002) analysis of mobility patterns in Britain revealed that, consistent with this argument, substantial variation within class groups by functional sub-group in the extent to which mobility was mediated by education. It was in precisely those classes where educational qualifications are more important in general that the greatest within class variation was found.

Allocation of occupations on the basis of personal and social skills and personal characteristics is not necessarily inefficient. Whelan and Layte (2002) note that where higher average levels of education ensure that a substantial number of candidates come above the minimum threshold, a particular level of education may become a necessary but not sufficient condition of access to an occupation. In such circumstances employers make use of additional criteria without incurring significant costs and in some cases with considerable gains. The former would be the case where the additional criteria are of an ascribed and performance unrelated type, as in the case of favouring members of particular family networks. The latter may be the outcome where performance related criteria unrelated to education, such as 'emotional intelligence' are applied. There is no reason in principle why the application of such criteria should favour those from one class origin over those from another. However, if there has been an increase in the use of such criteria, the continued strength of direct class-origin effects suggest that such characteristics are no less class related than those applied in earlier periods. Jackson (2002) suggests that functional sub-groups for which education plays a less important role may constitute 'niche' groups which provide a buffer against downward mobility. Future research will need not only to establish the importance of such niche groups but also the nature of the mediating processes involved. Can their existence be explained by an association between class origin and the type of personal and social skills employers value, or is it the case that, as with merit, social skills are important but working class applicants are compelled to display higher levels than their middle class competitors?

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Gender, Education and Labour Market Outcomes

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This paper reviews the 'state of the art' in research on gender, education and labour market outcomes and highlights issues which might usefully form the basis for future research. Given the broad scope of this area, it focuses on gender differences in educational outcomes and in patterns of intergenerational inheritance rather than wider issues such as gender differentials in pay.

Educational attainment patterns

Recent decades have seen an expansion in educational attainment among young women to the point where female educational attainment surpasses that of young men in many European countries (Müller and Wolbers, 1999; OECD, 2002). As a consequence, the policy debate, at least in some countries, has shifted from a focus on female educational 'disadvantage' to a concern with 'failing boys' (see, for example, Epstein et al., 1998). Drawing on a rational choice perspective, Breen and Goldthorpe (1997) attribute declining gender differences in educational attainment to a convergence in the pattern of returns to education for women and men due to increasing female labour force participation. While this may be a plausible explanation of the direction of educational trends, as currently formulated it does not explain cross-national variation in the pattern of change or allow for circumstances in which female educational expansion pre-dates increasing labour force participation (see, for example, Crompton and Sanderson, 1990 on the 'qualifications lever'). Country-specific accounts of gender and educational expansion have, in contrast, focused on (changes in) the specific institutional features of the educational system (including curriculum content and approaches to assessment) along with micro-level school processes as factors shaping gender differentiation in educational attainment (see, for example, Arnot, 2002; Tinklin et al., 2001). The latter approach would appear to provide a useful way of applying the Erikson and Jonsson (1996) framework to gender differences by disentangling the different opportunities and constraints faced by young women and men in making educational decisions.

Gender differences in field of study

In spite of changes in educational attainment by gender, considerable differentiation persists in the kinds of courses (whether vocational or academic) taken by male and female students. From a rational choice perspective, these differences have been viewed as reflecting the difference between occupations, and hence fields of study, in facilitating potential career interruptions for child-rearing (Breen and Goldthorpe, 1997) and/or as the outcome of different comparative advantages for males and females in different subject areas (Jonsson, 1999). However, Jonsson (1999) found that such comparative advantage differentials account for only a small proportion of the educational segregation by gender found within secondary education. Nor does this approach explain why gender differences are still apparent within very specific fields of study (for example, the well-documented higher take-up of Physics subjects among males compared with higher take-up of Biology among females). Feminist theorists view educational segregation as reflecting the gendered nature of different types of knowledge with many accounts focusing, for example, on the construction of science subjects as 'male' (see, for example, Kelly, 1985). However, such explanations tend to neglect the way in which the gender-typing of subjects can vary over time and between societies. A more useful approach would appear to involve a greater focus on the institutional context within which young women and men make educational decisions (about the type of education as well as the stage at which they leave the system). Studies in the sociology of education have identified a broader set of factors which may influence choice of field of study including school organisation and process, peer influences, curricular content and teaching methods (see, for example, Dryler, 1999; Dekkers, 1996; Smyth and Hannan, 2002). In addition, current occupational segregation by gender within employment could be regarded as part of the context within which subject choice is framed.

While gender differences in field of study have been well documented, relatively little attention has been paid to potential differences in field of study by social class background. In the US context, Davies and Guppy (1997) found that both males and those from higher socio-economic backgrounds were disproportionately represented in the more lucrative fields of study within selective tertiary institutions. Van de Werfhorst et al. (2000) indicate significant gender and social background differences in what they term 'field resources' (the types of skills and knowledge acquired through a field of study) but suggest that the impact of different dimensions

of parental background differs by field. The cultural aspects of the home environment shape entry to the cultural and communicative fields while entry to the economic and technical fields reflects a more direct intergenerational transmission.

Gender and intergenerational mobility

Research on gender and social class outcomes has tended to focus on educational *level* (rather than field of study) as a mediating factor in intergenerational inheritance. Similar differentials in educational attainment by social class background have been reported for males and females (Breen and Whelan, 1998; Ishida, 1998; Erikson and Jonsson, 1998). An exception to this pattern may be found in the self-employed group (including farmers) where educational attainment tends to be lower for males since they are expected to inherit the family business (Schizzerotto and Cobalti, 1998). Patterns of intergenerational mobility are found to be broadly similar for males and females with gender differences in occupational outcomes seen as relating to labour market segregation rather than differential class processes (see, for example, Breen and Goldthorpe, 2002; Goux and Maurin, 1998; Breen and Whelan, 1995, 1998; Erikson and Goldthorpe, 1992). The main exception to similarities by gender in relative mobility patterns relates to the stronger class inheritance effects found for men from self-employed (including farm) backgrounds (see Jones, 1998; Breen and Whelan, 1998; Erikson and Jonsson, 1998). In addition, some analyses have indicated somewhat poorer returns to education for women than men (see, for example, Heath and Cheung, 1998; De Graaf and Ultee, 1998).

The effect of parental social background is not only mediated through educational level but, in many contexts, has been found to have a direct effect on early labour market outcomes, including access to employment and the nature of the first job, in terms of social class and/or prestige (see, for example, Jones, 1998; Heath and Cheung, 1998; Goux and Maurin, 1998). Müller et al. (1998) found that different aspects of parental background (social class, occupational prestige and education) influenced first job differently for men and women. They attribute this pattern to the fact that many daughters operate in a different gender-segregated labour market than that of their fathers where social reproduction will occur less through the inheritance of class position. A stronger direct effect of parental background for males than females has also been found for Britain and Israel (Breen and Goldthorpe, 2002; Heath and Cheung, 1998; Kraus et al., 1998). In contrast, other analyses have

indicated stronger direct effects for females than males (see Tsai, 1998, on Taiwan; Buchmann and Sacchi, 1998, on Switzerland). However, no account has yet emerged concerning the specific circumstances in which direct class effects might be expected to be stronger for one gender than the other.

A number of studies have examined not only the impact of educational attainment but also the differences between those taking vocational and academic tracks within the educational system (Müller and Shavit, 1998). However, there has been a general neglect of the impact of more detailed field of study on labour market outcomes in general and on gender differentiation in particular. What research there has been has tended to focus on differentiation in courses within higher education or in vocational tracks at secondary level; however, differences in the take-up of academic subjects within secondary education may also impact on subsequent educational and hence career specialisation (see Smyth and Hannan, 2002).

Available evidence indicates that, at a micro level, gender-typing of field of study is significantly associated with gender-typing of occupation with educational segregation being described as a major cause of occupational segregation by gender in the Dutch context (Borghans and Groot, 1999). In addition, Erikson and Jonsson (1998) found that field of education had a significant association with occupational prestige with some fields having different returns for men and women. They also found that field of study completely mediated gender differences in occupational entry.

Gender segregation in the labour market

If gender differences in intergenerational mobility patterns are primarily related to gender segregation within the labour market (see above), it is necessary to broaden the analysis to consider the nature and possible causes of such segregation. Occupational sex segregation has been found to vary across countries and over time (see, for example, Blackwell, 2001). However, much attention has been focused on the appropriate measure of occupational segregation (see, for example, Siltanen et al., 1995) with comparatively little concern with explaining cross-national variation in the patterns discovered. Buchmann and Charles (1995) propose that where educational choices are made at an early age, they are more likely to be gender-typical and that this feature, coupled with strong education-labour market linkages, means that

segregation is likely to be more pronounced in countries with highly differentiated, vocationally-oriented systems. While Buchmann and Charles (1995) did not subject this hypothesis to empirical testing, it is given tentative support by analyses of twelve European countries which indicate that countries with higher levels of educational segregation by gender tend to have higher levels of occupational segregation in the early labour market career (Smyth, 2002). However, even within the same field of study, young men and women often enter very different occupations (Smyth, 2002). What then could account for the persistence of occupational segregation by gender?

From a human capital theory perspective, occupational segregation is taken to reflect the fact that women choose jobs which will not penalise (anticipated) labour market discontinuity (Mincer and Polacheck, 1974). However, this perspective has generally not specified the empirical relationship between 'penalties' for interruptions and (changes in) the feminisation of particular occupations. Initial formulations of the institutional perspective (for example, Maurice et al., 1986) have been criticised for being 'gender-blind' (O'Reilly, 1996) and analysis of national systems from a gender perspective have tended to focus more on overall levels and patterns of female labour force participation rather than gender differences in types of employment. However, an exploration of the institutional context within which employment patterns are formed would appear to represent a useful direction in explaining labour market segregation (Rubery and Fagan, 1995; Buchmann and Charles, 1995). A full exploration of the interaction between a differentiated labour supply (in terms of gender, educational level, field of study and social background) and a differentiated demand for labour on the part of employers has been hindered by the lack of information on the attributes sought by employers in recruitment to particular types of jobs. Studies of the factors shaping segregation have been carried out in particular occupations and industries (see, for example, Scott, 1994) but have not yielded a satisfactory (or empirically testable) framework for wider analysis. This issue is not just of relevance to the analysis of employment segregation but has wider implications for our understanding of social reproduction (see Erikson and Goldthorpe, 2002).

Gender and intragenerational mobility

The discussion so far has focused on the relationship between gender, educational outcomes and early labour market outcomes. In terms of the adult population as a whole, much of the discussion on intergenerational inheritance has centred on the

appropriate unit for class analysis and on the relationship between occupation and class position for (married) women (see, for example, Dale et al., 1985; Goldthorpe, 1983, 1984). Erikson and Goldthorpe (1992) have also stressed the complementarity of the processes of marital mobility for women and class mobility for men in reproducing the class structure. Intragenerational occupational mobility among women has received comparatively little attention though (variations in) labour force participation over the life cycle are well documented at the micro, and to some extent the macro, level. However, discontinuity of labour force participation and/or movement into part-time work have been found to be associated with 'downward' mobility (Blackwell, 2001). It has also been suggested that there is significant gender differentiation within class positions in terms of job characteristics such as promotion paths, pay and authority (see, for example, Crompton, 2001; Birkelund and Rose, 1997).

However, the relationship between occupational segregation in early and subsequent career has not been researched in any depth. Jacobs (1990) indicates considerable mobility between 'female' and 'male' jobs in the US context. However, this may be due to institutional differences between national systems since in the Swiss context, the higher costs of occupational shifts mean that little mobility between female-dominated and male-dominated jobs is apparent (see Li et al., 1998). Segregation may also increase over the life-cycle since moving from full-time to part-time work also typically involves moves into female-typed jobs (Blackwell, 2001).

In sum, this paper has identified two main gaps in the analysis of gender, education and labour market processes. Firstly, field of study has generally been neglected in studies of intergenerational inheritance. This neglect appears, at least in part, to relate to the absence of large-scale datasets which include (comparable) measures of type of education. However, the analysis of the influence of field of study in shaping (gendered) transitions from school to work would appear to be a potentially valuable topic for future research. A second issue relates to the absence of information on employer strategy and the attributes sought by employers in recruitment (and promotion). At present, researchers tend to make inferences about employer preferences and practices on the basis of the actual pattern of employment and unemployment rather than from direct evidence. Finally, I would argue that the study

of gender and class analysis could usefully take account of insights from other areas of study concerning the factors shaping the context within which educational and employment decisions are made.

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Cumulative Disadvantage

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Introduction

The concept of cumulative disadvantage, or rather the sociological mechanism of cumulative disadvantage has a long pedigree in sociological research on social disadvantage, inequality and stratification. For example, Lipset & Bendix (1959), in what has now become classic status attainment research, wrote extensively on the manner in which social status, income and education combined as a ‘vicious circle’ to limit personal life-chances. However, it was the economic restructuring and largescale unemployment of the 1980s that saw the notion of cumulative disadvantage re-emerge as a central concept in social exclusion research, but this time used in two rather different ways that we label here as ‘temporal’ and ‘locational’ cumulative disadvantage. In the first of these, cumulative disadvantage is used to describe a temporal process of accumulation where disadvantages in childhood influence the experience of later disadvantages and in doing so create a socially excluded group, whereas in the second, the accumulation of disadvantages is seen as operating contemporaneously and centres on the impact of living in urban public sector estates on individuals and communities to produce an ‘underclass’. Both of these approaches can be seen as being in direct competition with mainstream social class theory in terms of offering a competing theoretical framework for understanding social disadvantage. Whereas traditional social class theory (defined in terms of employment relations in the labour market) sees social class groups as distributed along several dimensions of inequality, both these theories of social exclusion see the key cleavage as between a comfortable majority and a disadvantaged minority. In this review paper, we trace the re-emergence of cumulative disadvantage processes in the literature and illustrate how it has been used in these two different ways.

The paper unfolds as follows. In the first section of the paper we describe the emergence of the concept of social exclusion and the hypothesised role of temporal cumulative disadvantage in causing it before assessing some empirical evaluations that have been made of the process. In the second section we move onto a description

of the structure and concepts of ‘underclass’ theories and one in particular from Wilson (1991). In the final section we outline a theory that has emerged in contradiction to research highlighting cumulative disadvantage processes – that of individualisation (Beck 1992; Leisering & Leibfried 1999). In this review we do not address the closely related issue of multiple deprivation which is being tackled in the social cohesion group and also leave the issue of persistent poverty and deprivation to the income inequalities group.

Social Exclusion Research and Temporal Cumulative Disadvantage

Social exclusion has emerged in the last decade or so to become a key concept among both researchers and policy makers trying to understand and respond to the consequences of economic and social change that have been in train since the late 1970s. Paugam (1996) has identified the concept as first emerging in the work of Lenoir (1974) who sought to understand a range of social ills that he saw as linked to rapid modernisation and urbanisation in France. However, it was not until the early 1990s that the term came to be used more widely to describe the processes said to underlie the so called ‘nouvelle pauvreté’ which had followed the economic restructuring and social dislocations of the 1970s and 80s. The rise of mass unemployment and the growth of atypical forms of work and employment insecurity threatened to become a permanent feature of the labour market with whole sections of the unskilled labour force excluded from stable employment. This problem seemed to be exacerbated by the expansion of the education system, leaving those without qualifications unable to enter the emergent service economy, a pattern that increased exclusion among the young, poorly educated unemployed. These changes had led to an increasing sense of precarité for groups who had heretofore been sheltered from the risk of poverty and an increasing emphasis was placed on processes leading from precarity to exclusion in the sense of exposure to cumulative disadvantage and a progressive rupturing of social relations.

Kronauer (1998: 52) has convincingly argued, it is only in the context of the long boom, *les trente glorieuses*, that followed the second world war that the increasing interest in the concept of social exclusion can be fully understood, since it assumes a

shared understanding of inclusion within the prosperity of the welfare state. In research (see Room 1995) this approach has led to the positing of a basic cleavage between a comfortable majority and an excluded minority who have been steadily detached from both the labour market and mainstream society. To define the hypothesised process leading to temporal cumulative disadvantage more clearly, there are three main elements:

First, there should be a causal sequence that occurs over time such as unskilled working class origins leading to adverse childhood circumstances and subsequent educational failure followed by entry to unskilled manual class position, the experience of unemployment and poverty.

Second, the effect of earlier disadvantages should persist, e.g childhood circumstances continue to have an effect even after we take educational qualifications into account. This assumes that the earlier variable has both a direct and indirect effect on the outcome concerned, the latter mediated through later links in the causal chain.

The impact of earlier factors interacts with later disadvantages, e.g poor educational qualifications interacts with unskilled manual class in the present.

It should be emphasised that the extent to which this causal sequence leads to cumulative disadvantage still depends on whether the factors involved combine to produce an 'accumulation' of risk rather than being simply redescribing the same group. For example, although a significant degree of correlation between two or more variables may still leave us far short of perfect predictability for an outcome, it may still produce a substantial group who are disadvantaged on all the variables and thus 'accumulate' the greatest risk of experiencing a particular outcome (even though this group will necessarily be a great deal smaller than the group experiencing disadvantage in any one element). On the other hand, if a variable is strongly correlated with the other predictor variables, the addition of each to the explanatory model does nothing to increase predictability since each simply redescribes the same group and is in this sense 'redundant'.

A paper by Layte & Whelan (2002) sought to test the extent to which these hypotheses had any empirical support using data for Britain, Germany, Italy and

Ireland. The paper examined the extent to which the risk of poverty accumulated as factors predicting disadvantage were added. Thus, the paper started with the risk of poverty associated with having an unskilled manual class background and then sequentially tested the effect on this risk of having low educational qualifications, being unskilled manual working class and being unemployed. The paper showed, as per social exclusion theory, that the effect of earlier disadvantages did persist in the life-course, even after controlling for later disadvantages. For example, the paper showed that the risk of 70% median income poverty for those with low educational qualifications was higher in all countries (and 400% higher in Ireland) compared to those with tertiary qualifications, even after controlling for present social class and employment status. However, even amongst that group in each country who have all four of the disadvantages examined, a majority were still not poor suggesting that the accumulation of disadvantages did not 'doom' the individual to poverty. It was also clear from the results that the combined impact of all the disadvantages actually only applied to a small proportion of the population of each country. Given this, it was clear that poverty as a phenomenon could not be understood in terms of processes of cumulative disadvantage resulting in exclusion from the mainstream. In fact, a crucial conclusion from the paper was that highly targeted policies aimed at alleviating multiply deprived groups would actually reach a tiny minority of the poor.

Underclass Theory and Cumulative Disadvantage

Over and above the accumulation of disadvantages over time, the manner in which disadvantage may interact with location and 'social milieu' to form an 'underclass' is a second way in which the process of cumulative disadvantage is used. Use of the concept of an underclass has a long history in social research, but the concept has been used with so little precision in research that it is enticing to accept Gans' (1990) suggestion that we abandon it as value-laden and pejorative. Instead we will concentrate on perhaps the most clearly developed use of the concept as used in the work of Wilson (1987, 1991). According to Wilson, the concept of an underclass was initially used by Myrdal to describe those who had been driven to extreme economic marginality through persistent and recurrent unemployment and poverty because of changes in 'post-industrial' society. However, the crucial element in process that is

said to lead to the development of an underclass is the effect of the concentration of a high level of disadvantages in a particular location. A great deal of the debate around the concept of the underclass has been motivated by the rise in urban poverty and the emergence of concentrations of the poor who are isolated from the mainstream. We can see all these elements in the central propositions of Wilson's development of underclass theory as laid out by Petersen (1991: 16)

Economic change leads to a demand for different forms of labour and is associated with significant institutional change in labour market arrangements.

These changes have a disproportionate effect on particular groups.

The major change involves the weakening of attachment to the labour market among such groups with a dramatic decline in the proportion in stable, reasonably well-paid jobs.

These effects are aggravated by outward migration.

The effects of economic change are compounded by social exclusion. Marginalisation has different consequences in terms of persistent poverty depending on location.

Economic disadvantage is reinforced by social context which contributes to detachment from mainstream values.

Joblessness, especially prolonged joblessness is likely to produce feelings of low perceived self-efficacy. People come to seriously doubt that they can accomplish what is expected of them, due to their damaged self-image or their perception of environmental constraints. It is hypothesized that such feelings are reinforced by the feelings and values of others operating in the same social context producing what Bandura (1982) has called 'lower collective efficacy'.

It is important to realise that Wilson distances himself from 'culture of poverty' type explanations by seeing unemployment and poverty as preceding behaviour and beliefs and only then becoming causal in their own right, rather than being the cause of unemployment and poverty. What is crucial then is weak labour force attachment and social isolation and the concentration of disadvantages in a particular location.

As with the temporal theory of social exclusion through cumulative disadvantage, there has actually been very little empirical assessment of the process through which an underclass may emerge, although what research that has been done has emerged in Ireland. Although Ireland would not at first glance seem a country that would develop an underclass given its relatively small population and urban spaces, the economic restructuring of the 1980s led to high levels of unemployment, and particularly long-term unemployment which did leave many permanently detached from the labour market. Moreover, public sector housing in Ireland had become increasingly residualized among the more disadvantaged as public sector stocks were sold off and few new houses built. Therefore, by the mid-1980s there was a real fear in Irish social research and policy circles that an underclass was emerging in certain urban areas.

Here we will describe a test of the process of cumulative disadvantage said to lead to the development of an underclass put forward by Nolan & Whelan (2000). Using Irish data for 1987 and 1994, Nolan and Whelan attempted to test whether the higher risk of poverty of those in urban public sector housing was a result of their urban public context and not due solely to the individual and household disadvantages of urban public sector households. They did this by first estimating the effect of housing tenure (public/private) and location (urban/rural) before entering other factors into the equation that could explain the higher risk of poverty faced by public sector urban tenants. The equation with sector and location alone showed the high risk faced by this group who had fifteen times the risk of poverty compared to other urban households. They then entered variables into the equation to control for the individual and household characteristics that could explain risk of poverty and found that 70% of the differential between public sector tenants and other urban households was explained by socio-demographic variables and all of the differential between public sector and other households outside of urban areas.

The question was then whether the residual effect of housing sector and location was due to underclass processes, i.e the vicious circle processes associated with the social milieu, or due to other effects such as social selection into these areas. To test this, measures of perceived neighbourhood employment opportunities, neighbourhood

problems and the individual's level of fatalism were entered into the equation in an attempt to control for the impact of context effects working through 'lowered collective self-efficacy'. The introduction of these variables reduced the effect of being a public sector tenant in an urban location by a further 20%. It seemed then that most of the risk of poverty faced by those in urban public sector housing could be explained via individual characteristics and sense of control/self-efficacy, but the question still remained as to the implication that should be drawn from the residual that remained. Nolan and Whelan argued using an analysis of patterns of change in public sector housing in Ireland that this residual effect was actually due to the social selection of groups with social disadvantages into public housing.

The Individualisation Thesis

Although the concept of social exclusion emerged in France, vicious circle processes and cumulative disadvantage still figured in academic and policy discourse in other countries. In Germany, the 'economic miracle' of the post-war period and the establishment of a generous welfare state had meant that by the 1970s living standards were some of the highest in the world. Yet, as in Britain and France, the 1970s also saw the emergence of research showing that poverty had not disappeared and had in fact appeared in new forms. Primary among these was the rise in divorce and single parenthood that undermined the role of the family as an agent of social integration and socialisation and limited the ability of the family to make good the shortfall in resources left by an employment centred welfare state system, unemployment and tightening fiscal policy. Similarly, the rise in single person households in Northern Europe at least, and the growing multi-ethnicity of most European states all contributed to the sense that poverty and social exclusion could not be traced back to a common and easily identifiable cause. This 'sense' of growing heterogeneity of lifestyles and precarity was exacerbated in Germany in the 1990s with the problems of reunification and the re-emergence of unemployment as a problem, and moreover a problem that now reached far deeper into the middle classes as economic restructuring led to layers of previously secure white collar workers becoming redundant (Andreß & Schulte 1998). Social theorists such as Ulrich Beck (1992) picked up these developments and saw them as linked to the growing 'individualisation' of social and

economic life. His argument was that individual behaviour was becoming less bound by traditional norms and values and sources of collective identity such as social class, just at a time when the ‘globalisation’ of economic life was leading to the declining value of social class as a determinant of social and economic risk¹⁷ (c.f. Goldthorpe 2002).

‘Individualisation’ has been picked up by a number of Germany researchers in the area of poverty and disadvantage who have combined it with more dynamic methods of poverty analysis and used it to argue against previous cross-sectional poverty research which saw those in poverty as experiencing poverty careers built upon ‘vicious circle’ processes of cumulative disadvantage. For example, Leisering and Leibfried (1999) have argued that the majority of poverty spells are of a short duration and actively overcome by those who experience them (the ‘temporalisation’ of poverty), that poverty now reaches across social boundaries such as class (the ‘transcendence’ of poverty) and that it is now in fact associated far more with life cycle transitions such as leaving home, having a child or divorce and separation (the biographisation of poverty). In their book, they offer some evidence of these developments using German data on spells of social assistance and argue convincingly that the majority of poverty spells are short. This has been supported in other research (Duncan et al. 1993; Goodin & et al 1999; Fourage and Layte forthcoming), but their tests of biographisation and transcendence are rather less secure. Testing these theories using ECHP data, Layte and Whelan (2002) show that class inequalities in the experience of poverty have not decreased in the majority of European countries between the 1980s and 90s and moreover, traditional structuring variables of the risk of poverty such as social class, education and employment status remain significant predictors, even after controlling for variables which represent important life-course changes and discontinuities.

In concluding their paper which tests both the theories of cumulative disadvantage and individualisation, Layte and Whelan (2002: 231) argue that their findings support neither over determination nor under determination arguments relating to the causes of poverty. Instead the data show that that, while variables such as unskilled manual

¹⁷ Beck (1992) also tied this ‘individualisation’ into the increase as he saw it of the ‘risk’ associated with economic globalisation and technologies such as nuclear power and environmental change.

class origins have substantial, and persisting effects, on risk of poverty, most poor people are not cumulatively disadvantaged. Traditional stratification variables combine with other factors in an additive in the complex processes that determine poverty outcomes. As a consequence class effects, for example, can be significant across arrange of outcomes and stable over time without any suggestion that we are in all cases identifying the same individuals. A crucial implication of this perspective they argue is that it directs attention away from highly targeted policies aimed at multiply deprived groups and points to the need for more generalised responses directed at groups who are not necessarily currently poor but whose vulnerability means that a range of factors may precipitate such an outcome.

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Theme 3 Implications of the Changing Quality of Work

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Skills and the Quality of Work

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In recent decades, the notion of the 'quality of work' has come to have steadily wider reference. The major studies between the late 1940s and the 1970s focused primarily on the issue of changes in skills and task quality. In the main, they regarded the work task as the crucial factor that conditioned people's experiences of the quality of their working lives. But from the 1980s, with the greater turbulence of labour markets, there was an increasing concern with the stability of employment. This in turn gave greater salience to the opportunities that jobs provided for updating skills so that employees were less vulnerable in periods of economic restructuring. Finally, in the 1990s, in part reflecting the growth of women's employment, the concept of job quality was extended further to include the extent to which jobs facilitated or made more difficult the reconciliation of work and family life.

There has been sustained debate in the literature on whether or not there have been clear trends with respect to each of these aspects of job quality. Arguably, by the late 1990s, however, a certain convergence was occurring about the broad outlines of the main direction of change. This combined aspects of the rival optimistic and pessimistic interpretations of the evolution of work that had been dominant earlier. In general, the view was that economic and technological change tended to favour a continuing increase in levels of skill in the workforce. This partly reflected structural change, with the expansion of more highly skilled occupations and partly 'content' change, that is to say a raising of the skill levels of existing jobs. There were thought to be two important implications of the trend to upskilling. The first was that it would lead to an improvement in task quality. In particular, employees would have greater discretion to take decisions at work and work tasks would become more varied and interesting. The second was that, given the rapid changes in technology and the continuous nature of skill change, there would be a marked expansion of in-career training.

However, there was also a dark side to the scenario. Rapid change and the need for more flexible forms of work organisation were thought to be undercutting job security. At the best employers would now offer assistance to ensure 'employability' rather than long-term guarantees of job security. At the same time, the combination of increased competitive pressure and new forms of work organisation, were held to have serious negative consequences in terms of intensifying work. Greater work pressures would take their toll partly in individual work stress. But they also accentuated the problems of managing the interface between work and family life, at a time when the increased labour force participation of women was raising new issues about how the two could be combined.

The long-term perspective in this scenario was then double-edged. While developments in skill and job interest were improving the quality of work tasks, employment insecurity, work intensification and changes in family structure were markedly raising the level of stress associated with both work and family life.

Our aim in this paper is to take a first look at whether there is serious evidence from research in the countries involved in the project that such developments have been occurring. Discussion of trends about the quality of work life often tends to be highly speculative, extrapolating from unsystematic case studies. But a number of countries have begun to develop data sets that provide better grounded indicators with some

consistency over time. The European Union has also begun to develop comparative data for member states. An important issue is whether these different studies provide a consistent picture of the pattern of change across countries or whether it varies substantially from one country to another, perhaps reflecting differences in patterns of economic development, in national institutional structures and in the policy preferences of the government and economic elites.

We start in Section 1 with the issue of whether there has been a tendency for skills increase and, if so, whether changes in the skill requirements of jobs and the skill requirements of individuals have developed in step or rather have led to potentially serious problems of skill mismatch. We continue in Section 2 with an examination of the evidence for change in task quality with respect to task discretion, job interest and work pressure. Section 3 seeks to assess whether or not there has been an increase in in-career training and, if so, its consequences for employees work lives. Section 4 examines the argument that there has been a marked growth in employment security and, finally, Section 5 examines the evidence about the changing problems of reconciling work and family life.

Section 1: Skill change and skill matching

(Michael Tåhlin)

The skill content of jobs has two basic dimensions: substantive complexity and autonomy (see, e.g., Spenner 1980, 1983). Of these, it is the former that is usually seen as the more important, in the sense of better capturing the essence of the concept. In addition, autonomy (job control, discretion) overlaps considerably with the quality of job tasks, a factor that is considered elsewhere in the present paper.

From a welfare point of view, a central issue is the degree to which the skill requirements of jobs are matched with the skills of the person holding the job. First, the psychological payoff of having a high-skill job depends positively on the skills of the worker (up to the point where the job demands cease to be challenging). At low levels of worker skills, the psychological payoff of job complexity may be zero or negative. Second, the economic payoff to worker skills (such as education) depends positively on the skill requirements of the job. Changes in the distribution of wages may to a large extent be explained by changes in the skill content of jobs.

Worker skills have two dimensions and two sources. The dimensions are the level and the type of skill, while the sources are schooling and experience. Match quality between job demands and worker capacity depends on both skill dimensions, although matching by type is more difficult to assess empirically than matching by level. Both sources of worker skills are also important, although the character of experience is often less clear than the character of education.

It is well-known that the average level of education has risen in advanced industrial nations in recent decades. There is also a wide-spread but contested view that the average skill level among jobs has risen even faster, due mainly to two developments:

technological change and globalization. An important outcome of the excess demand for skills is an increase in wage dispersion in several (but not all) countries. The relationship between skill and wage movements is assumed to be especially tight in labor markets with relatively uncoordinated (“flexible”) systems of wage determination.

The above suggests four separate but related topics to be dealt with in this section. In the following we give an overview of (a) how the skill requirements of jobs have changed in recent decades, (b) how worker skills, especially education, have changed during the same period, (c) how the quality of job-worker matches with respect to skills has evolved, and (d) how the distribution of wages, especially the returns to schooling, has changed. We focus on assessing cross-national variations in these trends. In addition, we briefly indicate how the evolution of unemployment is related to changes in the market for skills, and what country-specific labor market institutions might conceivably modify the impact of market change.

Changes in the skill requirements of jobs

General remarks

A basic distinction when assessing the evolution of skill requirements of jobs is between (1) changes in the occupational and industrial *structure* of a nation’s labor market and (2) changes that occur *within* occupational and industrial categories. There is evidence from at least two countries, the United States and Sweden, that structural change is the clearly dominant of these two components. For the US case, Spenner (1983) shows that skill requirement changes within detailed occupations do occur but tend to go in both directions so that net effects are typically small. An early study by Horowitz and Hernstadt (1966) came to the same conclusion. For Sweden, le Grand, Szulkin and Tåhlin (2001a) show that shifts in the distribution of employment across broad occupational and industrial categories account for close to all the change in the average skill content of jobs between 1974 and 2000.

A broad survey of recent evidence of skill requirement change in the United States (National Research Council 1999) questions the relevance of using traditional classification boundaries in capturing the effects of technological and organizational change. Such concerns are also reflected in the recent modification of the ISCO (occupations) and ISIC (industries) systems in the EU countries and elsewhere from the mid-1990s (see the overview in Elias and McKnight 2001). While intermittent updates of classification systems for the labor market are of course needed, they do not make structural analyses of change irrelevant or impossible. On the contrary: data on structural transformations are widely available for all advanced countries over long periods of time and may be used to achieve reliable estimates of the evolution of skill requirements. Breaks in the time series can be handled reasonably well by short periods of overlapping measurement. Other sources of information, in particular repeated surveys containing detailed questions to individuals on the skill content of their jobs, are obviously important to use continuously as corrective instruments. To repeat, however: existing evidence strongly suggests that the picture exclusively provided by analyses of structural change is likely to be sufficiently sharp for many purposes.

Pattern of findings

Studies of several countries: A comprehensive review of cross-national variations in the evolution of skill requirements is possible to do, at least in principle, based on data on structural change. A very useful source in this regard is a collection of surveys including occupational distributions for several countries over a long period of time (Breen 2003). Data for seven nations from the 1970s, 1980s and 1990s are available in the form of social class distributions among men. The applied class model is the well-known EGP schema (Erikson and Goldthorpe 1992, see also Erikson and Goldthorpe 2002), which divides employees into workers holding production and service occupations and further divides these two categories according to the typical skill requirements of their occupation. By comparing class distributions among employees in several countries over time, we get a fairly sharp picture of the international variation in trends in skill demand. As far as we know, the pattern shown in Table 1.1 is the most detailed cross-national assessment available in the literature. A measure of average educational requirements for three time-points in each country has been estimated by assigning a skill demand value to each of four classes of occupations: high-skill service, low-skill service, high-skill production and low-skill production. The assigned values are taken from the Level of Living Surveys (LNU) in Sweden that contain information both on the (self-reported) educational requirements of jobs and information on EGP class (based on self-reported occupation). The values are 5.1 years of required post-compulsory education in high-skill service occupations, 1.6 years in low-skill service occupations, 2.0 years in high-skill production occupations, and 0.5 years in low-skill production occupations. (Since skill values from one country are assigned to classes in other countries, no attempt will be made at making absolute skill demand comparisons across countries. We are only concerned with cross-national comparisons of within-country change.)

Table 1.1. Trends in skill demand in seven countries, 1970s to 1990s. Average educational requirements (years of post-compulsory schooling) in jobs held by male employees, and relative change across decades (1970s=100). Source: Own computations based on data from Breen (2003).

	1970s	1980s	1990s	70s-80s	80s-90s	70s-90s
France	2.19	2.45	2.56	115	105	120
Germany	2.87	2.99	3.10	106	104	109
Ireland	1.87	2.16	2.31	111	110	122
Netherlands	2.98	3.08	3.36	104	109	114
Sweden	2.54	2.67	2.84	107	107	114
UK	2.70	2.99	3.20	113	110	125
USA	2.64	2.89	3.00	109	105	115
Average	2.54	2.74	2.91	109	107	116

According to these estimates, skill demand grew considerably in all countries between the 1970s and the 1990s, but with some notable cross-national variation. The average pace of change was roughly similar in the first and the second half of the period, but

only the Netherlands had a larger growth from the 1980s to the 1990s than in the earlier decade. Across the two decades, the rise in demand was especially strong in France, Ireland and the UK and comparatively slow in Germany, while Sweden, the US and the Netherlands form an intermediate group. We return to these trends below when examining international variations in the evolution of skill supply (education).

Other cross-national studies: Machin and Van Reenen (1998) and Berman, Bound and Machin (1998) are interesting studies in that they analyze several different countries (seven and twelve OECD nations, respectively). As proxies for the skill requirements of jobs they use either the simple dichotomy between production and non-production workers or worker skills (education). These proxies are too blunt to produce much new knowledge on the evolution of skill demand.

International data sets: (1) The European Surveys on Working Conditions (European Foundation, Dublin), conducted in 1990, 1995 and 2000, and (2) The European System of Social Indicators (ZUMA, Mannheim). These data sets are attractive in that they contain reasonably comparable information for many countries. Their drawbacks are (a) that the time periods covered are still fairly short, and (b) that the information on the skill requirements of jobs is very limited, such as whether survey respondents view their job as "interesting" (there is much more on other work-life dimensions). The probably most useful information with regard to skill demand consists of data on changes in occupational and industrial distributions.

Britain: Gallie, White, Cheng and Tomlinson (1998) give a broad account of changes in work content – including skill requirements – in Great Britain from 1986 to 1992. Felstead, Gallie and Green (2002) provide additional analyses for Britain, with data up to 2001. The information used comes from the Social Change and Economic Life Initiative (SCELI) 1986, the Employment in Britain survey 1992, and the Skills Surveys from 1997 and 2001. Findings from these surveys are also reported in Penn et al. (1994), Felstead et al. (1999) and Green et al. (2000). There is no systematic attempt in the analyses to distinguish between changes brought about by structural shifts and changes occurring within occupational and industrial categories.

The general picture of skill change during the 15 years covered by these data is one of increasing requirements. For example, the proportion high-skill (degree-level) jobs rose from 10 to 17 percent from 1986 to 2001. The share of jobs requiring less than one month (of training after employment) "to learn to do well" fell from 27 to 20 percent during the same period. There was also a small but significant rise in the requirement to learn new things on the job, from 76 to 81 percent of all employees from 1992 to 2001. The perceived (by the employees) importance of computer skills increased more than any other of ten different kinds of skill requirements from 1997 to 2001.

The United States. The most recently published US studies of changes in skill demand based on nationally representative data are Wolff (2000), for the period 1950 to 1995, and Autor et al. (2002), for the period 1960 to 1998. The former analysis is exclusively structural, motivated by the kind of remarks made in the previous section. The point of departure is the US Dictionary of Occupational Titles (DOT, 4th edition 1977), which contains detailed measures of skill requirements for 12,000 different job titles. Data on the skill content of these jobs were collected between 1966 and 1974.

Hence, the working assumption of the trend analyses is that the net change in skill content within these detailed occupations during the period considered is not significant. The study by Autor et al. (2002) is also structural in character and again builds on DOT-connected data. It extends on Wolff's (2000) piece by examining changes in skill content among occupations that have received updated skill values in the DOT schema.

The results of both studies show a general increase in skill demands. According to Wolff (2000), the pace of this upgrading process was relatively slow in the 1950s, accelerated sharply in the 1960s, and then fell to an intermediate level in the 1970s. Since then, the increase in skill demand has been roughly stable according to these data, at a yearly rate of about 0.4 percent for substantive complexity (SC), and about 0.2 percent for general educational development (GED), i.e., mathematical, language, and reasoning skills. Autor et al. (2002) report estimates of a similar magnitude.

The study by the US National Research Council (1999) is a broad review of a large number of studies based on different kinds of samples, methods and assumptions. The majority of the cited analyses are case studies of specific work organizations or occupational groups. Not surprisingly, the picture of change during recent decades that emerges from this review is highly complex. "Considering all available evidenceit does not appear that work is becoming more routine or less skilled than in the past, but we are unwilling, at present, to claim that the reverse is true" (p. 162-3). With regard to variations between occupational segments, the authors (including Arne Kalleberg, David Neumark, Paul Osterman and Kenneth Spenner) conclude (p. 160ff) that an upgrading most likely (but not definitely) has occurred among blue-collar workers, that the development of skill requirements among service workers is very heterogeneous with no clear net change, that the nature of most professional and technical work is hardly changing at all, and that reliable empirical evidence on changes in the content of managerial work is close to nonexistent.

Sweden. There are two main sources of information on long-term changes in skill requirements in the Swedish labor market, the Level of Living surveys (LNU) and the Surveys on Living Conditions (ULF). The LNU surveys have so far been carried out five times: in 1968, 1974, 1981, 1991 and in 2000. The ULF surveys are carried out yearly since 1975, with a focus on work-life issues every eighth year since 1986.

le Grand, Szulkin and Tåhlin (2001) use the LNU surveys to establish trends in the skill content of jobs in Sweden since 1974. They explicitly distinguish between structural shifts and changes within occupational and industrial categories. In general, they find that a significant amount of upgrading has occurred between 1974 and 2000, evident from a variety of measures. For instance, the average educational requirements beyond compulsory school increased from 1.8 to 3.1 years. The proportion jobs with no educational requirements fell from half to just above one quarter. This process has been almost entirely driven by structural change. Middle and high-level white-collar jobs expanded from 25 to 41 percent of all employment during the last quarter century, while the share of unskilled manual jobs dropped from 37 to 23 percent. Employment in health care, education, finance, consulting and insurance grew while the number of jobs in the manufacturing sector declined. These developments, well-known across the OECD, produced a turnover of jobs in the direction of higher skill requirements. Net of this ecological transformation very little

change took place in Sweden during the period considered. It would be of great interest to examine whether any change in skill requirements net of structural change has occurred in other countries in recent decades. A reasonable hypothesis is that the Swedish result would be replicated, but aside from the US studies cited above we are not aware of any empirical evidence on the matter.

Changes in the skills of employees

General remarks

As already stated, the (acquired) skills of employees have two main sources: formal education (schooling) and work-life experience (including on-the-job training). I confine the review below to changes in educational attainment in various countries. Workplace training is covered elsewhere in the paper. Changes in experience aside from training, mainly of interest in the perspective of gender inequality, would be useful to document, but fall outside the scope of the present review.

Pattern of findings

The strong long-term rise in average educational levels among all populations in the OECD countries is well-known. Of more interest to document here are the variations around this general trend, between nations and between time periods. The main source of information is official national statistics, assembled for internationally comparative purposes by the OECD. Various attempts at improving comparability have been carried out. For a comprehensive and recent effort, see Barro and Lee (2001).

Table 1.2. Trends in educational attainment in seven countries, 1970s to 1990s.

Average number of years of schooling of working age population, and relative change across decades (1970s=100) . Source: OECD data, assembled by Bassanini and Scarpetta (2001).

	1970s	1980s	1990s	70s-80s	80s-90s	70s-90s
France	9.2	9.7	10.4	106	106	113
Germany	10.5	12.0	13.3	115	110	127
Ireland	8.2	8.9	9.8	109	110	121
Netherlands	9.5	10.6	11.5	111	109	121
Sweden	9.6	10.6	11.4	110	108	119
UK	9.6	10.5	11.4	109	109	119
USA	11.9	12.4	12.6	104	102	106
Average	9.8	10.7	11.5	109	108	118

As in the case of skill demand, skill supply (as reflected by educational attainment) has grown markedly from the 1970s to the 1990s in all the countries considered (Table 1.2). Again, there is some variation across nations in the growth rate. Germany exhibits the most rapid increase and the United States the clearly slowest. The rise in

educational attainment in France was somewhat below the average rate, while Ireland, Britain, Sweden, and the Netherlands form a middle group with relative growth rates close to the general average.

Skill matching between jobs and workers

General remarks

So far we may conclude (a) that the skill requirements of jobs have increased significantly in recent decades (certainly in Great Britain and Sweden, close to certainly in the US, and most probably in other OECD countries), and (b) that the supply of skills as measured by the educational attainment of workers has also increased significantly (with the exception of the US in recent years).

An important issue is how these two trends are related to each other. In the literature, there are two main strands. The first is the over-education perspective. The sense that educational expansion was outstripping the demand for skills in the labor market dates back at least as far as the late 1940s (see Harris 1949). In the wake of the rapid growth of student enrollment at colleges and universities this impression became a widespread view in the 1970s (Berg 1970, Freeman 1976), and began to be documented empirically. A literature on over-education and earnings started with a paper by Duncan and Hoffman (1981) and has since become substantial. See also Sicherman (1991). There is by now a large body of international evidence on the incidence and wage effects of over-schooling (see below). Most recently, Rubb (2003) provides a meta-analysis of many empirical studies of the effects of mis-match on earnings.

Studies of overeducation are dominated by economic contributions. After early analyses by Berg (1970) and Kalleberg och Sørensen (1973), and subsequent contributions by Burris (1983) and Shockey (1989), sociologists appear to have deserted the field. A critical paper by Halaby (1994) seems to have put an end (at least temporarily) to sociological efforts. Åberg (2001) takes up the issue again with an empirical analysis of the Swedish labor market.

The second major strand in the literature on skill matching is the upgrading view, i.e., that skill demand is increasing at a higher rate than skill supply (education). The starting point of this perspective was the growth in wage inequality, in particular across skill or education categories, in the United States and Britain in the 1980s. In a standard supply-and-demand model, the joint occurrence of rising returns to education and an increase in skill supply can only be explained by an even faster growth in skill demand. The main rationale behind such a growth in demand is skill-biased technological change (SBTC), i.e., changes in production processes favoring employment of high-skill workers. The rapid expansion of information technology is seen as the prime feature of this development. In addition to SBTC, globalization (in particular increased international trade, of which especially across the north-south divide) is viewed as a cause of skill bias in the evolution of labor demand in advanced countries. (See Feenstra and Hanson 2001 for a recent overview of the trade-inequality literature and Alderson and Nielsen 2002 for a general sociological review of explanations of trends in income inequality.)

The currently dominant view (within the upgrading strand) is that technological change is the clearly more important of these driving forces. Acemoglu (2002a) gives an extensive overview of the technology-inequality literature, with a useful summary in Acemoglu (2003). In addition, Autor et al. (2003) provide a large-scale and long-term analysis of changes in the US industrial and occupational structure, documenting a link between the expansion of information technology and a rise in skill demand. Gallie et al. (2002) draw similar conclusions based on British survey data. See also Fernandez (2001), a recent sociological case study establishing a connection between within-firm technological change and an increase in internal wage dispersion. Important dissenting accounts, where the link between computerization and growing wage inequality is questioned on a number of empirical grounds (in the US), are Bernstein and Mishel (2001) and Card and DiNardo (2002).

Pattern of findings

The two different (partly opposite) perspectives tend to use different kinds of evidence. The over-education literature is more directly empirical, in the sense that it looks at observed matches between workers and jobs, and in a straight-forward manner compares the educational attainment of the former with the schooling requirements of the latter. If attainment is higher than the job requirements, the worker is seen as over-educated; if attainment is lower, the worker is seen as under-educated; and all the rest are seen as properly matched. There is no explicit theory to guide these observations and classifications. Theory does not enter the scene until the causes and consequences of mismatches are at issue. The upgrading literature, by contrast, works by combining empirical information on wage determination with the standard neo-classical price model. If employers pay more for skills than previously when the supply of skills is growing, it must be that their demand for skills grows even faster. Given the strong theory, the rapid growth in demand is not really an empirical issue – it simply must be true. The more interesting empirical questions, in this view, lie elsewhere: what factors drive the growth in skill demand, what are the consequences of the growth aside from increasing wage inequality, and how do these causes and consequences differ across labor markets, i.e., across different institutional contexts?

It is therefore not surprising that the over-education literature is much more empirical than the upgrading perspective. Estimates of the incidence of mismatch between individual educational attainment and job requirements are available for many countries. New empirical results were presented at a recent conference (November, 2002) in Berlin (all papers can be downloaded from MPIB 2002). There are also collections of papers in Borghans and de Grip (2000) and in a special issue of the *Economics of Education Review* (2000) as well as an overview paper by Green, McIntosh and Vignoles (1999).

A fair amount of over-education appears to exist in Western labor markets, both in the United States and in Europe. Between 20 and 40 percent of all workers (depending in part, of course, on the definition used) seem to have more schooling than their job requires, with the American rate tending to be higher than the European. Trends in over-education are very poorly established. What we know is mainly confined to the US and a rather small number of countries in Europe, including Britain, the Netherlands, Portugal, Spain and Sweden. These studies indicate that over-education

has increased in Europe in recent decades, while it appears to have decreased in the United States. (On the US case, Gottschalk and Hansen 2003 is the most recent analysis.) However, the international empirical basis is not sufficiently solid to draw any firm conclusions.

The longest established trend is for Sweden (le Grand, Szulkin and Tåhlin 2001, Böhlmark 2003). According to data from the Level of Living surveys (LNU), over-education increased from about 15 percent of all employees in 1974 to one third in 2000, while the proportion properly matched (individual attainment and job requirements differing no more than one year of post-compulsory schooling) dropped from about 70 percent to 50 with an unchanging share (just under one in five) of under-educated workers.

It can be shown, however, that the categories of under-educated, well matched, and over-educated are internally heterogeneous with regard to worker composition, in a way that may make simple trend analyses more or less misleading. Consider table 1.3, where a combination of educational attainment and job requirements is cross-classified with the three match categories.

Table 1.3. Logical covariations between different combinations of education and job requirements. (Combinations: N = logically necessary, P = logically possible but not necessary, – = logically impossible.)

		E > 0 R > 0	E > 0 R = 0	E = 0 R > 0	E = 0 R = 0
E < R	Under	P	–	N	–
E = R	Match	P	–	–	N
E > R	Over	P	N	–	–

Note: E = individual education beyond compulsory school.
R = educational requirements (beyond compulsory school) of the job.

Several interesting observations can be made from the table. Of the twelve cells, six are logically impossible and therefore empirically non-existent. Another three cells are logically necessary combinations, two of which pertain to workers with only compulsory schooling (E = 0). This means that the proportions matched and under-educated will, all else equal, fall as these workers (most of whom belong to older cohorts) retire from the labor market. In fact, this exit pattern explains most of the rise in over-education in Sweden, and is likely to do so for several other countries as well. Within the left-most category in the table, i.e., the rapidly growing group of workers who have some post-compulsory education and have jobs that require such schooling, the increase in under-education has been larger than the increase in over-education in recent decades.

Hence, there is not only a need to establish trends in skill matching, but also to take this and other kinds of heterogeneity within the three different match categories into

account in such analyses. Of obvious importance in this regard is the heterogeneity with regard to type (field) of education. Given that a significant share of jobs that require post-compulsory education requires schooling in some particular field (or fields), any estimate above zero of over-schooling that fails to take educational field into account is likely to be upward-biased. Further, it is important to study the long-term career effects of initial mismatch (see, e.g., the analyses of Germany in Büchel and Mertens 2000 and the cross-national comparison in Scherer 2003).

Trends in wage inequality

General remarks

According to simple market logic, the trends in skill supply and demand documented above should go a long way in explaining trends in wage inequality by skill groups in different countries. We deal with this issue in the current section. In addition, it may be noted that the supply of and demand for skills also affect each other. The supply side is of course in part responsive to changes in demand, via individual choices of labor market actors or through shifts in educational policies. But skill demand might also respond to changes in supply. With growing amounts of human capital among workers, technological change could endogenously become more biased toward high skills (see, e.g., the overview in Acemoglu 2003 and Lucas 2002).

Pattern of findings

In table 1.4, the evolution of the market for skills (as revealed in tables 1.1 and 1.2 above) and of earnings inequality is shown for the seven countries that we focus on in this review. In the simple market framework, returns to education should be especially responsive in this regard, but overall rates of inequality are also of interest. (On cross-national estimates of returns to education, in addition to the sources reported below, see e.g. Psacharopoulos 1994, Asplund and Pereira 1999 and Trostel et al. 2002. On earnings inequality, see, e.g., Levy and Murnane 1992, Freeman and Katz 1995, OECD 1996, Gottschalk 1997, Gottschalk and Smeeding 1997, Gottschalk and Joyce 1998, Katz and Autor 1999, Morris and Western 1999, Atkinson 1999, Nielsen and Alderson 2001, Acemoglu 2002a, 2002b.)

On average for the considered countries, the period of the 1970s to the 1990s saw an approximate balance between the growth rates in skill demand and skill supply. Disaggregating by individual nations, however, only Ireland exhibits a balance throughout the period. In France, the UK and the US, the change in skill demand tended to outpace skill supply, thus creating (all else equal) an upward pressure on wage inequality, or at least on returns to education. This excess demand was clearly concentrated to the first half of the period, with a balance subsequently emerging, at least in France and the UK. By contrast, skill supply outgrew skill demand in several countries, especially in Germany, but to some extent also in Sweden and the Netherlands. In the case of this group too, a better balance was achieved in the second part of the period, even if skill demand growth in Germany was still slow relative to the increase in educational attainment.

Table 1.4. Trends in earnings inequality and the market for skills in seven countries, 1970s to 1990s. (Relative change in skill demand (from table 1.1) minus relative change in skill supply (from table 1.2), and relative change (1970s=100) in male earnings returns to education and in overall male earnings inequality (p90 / p10)).

	Ä (demand) – Ä (supply)			Ä (return to educ.)			Ä (p90 / p10 earn.)		
	70-80	80-90	70-90	70-80	80-90	70-90	70-80	80-90	70-90
France	+ 9	– 1	+ 7	99	102	101	89	105	94
Germany	– 9	– 6	– 18		94			91	
Ireland	+ 2	0	+ 1		119			111	
Netherlands	– 7	0	– 7	79	104	82		102	
Sweden	– 3	– 1	– 5	96	103	99	100	107	107
UK	+ 4	+ 1	+ 6	98	108	107		103	
USA	+ 5	+ 3	+ 9	114	118	135	121	103	125
Average	– 1	– 2	– 4	97	107	105		103	

Sources. Returns to education: Harmon et al. (2001) except Sweden, le Grand et al. 2001b, and USA, Mishel et al. (2003). Earnings inequality: Germany, Netherlands, UK, OECD (1996), France, Piketty (2001), Ireland, Barrett et al. (1999), Sweden, le Grand et al. (2001b), USA, Mishel et al. (2003).

How did the evolution of wage inequality respond to these changes in the market for skills? In all nations except France and Ireland the picture is fairly consistent with a simple market model. Excess demand for skills generally tends to push inequality upward, and vice versa. In France, however, the wage distribution was more stable than expected in the first half of the period, while in Ireland inequality rose much more than expected during the time for which earnings data are available. But there are other deviant cases too. For instance, the comparatively large rise in inequality in the United States squares rather well with cross-national variations in the trends in skill demand and supply, but seems to overshoot significantly in magnitude. And in Britain, the timing seems partly off the mark: returns to education grew later than the appearance of excess demand.

In accounting for the observed deviations above, two factors are especially important to consider: unemployment and labor market institutions. First, if labor prices (wages) do not respond as expected to relative shifts in skill demand and supply, it might be that the response instead emerges in the form of changes in labor quantities (employment). This has been a common view of the causes of cross-national variations in the evolution of wage inequality and unemployment: if there is an excess demand for skills, differential unemployment rates by education will appear to the extent that increasing wage differentials by education do not. Empirically, however, the support for this view has been weak (Card et al. 1996, Nickell and Bell 1995, Nickell 1997). And it is not helpful in accounting for the deviance of the French wage structure that we just noted. As we see in table 1.5 below, although unemployment grew faster among the less than the more educated in France during the period when wages failed to respond to the excess in skill demand (the 1970s to 1980s), the entire

cross-national pattern of changes in unemployment rates by education is apparently inconsistent with the simple market view indicated above. (See also Brauns et al. 1998 for an analysis of youth unemployment differentials by education in France, Germany and the UK.)

Table 1.5. Trends in male unemployment rates by education in six countries, 1970s to 1990s. Ratios between rates among (a) workers with completed secondary schooling or higher and (b) workers with less than secondary schooling, and relative change across decades (1970s=100). Source: Nickell and Bell (1996).

	1970s	1980s	1990s	70s-80s	80s-90s	70s-90s
France	3.1	3.6	2.3	116	64	74
Germany	1.9	2.8	2.6	143	93	137
Ireland						
Netherlands	2.0	2.9	2.0	145	69	100
Sweden	4.0	3.7	2.5	93	68	63
UK	3.2	3.9	2.6	122	67	81
USA	3.9	4.7	3.9	121	83	100
Average	3.0	3.6	2.7	124	74	92

Second, labor market institutions are obviously important in accounting for trends in wage inequality. Such institutions may not only modify the impact of shifts in skill supply and demand, but may also affect supply and demand more directly (see, e.g., Acemoglu 2002b). Vital factors to consider include minimum wage regulations, union strength, employment security legislation, and social norms. A discussion of these factors fall outside the scope of the present review (for overviews see, e.g., Fortin and Lemieux 1997, Katz and Autor 1999 and Morris and Western 1999). Specific analyses of the employment effects of minimum wages include Card and Krueger (1995) and Stewart (2001). For the impact of unions on wages, see, e.g., Freeman (1991), Card (1996) and Card et al. (2003), and for recent discussions on the relation between social norms and income inequality see, e.g., Atkinson (1999) and Piketty and Saez (2003).

In addition, it is important to underline that the empirical account above is highly general, and needs to be specified in a number of ways. Aside from shifting the focus on macro patterns to micro-level information on job-worker matches, it would be desirable to disaggregate the macro data by worker categories. First of all, women should of course be included in the analysis. Secondly, for both men and women, it is essential to apply a life-course perspective on the associations that we consider. Most matches are formed in early stages of individual work-life careers. Therefore, the relationship between skill supply and skill demand should ideally be assessed within a framework that takes the timing in matching processes into consideration. Needless to say, this is a complex task. In pursuing this issue in future research, the growing availability of detailed national data sets on career development should be a significant asset.

Conclusions

According to the estimates provided in this review, both skill demand (in the form of skill requirements of jobs) and skill supply (educational attainment) have grown considerably in recent decades in the group of OECD countries that we have considered. While data on trends in skill matching between individual workers and jobs are scarce, we have tried to establish the cross-national variation in the balance between these trends at the macro level. With some important exceptions discussed above, the macro pattern that emerges is roughly consistent with expectations based on a standard market model.

This general picture is quite coarse, however, and does obviously not allow strong conclusions. In a number of respects, much more research is needed before a fine-grained account of major developments can be achieved. The existing state of knowledge is particularly weak in two areas: assessments of trends in skill demand and of job-worker matches at the micro level. For the former, we have utilized data on changes in broad occupational class distributions as a preliminary device. While certainly useful, there is a need to establish nationally specific estimates of trends in skill requirements at the level of individual jobs, and to examine how well one can account for such trends by taking structural change into account. In this task, a variety of skill requirement measures should be used in addition to the major indicator considered above, i.e., educational requirements. This indicator has several advantages, but also significant drawbacks. For instance, it is probably tied to changes in national education systems that are partly unrelated to actual shifts in skill demand.

With regard to job-worker skill matches, cross-nationally comparable information on trends is quite scarce. Before such information is assembled, it is essential to carefully consider conceptual and logical issues in the classification of employees into the categories of overeducated, undereducated and matched. These wide categories are highly heterogeneous in a number of ways, including experience, on-the-job training, and field of education. This heterogeneity needs to be taken into account before it is possible to arrive at meaningful estimates of matching trends.

Section 2. The Quality of Job Tasks (Duncan Gallie)

The quality of job tasks with respect to task discretion, variety/monotony and work pressure have been repeatedly confirmed by research in different countries as critical for job interest, work motivation and work satisfaction (Caplan et al. 1980; French et al. 1982; Johnson and Johansson G.(eds) 1991; Warr 1987). They were the job characteristics that formed the central focus of the 'quality of working life' movement from the 1960s.

The long-term trends in job control and job interest, and their determinants, have been the subject of sustained debate in economic sociology. For many decades there were strongly contrasting perspectives in the literature about the long-term perspectives of change with respect to task discretion and job variety. The first, premised on a trend of skill upgrading, predicted that the quality of job tasks was likely to improve over time (Blauner 1964; Zuboff 1988; Piore and Sabel 1984). The second, premised on a trend to deskilling, predicted that the quality of job tasks would deteriorate, with tighter control over work performance and more fragmented work tasks (Friedmann 1946; Braverman 1974; Wright and Singelmann 1982). As has been seen in the last section, there has been an increasing convergence of research results from different countries that upskilling has been the predominant process. Hence in the light of the existing literature the principal expectation would be that individual job control and job interest would have risen in the 1990s.

There has been less disagreement about the trends with respect to work pressure. Proponents of both upskilling and deskilling theses have argued that work pressure is rising with corresponding increases in work strain. For those from the upskilling perspective, the need to learn new skills, the increased complexity of jobs and increased responsibility accentuate the pressure of work (Gallie et al. 1998; Capelli et al. 1997). For those from the deskilling perspective, simplified tasks and tighter control are designed to allow management to speed up work pace (Braverman 1974; Crompton and Jones 1984). The major expectation then is that there has been a sustained growth of work pressure.

Task Discretion

Problems of Conceptualisation and Measurement

Task discretion (or 'autonomy' or 'decision latitude' in some of the literature) is very vaguely conceptualised and quite different indicators are used in different studies. One issue is which aspects of the job should be the focus of attention. Some indicators that have been used are rather broad in formulation so that it is not clear either what aspects of the work they refer to or the form of employee involvement; presumably they may mean quite different things to different respondents. This is the case for instance with those who have used the indicators drawn from the US Quality of Working Life Surveys, which ask how true it is that people 'have a say over what

happens at work' or 'take part in making decisions that affect their work' (Karesek and Theorell 1990; Quinn and Staines 1979) .

As Kiggundu (1983) and Breugh (1985) pointed out some time ago the notion of autonomy has been particularly slippery, referring not only to 'discretion' but also the notion of working 'independently'. This has led to a lack of clarity in some of the most commonly used measures, for instance those derived from the 'job diagnostic survey' developed by Hackman and Oldham (1975)¹. Among those who have focused on discretion, there have been differences in the aspects of work that have been of central concern. Some research has focused more specifically on the ability to exercise initiative in carrying out the job itself, whether with respect to effort, planning of the work or quality standards (Gallie et al. 1998); others, for instance Jonsson (1998), have been more concerned with the extent to which the individual is tied to the workplace (ie punctuality, ability to leave for short periods on private errands, receive private visits, choose hours of work). There is also much variation in response sets used, in particular whether people are obliged to make dichotomous choices, as is the case with the measures adopted by Marshall et al (1988), or are given more nuanced response sets. The view taken here is that good indicators should be reasonably precise in reference and provide several levels of response.

Evidence on Trends

There is trend data from national studies, with large samples, for Britain, France and Sweden. For Britain, the best data in terms of the quality of both indicators and surveys are those from three surveys : the Employment in Britain Survey, carried out in 1992 (Gallie et al. 1998); and the 1997 and 2001 Skills Surveys (Ashton et al. 1999; Felstead et al. 2002).

A measure of task discretion was derived from four questions asking people to assess how much personal influence they thought they had over specific aspects of their work: how hard they worked, deciding what tasks they were to do, how the task was done, and the quality standards to which they worked.²

At each of the dates a high degree of employee discretion was most frequently reported with respect to work effort and quality standards (Table 2.1). Employee influence was substantially lower over decisions about what tasks were to be done and especially over decisions about how to do the task.

¹ Hackman and Oldham define autonomy as 'the degree to which the job provides substantial freedom, independence and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out' (Hackman and Oldham 1975). This notably differed from another very influential early study (Turner and Lawrence 1965), where autonomy is defined as 'the amount of discretion the worker is expected to exercise in carrying out assigned work activities'.

² People were asked: 'How much influence do you personally have on ...how hard you work; deciding what tasks you are to do; deciding how you are to do the task; deciding the quality standards to which you work?' The possible responses included 'a great deal (of influence)', 'a fair amount', 'not much' or 'none at all'.

Table 2.1. Britain: Employee Task Discretion in Britain, 1992-2001

	1992	1997	2001
% Great Deal of Influence over:			
How Hard to Work	70.7	64.4	50.6
What Tasks Done	42.4	33.1	30.5
How To Do Task	56.9	49.7	42.8
Quality Standards	69.6	51.1	51.7
Overall Task Discretion Index¹			
All	2.43	2.25	2.18
Men	2.43	2.26	2.19
Women	2.44	2.24	2.17
N (All employees)	3408	2218	3984

Note:1. The task discretion index is computed as the summed average score of the four 'task influence' questions, with a highest score of 3 and a lowest score of 0.

Source: The Employment in Britain Survey (1992); the Skills Survey 1997; the Skills Survey 2001.

Examining the trend over time, there has been not an increase but a reduction in employee task discretion over the period. Between 1992 and 2001 there was a decline in employees' perception of their influence over each of the specific aspects of the work task. For instance, the proportion reporting that they had a great deal of influence over how hard they worked fell from 71% in 1992 to 64% in 1997 to only 51% in 2001. Those with a great deal of influence over choice of task fell from 42% to 31%. The decline was equally sharp with respect to decisions about how to do the task and the quality of work.

To provide an overall picture from these items, taking account of the full range of responses, a summary index was constructed by giving a score ranging from 0 (no influence at all) to 3 (a great deal of influence) and then taking the average of the summed scores.³ As can be seen in the last three rows of Table 2.1, the overall index score for task discretion declined from 2.43 in 1992 to 2.25 in 1997 to 2.18 in 2001. The pattern was virtually identical for men and women.

French evidence on task discretion is drawn from successive Enquetes Conditions de travail and from the Enquete Techniques et organisation du travail. These provide a time span of just over a decade – from 1987 to 1998.

Changes over time have been analysed by Serge Paugam (Paugam 2000). In sharp contrast to the British data, Paugam concludes that task discretion rose between the late 1980s and the late 1990s. He uses three main indicators of 'autonomy'; whether people say they have to 'strictly carry out orders'; whether most of the time they personally sort out problems in their work and whether they are free to make

³ The index was statistically robust, with an overall alpha of .78.

arrangements directly with colleagues to exchange work (Table 2.2). The first two of these indicators provide the strongest indication of change over the period. However, it is notable that most of this occurred over the period 1987 to 1993. There was little discernible change between 1993 and 1998. Further, although not labelled as indicators of autonomy, there are other indicators that seem to qualify the picture. For instance the proportion of people whose pace of work was imposed by permanent hierarchical control increased over the same period, and similarly people were more likely to have to respect quality norms in carrying out their work.

Table 2.2. France – Task Discretion 1987-1998

	1987	1991	1993	1998
Strictly carries out orders	44.0	41.6	37.9	37.0
Most of the time personally sorts out problems	43.3	49.6	54.2	55.8
Can make arrangements directly with colleagues to exchange work	36.7	n.a.	41.0	n.a.
Pace of work imposed by a permanent hierarchical control*	(17.4)	22.9	n.a.	29.1
Have to respect quality norms	13.8	n.a.	18.1	20.2

Source: Enquetes conditions de travail et Techniques et organisation du travail

Note* : The date for the 1980s data for this item was 1984.

For Sweden, we have three sources for trends: the Level of Living Survey, data from Statistics Sweden, and the Work Environment Survey. They differ in their coverage. The former provides a longer-term data series from 1968 to 2001, while the Work Environment Survey gives evidence for the more recent period.

Jonsson's (1998) analysis of the Level of Living Surveys, using indicators of autonomy in terms of 'ability to take time away from the job' concludes; 'Lack of autonomy is a problem which became less severe for men and women in most social classes. The exception is female manual workers for whom no change at all is detectable. Overall class differences in autonomy did not change very much for men during the time-period under study. For women there was some divergence because females in middle-class positions improved their positions most. Class differences were in fact very small among female employees in 1968 (Jonsson, 1988:615)

It is also possible to make relatively long-term comparisons of those who thought they had no influence on the planning of their own work and on their pace of work, based on data from Statistics Sweden. This provides evidence spanning the period 1975 to 1999 (Table 2.3). It reveals a decline over the overall period, both for employees as a whole and for blue-collar and white-collar workers separately, in the proportion that had no influence on the planning of their work. However, it is notable that the increase in employee discretion reached its peak in 1996/7, after which there is evidence of some decline in control, although staying well above the levels of the mid-1980s. With respect to influence on work pace, there was a small overall decline

from 11.3% with no influence in 1975 to 7.7% in 1996/7, but the major part of the change took place between 1975 and 1986/7. Again, in the second half of the 1990s, the evidence points to some decline in discretion. The same holds for the separate analysis for blue-collar workers. Among white-collar workers a small increase in influence between 1975 and the mid-1980s, also was reversed in the subsequent decade. Moreover, by 1999 a higher proportion of white-collar workers reported no influence than at the earliest reference date in 1975.

Table 2.3. Sweden: No influence on, percent

	1975	1986/7	1994/5	1996/7	1998/9	1999
Planning of own work						
All employees	23.2	13.3	9.3	8.6	8.9	9.1
Blue-collar	34.1	21.4	14.2	13.9	15.1	15.8
White-collar	7.8	4.3	4.0	3.6	3.2	3.2
Work Pace						
All employees	11.3	8.6	8.5	7.7	9.0	9.9
Blue-collar	14.8	11.9	10.7	10.0	11.8	12.5
White-collar	6.2	5.0	6.2	5.7	6.4	7.4

Source: Swedish Surveys on Living Conditions (ULF), (Statistics Sweden 1998b) plus unpublished updates.

There is little respectable comparative data on trends in task discretion. There were two special surveys within the Eurobarometer series, commissioned by DG Employment and carried out in 1996 and 2001, that provide an indicator of 'job control'. These asked people how true it was of their current job that 'I have a lot of say over what happens in my job'. This is a rather unspecific indicator and the country samples are also relatively small. These data then are presented then very tentatively.

They also suggest that there is no evidence of a general process of increasing task discretion in the latter 1990s (Table 2.5). Whether one takes those who reported that it was 'very true' or those saying it was 'not at all true', there is a decline in say over the job in all countries other than Germany, and a decline in the ability to take part in decisions in all countries other than Germany and France. The pattern for Britain is consistent with that of the national surveys (and the dates compared are reasonably close). The Swedish comparison is more difficult because of differences in the time points, but, while the picture of a decline in control in the later part of the decade is consistent with the national data, the change depicted is more drastic than emerges from the better national data.

A final point to note is the marked variations in reported job control by country. In particular, Sweden stood out in 1996 from the other countries both in the high proportions with a high level of influence and in the very low proportions with no influence. By 2001, it was no longer distinctive in the proportion with high influence, but it was still the case that it had a strikingly low proportion with no influence.

Table 2.4. Say over what happens in job 1996-2001

	% very true		% Not at all true	
	1996	2001	1996	2001
France	39.5	30.7	12.8	22.0
Germany	29.2	28.4	18.1	15.5
Great Britain	30.0	23.9	22.0	26.9
Ireland	31.8	27.1	26.7	34.0
Sweden	42.1	27.8	3.7	9.0

Source: Eurobarometers 44. 3; 56.1

Overall, there is little evidence of an increase in task discretion from the mid-1990s, as would be expected from the general trend of rising skill levels. On the basis of the strongest (national) data sets, there is marked evidence of a decline in Britain, evidence of a small decline in Sweden and of little change in France. The rather weaker comparative data suggest that (with the exception of Germany) there may have been a more general tendency for job control to decline in the second half of the decade.

Intrinsic Job Interest

Intrinsic job interest, often proxied by measures of the perceived variety, monotony or repetitiveness of a job, has usually been seen as integrally linked to skill trends. Rising skill has been thought to enhance job variety, while declining skill undercuts it and creates monotony.

The core focus of much of the literature has been with the deleterious effects of assembly line or machine controlled production for job interest (Friedmann 1946; Durand 1978; Beynon 1973; Durand 1978; Durand 1978; Linhart 1978). The assembly line was seen as the culmination of Taylorist and Fordist methods of production. At least until the 1980s it was widely viewed as prototypical of the future direction of work. Research evidence on the frequency of machine controlled jobs suggests that analysts may have been over-preoccupied with a particular sector of production that was not necessarily typical of the wider pattern. French data covering the period 1984 to 1998 show that the proportion of people whose work effort was subject to the type of assembly line or machine-controlled conditions that were central to so much of the literature was actually very small, involving less than 10% of employees (Paugam 2000). This is very similar to the picture that emerged from British research (Gallie et al. 1998). However, whereas in Britain the proportion was very stable from the mid-1980s to 1992 (7% and 6%) respectively, in France there was some evidence that machine control was increasing (from 7% in 1984 to 9% in 1991 and 10% in 1998).

Research in the 1990s casts some doubt on the assumption that there would be a tendency for job interest to increase. For instance, Michael Handel's analysis of the

US General Social Survey found little change between 1989 and 1998 in the proportion of American employees who found their job interesting. There was a small but non-significant decline in the proportion agreeing their work was interesting.

Jonsson (1998), analysing the Swedish Level of Living Survey data found that a trend to upskilling was not accompanied by any sharp decline in job monotony. Whereas 18.4% of men reported that their work was monotonous in 1968, the proportion was still 18.0% in 1991. For women, there was a somewhat greater decline in monotonous work from 22.5% in 1968 to 18.3% in 1991. The situation of those in unskilled working class jobs, who were the most likely to experience monotonous work, had become worse between 1974 and 1991. The data for the most recent wave of the Level of Living Survey suggests that even the small overall improvement in job monotony reported by Jonsson had disappeared by the turn of the century. The overall proportion in monotonous jobs had risen to 19.5%. The proportion among men was even higher than in 1968 (20.3%), with the proportion among women (18.6%) virtually the same as in 1991. The deterioration in the 1990s in intrinsic job interest was evident for both blue-collar and white-collar workers.

In France, the study of trends in job interest has been a central component of the Enquetes sur les conditions de travail (Dares 1999; Dussert et al. 1999; Paugam 2000). These surveys show an increase between 1984 and 1998 in the proportion of employees who find their work repetitive (from 20% to 29%), although no change in those subject to the most the most repetitive work cycles (in which each set of movements lasts less than a minute). Finally, British national data suggest little change between 1997 and 2001 in the proportion of people who reported that their work always or often involved 'carrying out short, repetitive tasks'. In 1997 this was the case for 45%, in 2001 for 46% (Skills Surveys 1997 and 2001).

The picture provided by the national studies of the lack of any improvement in job interest in the 1990s is confirmed by comparative DG Employment Surveys. The proportion strongly agreeing that there is a lot of variety in the job was lower in each of the countries in 2001 than in 1996 (Table 2.5). However, these year differences were only statistically significant in Ireland and Sweden.

Table 2.5. Proportion strongly agreeing that job has a lot of variety

	1996	2001
	% strongly agree	% strongly agree
France	36.4	33.7
Germany	36.1	32.4
Great Britain	43.6	33.0
Ireland	37.7	30.3
Sweden	53.1	44.4

Source: DG Employment Surveys 1996, 2001.

Work Pressure

The view that there has been a marked tendency towards the intensification of work was one of the principal themes of neo-Marxist critiques of Scientific Management and 'Fordism' (Friedmann 1946; Braverman 1974). The reduction of the skill content of work tasks and an ever finer division of labour, it was argued, were designed to allow an intensification of work through more precise measurement of task activities, a tighter linking of financial incentives to output and a reduction in the capacity of resistance of the workforce due to easier substitutability. This was reinforced by the implementation of assembly line technologies that made possible the machine pacing of work and mechanical control of work rhythms. A wide range of studies (using diverse methodologies) pointed to the enhanced pressure that characterised assembly line work (Friedmann 1946; Durand 1978; Beynon 1973; Durand 1978; Durand 1978; Linhart 1978).

However, especially from the mid-1980s, the focus of attention shifted to the possibility that new production technologies (in particular related to the rapid spread of computerisation) and the increased emphasis on quality in both production and service delivery placed a higher premium on skill and team work thereby reversing the historic process of an ever greater division of labour⁴. An early version of this argument was advanced by Robert Blauner (1964). For studies in the 1980s and early 1990s that had considerable influence in the 1980s, see especially (Kern and Schumann 1987; Zuboff 1988; de Terssac 1992).

If deskilling, the fragmentation of work tasks and decreasing control over work had been crucial factors accelerating the intensification of work, it might have been expected that a reversal of these tendencies would have alleviated work pressures and reduced levels of work stress. Certainly, the evidence pointed to the fact that these new developments increased the satisfaction of employees with their work and their involvement in their work task. However, a number of analyses suggested that this was at a cost. The increased responsibilities of employees, as a result of upskilling and the delegation of decision making, were thought to be an important factor leading to higher levels of work pressure and work strain (Gallie et al. 1998; Capelli et al. 1997).

In addition to this, a number of studies in the late 1990s pointed to the increased pace of technological change as an important factor underlying increased work intensity and psychological strain (Green and McIntosh 2001). In particular, this was related to the spread of computer-based technologies. While these may have contributed to the process of upskilling, at the same time they provided ways of increasing the efficiency of work flows, thereby removing much of the 'idle' time associated with traditional manufacturing technologies. At the same time, at least in certain types of work, they allowed for more systematic electronic monitoring of performance, with the potential for greater continuity and precision than traditional forms of performance control.

Finally, it could be argued that employers' capacity to increase the intensity of work increased sharply in many European countries in the 1990s. This was for two reasons,

⁴ Other researchers, however, remained deeply sceptical about the supposed decline of Taylorism, see for instance (Boyer and Durand 1998)

both linked to the issue of security. The first was the decline of trade union strength and the shift from collective representation to forms of more direct participation (Gallie et al. 1998; Green and McIntosh 2001). In this respect, however, the severity of the decline of organised labour varied considerably between countries, with the implication that there could be substantial differences in trends between one country and another. The second was the widely assumed decrease in job security resulting partly from periods of relatively high unemployment and partly from the growth of non-standard contracts, which provided lower levels of employment protection. Arguably employees who were both less protected by collective organisation and more insecure in terms of their labour market position would be in a much weaker position to offer resistance to management drives to 'rationalise' workplace organisation and increase work effort.

Much of the evidence for developments in work intensity until the end of the 1980s had been drawn from individual case studies. It was not until the 1990s that the first representative survey data became available that allowed for comparison over time between countries. A significant development in this respect was the European Survey on Work Conditions, which was conducted initially in 1991 and then repeated in 1996 and 2000. The first major analysis of these surveys for the specific issue of work pressure was carried out by Green and McIntosh (2001), focusing on the period 1991 to 1996. They concluded that there was clear evidence of an increase in work intensity in the early 1990s. They found major differences between countries, with the increase in work pressure particularly marked in Great Britain, but significantly less severe in Denmark, Germany, Greece and Spain. Further they found confirmation for the importance of both computer technologies and trade union strength as determinants of the level of work pressure.

Table 2.6. Britain : Changes in work strain 1992-2001 (% much of the time)

	1992	2001
	%	%
Worries about job after work	12.7	17.8
Finds it difficult to unwind	14.6	17.5
Feels used up at the end of a workday	22.3	25.4
<i>Work Strain Index</i>		
All	2.34	2.39
Men	2.35	2.41
Women	2.32	2.38
N (All employees)	3679	4453

Note:

1. The work strain index is computed as the summed average score of the three 'strain' questions, with a highest score of 4 and lowest score of 1.

Source: Employment in Britain Survey, 1992; Skills Survey, 2001

British, French and Swedish national studies confirm the view that over the 1990s as a whole there was an increase in work pressure. British studies give us a comparison between 1992 and 2001 for indicators of whether people worry about their job after work, find it difficult to unwind at the end of the working day and feel 'used up' at the end of the workday. Taking both the individual measures and the overall work strain index, which was a summed measure of these, there was evidence of an increase in work strain over the period (Table 2.6).

The French *Enquetes sur les conditions de travail* also point to a rise work pressures. There was a small rise (23% to 25%) between 1991 and 1998 in the proportion of people who reported that they could not carry out their work correctly because of lack of time. There was a rather more striking increase between 1984 and 1998 (from 16% to 32%) in the proportion who said that they could not take their eyes of their work (Paugam 2000).

Evidence from the Swedish Surveys for the period 1989 to 2001 suggests that there may have been some increase in work pressure between the early and late 1990s, although the trend then reversed between 1999 and 2001. Of the three indicators that are available for the full period, one shows the level of work pressure higher in 2001 than in had been in 1989, whereas the other two show no change over the period (Table 2.7). People were more likely to say that they had too much to do, but there had been no change in the proportions who felt their tasks were too difficult or that work was mentally stressful.

Table 2.7. Sweden: Changes in Work Pressure 1989-2001

	1989	1991	1993	1995	1997	1999	2001
Has too much to do at work	50.7	45.5	50.2	52.7	59.0	60.4	56.1
Tasks are too difficult	11.6	11.1	10.5	10.8	12.8	12.5	11.7
Work is mentally stressful	43.2	39.6	41.6	42.0	45.9	46.7	43.8

Source: Swedish Work Environment Surveys (Statistics Sweden 1998a; Statistics Sweden 2002)

A central focus of Swedish research over the 1980s and 1990s was with the way in which task discretion might mediate the implications of work pressure for health. There was a substantial convergence on the view that the jobs that posed the greatest threat both for self-reported stress and for vulnerability to cardiac illness were those that combined high levels of work pressure with low levels of job control (Karesek and Theorell 1990; Theorell 1998; Theorell and Karesek 1996; Johnson and Johansson G.(eds) 1991). Laboratory experiments showed that such work conditions also affected the change in stress hormones in ways that were consistent with this argument (Frankenhaeuser 1991). There was some indication that the implications of the high demand/low control syndrome were stronger for manual than for non-manual

employees. The Swedish level of living survey permits the construction of a 'job strain' score which is based upon the mental demands of the job combined with small decision latitude. This shows a rise in those in high job strain jobs from 1981 to 2000 (from 12.8% of all employees to 21.9%). The pattern was broadly similar for men and women and for blue-collar and white-collar workers.

Finally, the DG Employment Surveys of 1996 and 2001 provide a number of indicators of work pressure:

- My job requires that I work very hard
- I work under a great deal of pressure
- I never seem to have enough time to get everything done in my job
- I often have to work extra time, over and above the formal hours of my job to get through the work or to help out.

These give a picture of relatively stable or declining levels of work pressure in the later 1990s for the five countries of the project. In all cases other than Britain there was some decline in the overall work pressure scores, based on these four indicators (Table 2.8). There is no evidence of significant change for France, Britain and Sweden, while in Germany and Ireland work pressure scores were significantly lower.

Table 2.8. Work Pressure Score 1996-2001

	1996	2001	Sig
France	3.13	3.09	n.s.
Germany	3.18	3.03	***
Great Britain	3.41	3.45	n.s.
Ireland	3.33	3.17	**
Sweden	3.44	3.36	n.s.

Source: DG Employment Surveys

Overall, there seems to be some evidence for rising work pressure from the 1980s to the mid-late 1990s, though this may have levelled off (or even declined) in the most recent period.

Conclusions

The evidence on skill trends generally points to an increase in skill levels over time. Previous research indicated that this would be associated with higher levels of task discretion for employees and greater job interest but possibly also with greater work pressure. However, none of these predictions appear to be correct. There is no evidence that task discretion increased in the second half of the 1990s and indeed it may have declined. Job interest either remained unchanged or decreased. In short, taking the 1990s as a whole, rising skills have not been associated with the anticipated improvements in what have been frequently seen as the key aspects of task quality.

With respect to work pressure, there was some evidence of work intensification in many countries during the early and mid 1990s. However, the evidence for the second part of the decade suggests the increase in work pressure may have peaked in the mid decade and has declined in the most recent period.

The existing theoretical literature offers us little guidance as to why it should be the case that increasing skills have not been accompanied by any overall improvement in the quality of tasks. An important avenue to explore is how far it may be accounted for by rising expectations. The evidence for job quality is based on employee reports and these are likely to be affected both by the salience of specific issues and by the reference criteria. If job control, for instance, comes to be regarded as more important, then people may be more sensitive to its absence, leading to an increase of reports of low control. One factor that might drive such shifts in issue importance is the rise in levels of general education described in the first section of the report. It also would be important to explore the implications of rising skill mismatch on perceptions of job quality.

Analyses of job quality may also have been limited by their tendency to focus primarily on the intra-organizational environment – in particular the implications of managerial systems of performance control and of new types of technology. In so far as the wider environment has been considered, this has been largely in terms of some postulated general dynamics of capitalist or advanced industrial societies. There remains the possibility that job quality is affected by macro-structural factors of a different type. For instance, the key state and industrial actors have adopted rather different policies in different European countries with respect to work conditions and more systematic research is needed into whether this has led to different outcomes for instance in the prevalence of particular principles of job design (Gallie 2003). We also know very little about the implications of the economic environment on the experience of work, for instance in terms of the level of competitive pressure or the phase of the business cycle. It is plausible, for instance, that these types of factor might be as important as shifts in types of technology in accounting for changes in the level of work pressure in jobs.

In order to address such issues, good quality comparable data sets are required that provide measures at regular intervals. A review of the evidence currently available shows that there are several national data sets of high quality but that allow little possibility of direct comparison. There are also a few poorer quality but comparable European data sets. In general, there has been remarkably little attempt to validate or standardise key measures. We are then very far from possessing the type of data resources that are needed for rigorous exploration of the determinants of the quality of working life.

Section 3: Training and Career Development

(Philip J. O'Connell)

The resurgence of interest in recent years in the importance of education and training in furthering the goals of economic progress, fuller employment and social integration coincides with a new emphasis on the need for 'life long learning', both to respond to current changes in the organisation and technology of production and service delivery and to counter the socially disruptive effects of increased labour market flexibility.

The increased awareness of the importance of education appears to coincide with increased activity in education and training. The annual OECD publication *Education at a Glance* provides ample evidence of continued increases in the educational attainment of OECD member countries over the last several decades. While there has been a great deal of interest in and research on initial education, prior to labour market entry, continuing job-related training is also believed to be highly influential in determining both corporate or organisational performance as well as individual earnings and career development, although the empirical research on this topic is much more limited. Consistent with the growing potential importance of life-long learning, company training of employees also appears to have increased over the course of the 1990s.

Table 3.1: Indicators of Enterprise-sponsored Training, 1993 and 1999

	% of enterprises providing any training		% of enterprises providing training courses		% of employees receiving training courses	
	1994	1999	1994	1999	1994	1999
	%	%	%	%	%	%
Belgium	46	70	42	48	25	41
Denmark	87	96	79	88	33	53
France	62	76	48	71	37	46
Germany	85	75	60	67	24	32
Greece	16	18	13	9	13	15
Ireland	77	79	64	56	43	41
Italy	15	24	9	23	15	26
Luxembourg	60	71	50	50	25	36
Netherlands	56	88	46	82	26	41
Poland	13	22	13	11	13	17
Spain	27	36	21	28	20	25
Sweden	--	91	--	83	--	61
United Kingdom	82	87	58	76	39	49
Mean	52	64	42	53	26	37

Table 3.1 shows indicators of enterprise-sponsored training for European countries in 1993 and 1999, drawn from the two Eurostat *Continuing Vocational Training Surveys*. The data indicate substantial differences between countries in the incidence of training and in participation rates of employees. These national differences in training levels notwithstanding, a comparison of the two surveys shows that a greater proportion of companies provided training for their employees in 1999 than in 1993 and that the proportion of enterprise providing formal training courses also increased. These increases were reflected in the growth in the percentage of employees engaged in training courses over the period in virtually all the countries included in the surveys.

The potential of investment in human capital to solve economic and social problems has gained widespread popularity in policy-making circles, and a great deal of attention is now paid to continuing vocational training for both employed and unemployed workers. In light of the increased importance accorded continuing vocational training, two fundamental questions warrant closer attention:

- (1) Who gets trained?
- (2) What are the effects of training?

(1) Who gets trained?

Most research on continuing vocational training suggests that participation is highly selective: those with higher educational attainment receive more training than the low-skilled, and the employed receive more training than the unemployed, who in turn receive more training than those not economically active. To the extent that this is the case, then current allocation principles are in inverse relation to need, and training is more likely to exacerbate rather than mitigate existing labour market inequalities.

(2) What are the effects of training?

The wealth of empirical research on the labour market effects of initial education stands in stark contrast to the paucity of research on the effects of continuing vocational training. While the assessment of the impact of active labour market programmes for the unemployed has become a vibrant and increasingly sophisticated field, most empirical work has been confined to relatively short-term employment and earnings effects.

Theoretical Framework

The dominant theoretical framework in the field of training is the human capital approach, deriving from Becker (1975), which situates the training participation decision in a classical utility maximising framework within competitive labour markets: individuals undertake training on the basis of their estimate of future returns (wages and employment prospects). Access to training is thus not regarded as problematic, although market failures and barriers to training (such as imperfect capital markets, and/or imperfect information) may lead to sub-optimal investment in training.

With regard to continuing vocational training of employees, the human capital approach emphasises the distinction between “general” versus “specific” training.

General training is defined in terms of its transferability: general training may be of use to current and subsequent employers, whereas specific training is of use only to the current employer. In this approach employers are less likely to pay for general than specific training, since other, non-training' employers can pay higher rates to workers who have received general training from their current employer. This has obvious implications for who bears the cost of training, and a consequence of this market failure is that there is under-investment in training.

A key assumption of the human capital approach is that labour markets are competitive. This assumption, and its implications for training, have been challenged. The empirical literature has found: (1) that the theoretical distinction is difficult to operationalise; and (2) that many employers pay for both general and specific training (see, e.g. Loewenstein and Spletzer, 1999; Bishop, 1996), suggesting that the situation is more complex. Reasons advanced for why employers may pay for general training emphasise transaction costs (including asymmetrical information) and institutional factors, including wage compression due to trade union effects or collective bargaining at sectoral or national levels, as well as labour market regulation, including employment protection legislation (see e.g. Acemoglu and Pischke, 1999).

With regard to the returns to training, human capital theory anticipates that the returns, in the form of wages, are "smooth", so that additional periods of continuing vocational training should have, on average, positive and linear effects on wages. Again, however, institutional factors, including wage compression and differential labour mobility may alter the returns to training in differing institutional contexts, for example, across countries.

In contrast to the human capital model, the segmented labour market approach focuses more on the characteristics of jobs rather than individuals, and thus on the demand, rather than the supply-side, of the labour market and argues that different labour market sectors impose structural limitations both on the returns to education and experience and on the career prospects of workers (Doeringer and Piore, 1971; Gordon, Edwards and Reich, 1982). At their simplest, labour market segments can be dichotomised, with the primary market consisting of well paid and secure employment as opposed to jobs in the secondary market which are poorly paid and are of a precarious nature with few or no prospects for upward mobility. From this perspective, workers in the secondary labour market are less likely to participate in job-related training, and the returns to such training are lower. Workers in the primary segment(s) are more likely to receive training, the returns are higher, and such training is likely to be associated with upward mobility, perhaps in an internal labour market.

Evidence

There is a substantial body of evidence indicating that in-career training is stratified, with the result that those with higher skills, or educational attainment are more likely to participate in training, and in training sponsored by their employers (Lynch, 1994; OECD, 1999; O'Connell, 1998 and 2002; Schömann, 1998; Blundell et al., 1996).

Older workers are also less likely to participate in job-related training (Gelderblom and de Koning, 2003). Larger firms, and those that pay above average wages are also more likely to train their employees (O'Connell, 2002). Part-time workers and those on temporary contracts are less likely to receive training (Arulampalam and Booth, 1998).

Table 3.2: Participation in Job-related Continuing Vocational Education and Training by Level of Educational Attainment, Selected European Countries

	Ref. year	Lower Secondary	Upper Secondary	Tertiary	All
Belgium ¹	95/96	4	19	33	14
Denmark ¹	98/99	29	51	70	49
Germany ¹	2000	9	26	43	29
Ireland ¹	95/96	9	21	41	16
Italy ¹	98/99	6	27	46	16
Netherlands ¹	94/95	14	27	40	24
Norway ¹	98/99	22	44	62	44
United Kingdom ¹	95/96	28	52	70	40
Sweden ²	99	25	40	60	43

1. Source: OECD, *Education at a Glance, 2002*, Table C4.1

2. Source: Statistics Sweden, *Education Yearbook*. Refers to training during first half of year.

Table 3.2 above presents the pattern of participation in job-related training by level of educational attainment for a selection of European countries in the mid- to late 1990s. It reveals a familiar pattern in which participation in training is closely related to initial education, suggesting that current patterns of training are likely to exacerbate rather than mitigate labour market inequalities. Of interest here, however is that the training gap between those with low and high levels of educational attainment tends to be smaller in countries characterised by comparatively high overall rates of training participation. This raises the policy question of whether interventions to increase the overall national rate of training would increase training among those with lower qualifications, or interventions to redistribute training opportunities to those currently exhibiting low participation would lead to an increase in the overall rate of training participation.

Most information on continuing education and training derives from individual level survey data. However, research on enterprises confirms the stratified nature of training participation. Hughes, O'Connell and Williams (1993) show that enterprises engage in more training of their employees when they experience labour and skill shortages. However, while the vacancy rate among professional and technical workers is associated with an increase in training, vacancies among low skilled workers have no impact on enterprises' training activities. In general, research on firms suggests that both the incidence and intensity of training is higher in firms characterized by relatively advantaged workforces – in organisations where average wages are higher,

and where greater proportions of the workforce are in higher level occupations or possess higher skills (Booth and Zoega, 2000; O'Connell, 2002; Lynch, 1994).

One issue that does not appear, as yet, to have received a great deal of attention in the literature, is the extent to which these highly stratified patterns of access to continuing vocational training relate to the characteristics of individuals (e.g. education) or to the characteristics of their jobs (e.g. size, sector, size of firm). This relates to the debate between human capital and labour market segmentation approaches: do workers with lower skills receive less employer-sponsored training because of their low educational attainment, or because their lower skills increase their probability of working in the secondary labour market, a segment in which less training is undertaken? The answer to this question has obvious policy implications for how public intervention might alter the distribution of access to training.

Most empirical work suggests that there are positive wage returns to training (Blundell et al, 1996, Schömann and Becker, 2002). Empirical evidence of the impact of training at the level of the enterprise is less developed than the evidence relating to individuals, although there is a growing literature which suggests that training increases the productivity of firms and leads to higher earnings for trained personnel. Quantitative analysis of enterprise-level data has tended to focus more on the effects of training on company performance (e.g. Barrett and O'Connell, 1998; Bartel, 1989; Holzer *et al.*, 1993), although several studies have found evidence of positive effects of training on wages (Bartel, 1995; Booth, 1991; Loewenstein and Spletzer, 1997; Goux and Martin, 1997). Moreover, a number of studies have found that training enhances both company performance and workers' wages (Bishop, 1994; Groot, 1994).

One of the interesting findings from the literature on the impact of training is that the wage returns may be higher among those with low propensity to participate in training (e.g. Bartel, 1995, in the U.S.; Blundell et al, 1996, and Booth, 1991, in the U.K.; Pischke, 1996, in Germany). Higher returns to training among groups with low rates of training participation (such as those with low educational attainment) could be due to selection effects, but could also be due to higher returns to training among those with poor qualifications who nevertheless work in the primary segment of the labour market, or, in the formulation of Booth and Zoega (2002), in 'good' firms, where the average stock of human capital is high.

Research on the longer term impact of training appears to be particularly scarce. Schömann and Becker (2002) show that further training of employed workers in East Germany reduces the risk of becoming unemployed. Blundell et al (1996) show that training increases the likelihood of promotion and has a positive effect on job tenure in the UK. The long-term effects of training on both earnings and career development should be regarded as an important and fruitful area for new research, to take advantage of the improved availability of longitudinal data sets.

Discussion

While stratification in access to training participation may be universal, further research is needed on variations in inequality in access to continuing vocational

training. Institutional characteristics of national labour markets, including wage-setting institutions as well as national labour market regulations offer promising potential (Acemoglu and Pischke, 1999). They argue that national wage setting arrangements that give rise to compressed wage structures may increase the level of training, particularly general training. Where compressed wage structures coincide with strong employment protection legislation, giving rise to lower labour mobility, then the incidence of training may be higher while the returns to training lower. Analysis of the incidence and effects of training in the context of institutional differences in wage compression and labour regulation could contribute to explanations for why earnings have become more dispersed in some countries than others (e.g. the US versus many European countries).

Research into the effects of training of employed workers is, at best, a developing field. Crucial questions remain to be addressed, particularly with regard to longer-term effects of training on employment security and career progression. Again, obvious areas for investigation national labour market institutions and labour market segmentation.

Section 5: Work and Family (Stefani Scherer)⁵

Introduction

Until recently, the topic ‘work and family’ would not have appeared on the agenda of an international research project. As a matter of fact, the two parts ‘work’ and ‘family’ have for a long time been addressed separately in the scientific research and literature. Work has been studied in terms of working conditions, work commitment, quality of work, automation and work design, consequences of IT on work dimension and workers control. Family, on the other hand, has traditionally been a topic of either demographic research or feminist’s literature. This strict separation came to an halt with the changes occurring in recent decades in both the spheres, emphasising that work and family are closely related domains of human life (Edwards/Rothbard 2000, Voydanoff 1988), interacting with each other, and the results of these interactions structure individuals’ life courses.

On the one side work became a more unstable and insecure factor in people’s life course, with periods of unemployment and periods of less or little pay. In general threat to a secure work position implies a parallel threat to the family based model, which relied on such secure, long-life income and welfare rights access. Moreover, the increasingly high female activity rates undermine the breadwinner model. On the other side, family, as well, faces growing instability, increasing divorce rates, decreasing fertility, and more and more loses its characteristics as being the “centre” of social reproduction and social risk management. Fortunately, work and family interact not only in terms of failures. New forms of work go along with new forms of family and ways of participating in social life. Double income families clearly reduce the members’ risks of social exclusion, but undoubtedly create new needs and problems. Therefore, ‘Work *and* Family’, the interaction of ‘economic’ and ‘social’ have become a topic for social scientists; in order to understand current social change, both should be seen as intertwined rather than separate phenomena.

The topic, by nature, is rather broad. In this report we are mainly interested in the changes in household employment structures and the consequences of new forms of work and employment patterns on the family welfare.

Reconciling Work and Family

The linkage between the work and family becomes most obvious with regard to female employment as it often means to combine both, but the topic is definitely broader than that. A vast amount of literature documented the increase in women’s labour market participation, prevailing differences between the European countries (for an overview of recent publications: OECD 2001, Daly 2001, European

⁵ I am in dept with Gudrun Seltmann and Nadia Steiber for helpful assistance with the literature search.

Commission 1997 2002a, Glass/Estes 1997b) and contributed various explanations for the different forms and participation rates, and the shared trends of increase. Among institutional factors structuring women's labour supply is the availability of (child) care provision, financial incentives set by taxation and family transfers, the simple necessity to contribute to the household income (OECD 2002, for an overview see: Daly 2001, Lewis 1999,) or 'family-friendly' work arrangements, voluntarily introduced by firms (Evans 2001). Consequently, the work-family arrangements vary considerably according to the welfare state (Van Doorne-Huiskes et al 1999 Drew et al 1998). Stier et al (2001) and Hall (2001) empirically show that these influences are not restricted to participation rates, but affect also the patterns of participation over the life-course, as well as the consequences that come along with non-continuous participation.

The fact that employment is rising most rapidly among well-educated women, mostly living in an education-homogeneous partnership, leads to a polarisation of work-rich and work-poor households, which bears the risk of growing economic and social polarisation. Children are the major losers (living in poverty, or lacking attention in the case of dual career families. We will come back on this point). Mothers in couples are more likely to be economically active than lone mothers. Table 5.1 summarised country differences and changes over the last decade.

Table 5.1 Female Employment Rates

	All women without children aged 20-60		All mothers with children under 6		All mothers in couple families		All lone mothers		Parents employment rate (in couple families)	
	1989	1999	1989	1999	1989	1999	1989	1999	1989	1999
Sweden ¹⁾	83.7	75.6	82.3	71.5	87.8	81.9	85.1	75.9	91.6	86.3
Italy	38.0	43.1	41.3	45.7	40.7	44.9	65.5	72.2	67.6	68.0
Ireland	50.6	58.3	25.3	44.4	25.8	45.5	20.6	35.2	52.4	64.5
United Kingdom	70.8	74.3	42.7	55.8	45.3	61.3	27.5	36.8	66.5	75.1
Germany	65.0	67.3	42.6	51.1	49.4	51.4	62.0	49.7	69.3	70.9
France	60.6	64.7	52.6	56.2	52.2	56.8	60.8	51.6	71.9	72.9

Source: OECD 2001

¹⁾ Swedish Level of Living Surveys (LNU) 1991 and 2000, data provided by Tahlin. Germany 1991 (East and West).

Current Work-Family Arrangements in France, Germany, Ireland, Sweden, and the United Kingdom

Also with the beginning of the new century, women's employment rates are quite low in southern European countries, Ireland and partly in Germany, while the Nordic countries stand out with traditionally high rates, although declining over the last decade. France and the United Kingdom are as well among those countries that already exceed the EU-Lisbon target of at least 60% (European Commission 2002b).

In Sweden the presence of children seems to make little difference to women's participation in paid work (Jonung/Persson 1993, for an overview: Strandh/Boje 2002) as there are comparatively generous levels of parental leave (used also by fathers), shorter working days for parents –mothers are mainly working part-time - and subsidized childcare. Problems in the labour market and cuts in the public spending, experienced also in Sweden, have left these patterns relatively unchanged (Naesman 1999), although the recession in the 90ies increased socio-economic polarisation in the labour market (Ellingsaeter 2000, Ellingstaeter 1998) and had implications on women's ability to attain financial independency (Gonaes 1998). In France (full-time) participation rate of mothers and women in general is traditionally rather high (European Commission 1997), which partly is attributed to extensive public childcare provision (Fagnani 1998, Marry et al 1997, Brauns et al 1999). A still high, though mainly part time, market participation of mothers exists in the United Kingdom. Women, hold almost 80% of part-time jobs⁶. The need to work part-time derives partly from lacking childcare. Women, therefore, have to draw either on (expensive) private care or find flexible work arrangements that allow for the combination of both. Even more important are, thus, flexible arrangements (Lewis 1999). In Germany and Ireland (Russell et al 2002) the situation changed considerably since the 80ies. Also there, the increase was mainly due to part-time employment. In Germany we have to distinguish between the Eastern and Western part (Trappe 1996). In East Germany female labour market participation in the socialist times reached almost 90%, a large share thereof full-time. This rate dramatically fell to 63% in 1999 (Erler 1999), mainly because of the economic and social breakdown of the "Neue Bundesländer" (the new federal states) after the unification, which particularly affected the labour market situation of women. Childcare provision is still considerably higher than in the Western part, although today, besides extensive leave programmes allowing women to come back to their former job after family phase, child care coverage considerably increased also in the West.

Labour Market Flexibilisation as a Means of Reconciling Work and Family?

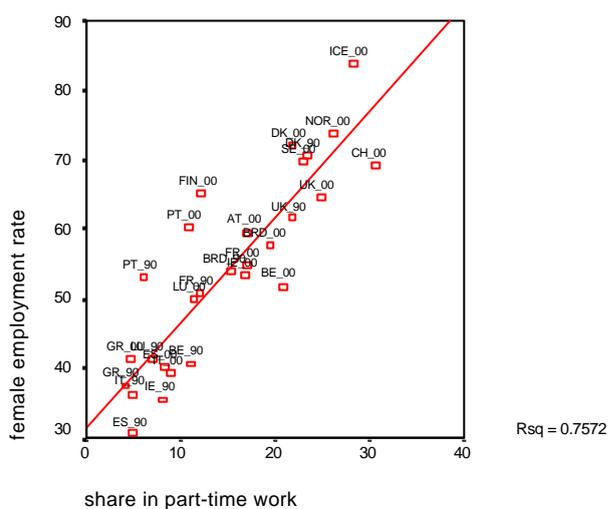
Not all jobs are compatible to the same extent with family duties. In the current debate about labour market deregulation, flexible employment is often seen a means resolving the unemployment problem, maintaining economic efficiency and competitiveness, increasing economic and social cohesion *and* enhancing equal opportunities between women and men by integrating less market attached groups of persons (European Commission 1997, OECD 1999, Snower/Dehesa 1997, Esping-Andersen/Regini 2000, Perrons 1999, Cousins/Tang 2002). 'Flexible' or 'atypical' employment is said to facilitate the reconciliation of paid work and family life.

In fact, non-standard employment (mainly part-time and temporal employment) has expanded throughout the EU during the last years- although to various degrees, distributions and consequences- and job growth has been mainly observed among so-called atypical jobs (OECD 1998, 1999, 2002, DiPrete et al 2002, Kalleberg et al 2000, Burchell et al. 1999, Felstead/Jawson 1999, Blank 1998, Hipple 2001, Rubery et al. 1998, Segal 2001). During the 1990ies part-time jobs increased by 9% while full-time and the overall number of jobs fell by 6% and 3% respectively. Women,

⁶ In the recent years, however, part-time work is increasing faster among men (Crompton 1999)

who now account for over 40% of the European labour force, are over-represented among the atypical employed; 83% of part-time workers, 70% of family workers and 50% of the temporary workers in the EU are women. Part-time work accounted for 32% of female but only 5% of male employment in 1996 (Perrons 1999, Eurostat 1997). The increase in non-standard employment (especially numerical flexibility) has been associated with the ‘feminisation’ and precarisation in the labour markets (Burchell et al 2002, Heery/Salmon 2000, Cousins 1999) and a further polarisation of the workforce (for instance Perrons 1999, Bruegel/Perrons 1996).

Figure 5.1: Non-standard employment and female participation rate (1990ies and 2000, various countries)



Source: Eurostat, own calculations.

Focussing on Europe only, we find in fact a positive relationship between the labour market participation and the availability of part time work (with the amount of part time work being dependent on the amount of women employed in the public and service sector) (Rosenfeld/Birkelund 1995). Figure 1 shows the bivariate correlation between female employment rate and the amount of part-time work in the labour market. Thus, in a large number of European countries, part time work has an important part in reconciling work and family life, providing some first support for flexibility argument⁷. However, the share of voluntary part-time varies. More people in the Nordic countries and in Southern Europe would prefer to have full-time jobs (Evans 2001).

In addition, there are clear differences between the countries in the extent to which non-standard employment is precarious or stable. In Sweden and Germany, non-

⁷ Some authors argue that the lack of women’s career orientation contributes to low participation rates and low labour market attachment (Hakim 1993). At this point, a final answer cannot be given, especially as the people’s self-expectations depend on social norms and expectations. It seems, however, important to note that besides institutional aspects cultural frames seem to be relevant (Pfau-Effinger 1996)

standard employment generally remains highly protected (except for marginal part-timers in Germany). Women in Sweden benefit from socially acceptable part-time work, which gives them lifelong continuous labour market participation. Due to the legacies of the Swedish model, a secondary labour force has not arisen to the same extent as in other countries. In contrast, much of the part-time work in the UK is of a precarious nature (Cousins 1999). Bruegel/Perrons (1996) report evidence that the introduction of deregulation and flexible working practices leads to increasing wage polarisation and an expansion of the working poor, especially women. Yeandle (1999b) argues that in all the countries under study (Denmark, France, Germany, Italy and the UK) there are trends towards polarisation between secure and comfortable employment conditions and lifestyle for some workers and job insecurity and risk in relation to the labour market for others. These changes constitute major shifts in the social division and organisation of labour.

Thus, it seems that atypical jobs might increase women's market participation (Drew/Emerek 1998) but they also involve a set of negative aspects and confront women and men with additional difficulties. For instance, for those on reduced or variable hours and temporary contracts, incomes can be both: low and insecure. These forms of work might allow women to enter paid work, but not necessarily provide an independent income. This could be one reason why these forms of flexibility are disproportionately female, since implicitly, dependency on a second source of income (whether the state or a primary [male] breadwinner) is assumed (McRae 1989, Crompton 1999). In addition, non-standard work constrains promotional opportunities and are often combined with less favourable work-situation (European Foundation 2002, Kalleberg et al 2000, McRae 1998). Nonetheless, with regard to (women's) work histories these employment forms might still be better than to stay away from the labour market entirely.

To explore the nature and consequences of non-standard employment is one of the most interesting research topics for the future- not just with respect to female employment. To enhance our understanding a straightforward and detailed distinction of several 'atypical' work forms is necessary and we need to keep in mind that they might mean different things depending on the institutional context. An other important point is their potentially 'transitory' character: if 'atypical' employment constitutes a mean to bridge problematic employment situations and allows to meet specific requirements of certain situations (like the need for more temporal flexibility of mothers with young children (McRae 1989), their evaluation will surely to be more positive than if they have a permanent (negative) impact on employment and social chances and induce new social divisions or even polarisation. Once again, this points to the importance of adopting a life course perspective dealing with these topics.

New Forms of Household Employment Structure

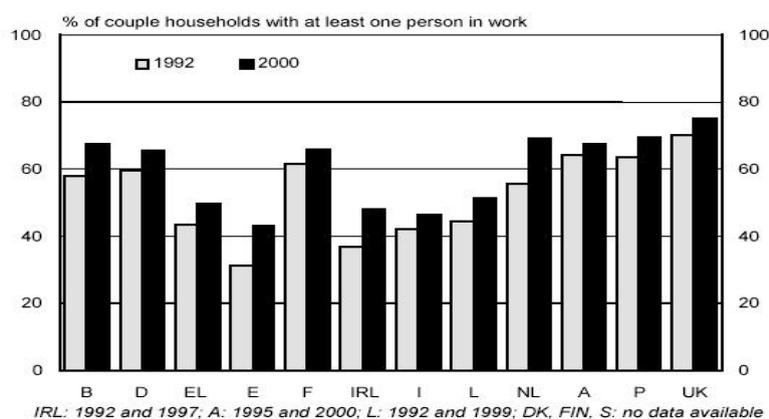
So far, we have been considering the individual level only. However, as families have a certain capacity to manage social risks and to cope with market insecurities, it is necessary to consider the household level (DiPrete 2003) and changes in the family structure (McManus 2003) - like the increased divorce risk, reduced fertility, increase in single (parent) households, extensively documented by demographic and other research (Drew et al 1998, Franco/Winqvist 2002b) - to assess the impacts of changes

(Del Boca/Pasqua 2002) and effects of institutional frameworks sufficiently. One of the challenges for future research thus lies in bringing together changes in the family structure and the employment structure.

A first step in this direction is to consider household employment patterns rather than individual participation rates. Figure 5.2 documents the increase in dual income households over the last decade (The graph are taken from Franco/Winqvist 2002a), going along with women's increased labour supply.

Figure 5.2

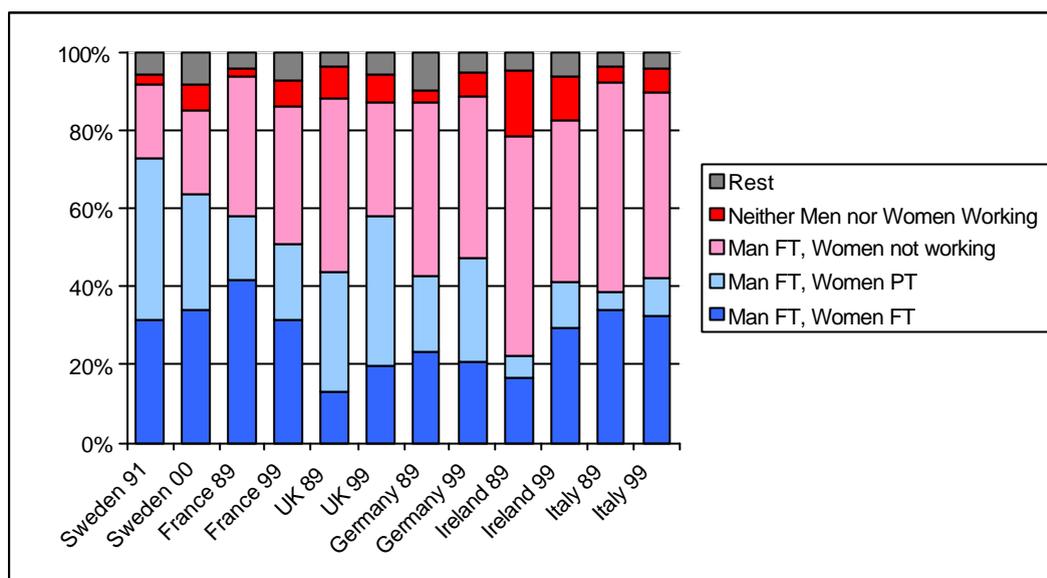
Fig. 1 Dual participation households, 1992 and 2000



Source: Franco/Winqvist 2002a (percentage of couple households among those households with at least one person in paid work).

Figure 2 further specifies this change for couples with young children, reporting the key employment patterns of the households. In Italy and Ireland the male breadwinner model is still prevailing. In the United Kingdom and in Germany it was only in the 1990ies that with the increase in women's part-time work this picture changed slightly. Opposite trends are visible for Sweden and France, where the participation of young mothers decreased over the last decade (Fagnani 1998), in Sweden due to a reduction of part-time work, in France in full-time work. Table 5.1A in the appendix provides the figures also for single parent families, showing that the amount of market participation of lone mothers rather decreased over the last decade. Finally, table 5.2A in the appendix documents the differences between parents and non-parents and again the fact that, despite different overall participation and levels of part-time work in the countries, in Sweden, the United Kingdom and Germany families with children often opt for a one and a half income model, with the women working part-time.

Figure 5.3: Employment patterns in key family types (couples with children under 6)



Source: OECD 2001, Swedish Level of Living Surveys (LNU) 1991 and 2000, data provided by Tahlin

Besides the description of the changes in household employment patterns a rather recent line of research is occupied with the parallel development of couple's work histories, taking into account the current family cycle and employment situation of the spouse (Blossfeld/Drobnic 2001, Bernasco 1994). Independent of their own status, women of men with less income are more likely to join the labour market to contribute to the household income in this way, which is in line with economic theories. However, despite their lower level of labour market participation, wives of men with socio-economic better positions tend to have better job, which is in line with sociological ideas about social networks (Bernardi 1999, Bernasco et al 1998). At the same time, unemployment cumulates among couples: women with unemployed partners are less likely to have a job. McGinnity (2002) shows that these effects are mediated by the institutional context, with wives of unemployed husbands in Britain being especially unlikely to go for a job to compensate the income loss. The contributions in Blossfeld/Drobnic (2001) confirm this impact of the national context on household employment structures and family formation decisions.

3. The Impacts of Employment

Paid work provides the economic means for the survival of the family. In addition, it can be a source of satisfaction, as well as, a source of strain and stress. The greatest potential of stress is carried by double income families with children. The amount of time spent in work sets the boundary for the time left with the family or leisure activities. While too much time can undermine personal and family welfare, too little time might endanger family's economic security. The increase in dual income households or (working) single parent families contributes to the increase in time pressure (Jacobs/Gerson 2001, Jacobs Gornick 2001). The increased labour market participation of women from their own point of view has to be evaluated clearly positive as it provides them with more economic independency (becoming even more important with the increasing instability of families) and preventing the erosion of

their skills (Joshi 1998). However, there might be negative aspects attached to it for the family welfare (Glass/Estes 1997a).

Additionally, some recent changes like the increased insecurity (economical and temporal), induced by high unemployment risks, the increase in fixed term contracts and the erosion of employment protection in general, force individuals to cope with different and probably higher risks (Müller/Scherer 2003, Laditop/Wilkinson 2002, Yeandle 1999a). 'Flexible' working time and extensive overtime work might be at the expense of family welfare. While on the one side, flexible work arrangements might ease the combination of work and family, they might, on the other side, have the capacity to add stress and strain on the individuals and, consequently, their families. These negative externalities of insecure labour market situations contribute, although indirectly, to the societies' social problems. The detailed ways and circumstances the increase in double income families and recent market deregulation affect family welfare constitute an interesting area for future research.

A huge amount of literature has contributed to our knowledge about the impact of certain labour market statuses, work arrangements and contractual situations on individual well-being, satisfaction,⁸ and occupational mobility. Less investigated is the impact on family welfare. Many studies link negative health effects directly to financial problems. Other studies provide evidence of the non-financial benefits of work for the mental health, evidence that job insecurity and threat of job loss result in increased psychological disturbance and point towards the negative effects of flexible working arrangements, which might intervene with family life (Bartly et al 1999, Whelan 1994, Burchell 1994, Gershuny 1994, Lampard 1994, JRF 2002, La Valle/Arthur, et al. 2002, European Foundation 2002, Bellaby/Bellaby 1999, Aronsson 1999, Glass/Estes 1997b). These disadvantages accumulate over the life course and thus may have effects well beyond the experience of the current situation. Strandh (2000) reports for Sweden that entering a permanent employment after a period of unemployment comes along with a larger increase in mental well-being than entering temporary employment, with these differences not being directly the result of different financial situations but rather by how the new status allowed resolving long-term insecurity. Sparks et al (1997) show that working long hours can be detrimental to health. They discover in a meta-analysis a small but positive relation between hours at work (overtime and shift work) and ill health. Finally, Stolzenberg (2001) reports evidence of wives long working hours on their husband's health. There are, however, considerable country differences in the way unemployment and market insecurity in general affects the individual well-being (Gallie/Russell 1998, Gallie et al 1994, 2000).

Despite the increased employment rate of women, they still carry the vast part of domestic tasks and childcare (Sorensen 2001, Joshi 1998, McRae 1989), as is shown by time budget analysis⁹. And although the labour market attachment of women varies between different welfare states, differences in the gender division of domestic and parenting work are minimal (Windebank 2001). Therefore, in addition to strain induced by the work itself, women are exposed to a double burden and stress from

⁸ Part-time employees seem to be more satisfied than full-timers (Dex 1999) while overall job satisfaction is generally lower for temporary than for permanent workers (Kaiser 2001).

⁹ However, the most egalitarian parenting and domestic arrangements were found in households in which both parents were employed full-time (Ferri/Smith 1996).

both, work and family. Bratberg et al (2002) provide some empirical support for the double burden hypothesis. Once controlled for selectivity mechanisms (in the sense that only those with higher capacities to combine job and family join the labour market), the number of children increases sickness absence.

Obviously, the situation of the family displays also effects on the children. As we know, their current and further life-chances are strongly dependent on the employment and income situation of their parents as well as on the family composition, respectively their stability. Current research about social mobility underlines the still overwhelming importance of the families' socio-economic situation. The rising temporal insecurity of employment situations as well as women's changing roles leads to new risks, but also to new chances for children.

Parents' employment patterns can have long-term consequences for their children's development as their educational attainment seems to be sensitive to the amount of time especially mothers spend with them: there is evidence for negative effects of women's full-time employment on the educational attainment of their children, especially in the pre-school years. Father's employment situations seem to be less important. These negative effects, however, might be offset by increased family income, which shows a positive effect on educational attainment and economic performance of the children. Couples in which both spouses were employed full-time had the tendency to be better qualified and have higher status occupations than couples in which both were unemployed (Ferri/Smith 1996). Thus, female-employment per se has not a negative impact, but it should be ensured that female work participation, in fact, increases the economic situation of the family significantly, which might be a problem especially for parents of low socio-economic background (Ermisch/Francesconi 2001, 2000 - for the United Kingdom). To limit negative effects of atypical and long working arrangements, individuals must be given some choice about their working time arrangements, in order not to intervene too much with their family life. But again, conclusions vary with the institutional context and with regard to the respective outcome dimension. Menaghan et al (2000) finds for the U.S. that children whose mother was constantly employed are least prone to behavioural problems, while those with mothers never working were the most prone. The quality of work affects the stability of work patterns, but apart from that, has no direct effect. With regard to the family composition, what seems to matter for children's normal behaviour is the stability of the family composition.

Fertility

The impact of household employment structures is not restricted to already existing families but also concerns the family formation process itself. In fact, fertility rates have been declining significantly over the last decades - table 5.2 provides the details. This decrease was repeatedly discussed in conjunction with the increased female labour market participation (Brewster/Rindfuss 2000), often with the assumption women would either limit their fertility to accommodate their labour force activity or adjust their labour force behaviour to their fertility.¹⁰ Empirical evidence suggests that they do both and that strategies vary across national settings.

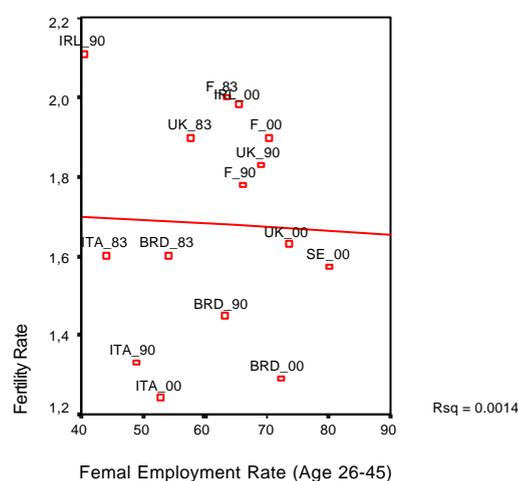
¹⁰ Joshi (1998) points to the fact that also fathers might and should be affected by the decisions for children.

Table 5.2: Fertility Rates

	1983	1990	2000
Sweden	1.70	2.13	1.57
Italy	1.60	1.33	1.24
Ireland	3.30	2.11	1.98
United Kingdom	1.90	1.83	1.63
Germany	1.60	1.45	1.29
France	2.00	1.78	1.90

Source: www.childpolicyintl.org

In general, work and family became less mutual exclusive with the recent social changes. Until the 1970ies, respectively the 1980ies, a significant negative correlation between fertility and female employment can be found, but the correlation is insignificant or at least weaker afterwards (Engelhart et al 2001). This result is consistent with the assumption that changes in the institutional context like childcare availability and attitudes towards working mothers have reduced the incompatibility between childrearing and female employment. And also the less sophisticated, but very clear presentation of figure 5.4 underlines that we are not talking about mutually exclusive processes. As mentioned above, the availability of part-time employment is an element contributing to the compatibility between childrearing and female labour market participation.

Figure 5.4: Fertility by Female Employment Rate

Since recently, the increase in economic instability is seen as having a part in explaining overall decreasing in fertility rates. Taking long-term commitments like marriage or parenthood requires some stability in the life circumstances and a secure economic basis. Almost all European countries have experienced increased levels of deregulation and flexibilisation. Golsch (2002) provides some empirical support for the hypothesis that insecurity matters for the entry into first parenthood in Britain and

Spain. The impact of insecurity is gauged through individuals' employment relationships and their satisfaction with job security. In both countries, the induced insecurity seems to make transitions to first parenthood less probable, but with nation- and gender-specific adaptation strategies. In contrast, two studies on West Germany do not find significant empirical evidence for the impact of temporal insecurity induced by having a fixed term contract for the transition to fatherhood. This finding might be due to the fact that the non-permanently employed are a rather heterogeneous group and these positions might also be entry ports in predictable internal careers. In sum, for men it clearly matters if they are employed or not, but not what kind of contractual situations they are in (Kurz et al 2001, Toelke/Diewald 2002). Interrupting the working career (mainly for unemployment but also for education) clearly lowers the likelihood of becoming a father. A strong career orientation with upward mobility shifts, as well is accompanied by postponement of having children, potentially until it is too late. Men with stable, lateral careers have the highest chances of setting up a family.

Insecure labour market positions are likely to have different meanings for men and women, and, advantage or not, women always have the alternative mother role which they can take if labour market career is not performing according to the expectations. The idea gets support from the finding that unemployed women are more likely to marry and to have kids.

That these results are strongly dependent on the institutional context is shown by the comparison with the Eastern German sample (Toelke/Diewald 2002). For men, no reciprocal effects between family and work decisions were found at all. In contrast, other research argues that the increases in uncertainty subsequent to the transition of East Germany into a market oriented Federal Republic of Germany could have contributed significantly to the dramatic decline in fertility in the formerly socialist country that was observed in the early to mid 1990s. Studying the impact of economic insecurity on the likelihood the bear children in East Germany after the re-unification, Bhaumik/Nugent (2002) find empirical support for that idea. The fact that these uncertainties seem to have declined in recent years, especially after 1994, may also explain why the decline in fertility seems to have stalled and even reversed in the last few years.

Appendix

Table 5.1A: Employment patterns in key family types

	Couples with children under 6							
	Man full-time Women full-time		Man full-time Women part-time		Man full-time Women not working		Neither men nor women working	
	1989	1999	1989	1999	1989	1999	1989	1999
Sweden	31.5	34.1	41.2	29.7	19.1	21.3	2.3	6.5
Italy	33.9	32.6	4.7	9.5	53.7	47.5	4.0	6.3
Ireland	16.9	29.6	5.3	11.4	56.6	41.8	16.5	10.9
United Kingdom	13.2	19.5	30.7	38.4	44.5	29.4	8.0	7.0
Germany	23.3	20.9	19.4	26.3	44.4	41.6	3.4	5.9
France	41.9	31.3	16.1	19.7	35.8	35.1	2.0	6.6

	Single parent families (women)					
	Women working full-time		Women working part-time		Women not working	
	1989	1999	1989	1999	1989	1999
Sweden	59.8	55.2	25.3	20.7	14.9	24.1
Italy	52.8	58.7	6.4	10.8	40.8	30.5
Ireland	13.3	15.5	4.1	6.2	82.6	65.9
United Kingdom	7.2	12.5	16.4	21.7	76.4	65.8
Germany	39.1	24.0	20.3	23.9	40.6	52.1
France	55.8	34.9	11.8	14.1	32.4	51.0

Source: OECD 2001, Data for Sweden provided by Tahlin.

Table 5.2A Combination of dual participant households (among couples with at least one working) in 2000

	One earner couple	Man full-time Women full- time	Man full-time Women part- time	Man part-time Women full- time	Man part-time Women part- time
Non-parent					
Sweden	29.2	48.0	17.8	2.8	2.2
Italy	53.5	34.9	9.0	1.3	1.3
Ireland	45.3	43.5	11.2	.	.
United Kingdom	20.9	55.2	21.2	1.6	1.6
Germany	30.1	47.5	20.4	1.2	0.8
France	31.8	52.3	13.2	1.6	1.1
Parent					
Sweden	20.7	44.8	31.3	2.0	1.2
Italy	53.6	31.2	13.0	0.9	1.3
Ireland	55.5	27.1	16.2	.	.
United Kingdom	29.8	28.6	40.0	0.9	0.7
Germany	39.7	26.1	32.9	0.7	0.6
France	36.0	45.4	16.3	1.1	1.2

Source: Eurostat. ¹⁾ IRL and UK: 1999, Swedish Level of Living Surveys (LNU) 1991 and 2000

Provisional Conclusions

This review paper very much represents work in progress. Our focus has been on the main trends of change. There is clearly much more that can be explored on the basis of existing data. In particular, we have not yet systematically addressed the question of whether or not the evidence points to a polarisation or convergence in the experiences of different categories of the workforce, although this is clearly of fundamental importance in assessing a number of influential labour market theories. Nonetheless the review to date already points to a number of issues where we suspect that fresh research will be needed to provide well-grounded conclusions. To give some examples:

The evidence available points primarily to a process of upskilling, but apart from research in Sweden (and the US), we do not know to what extent this can be accounted for by compositional shifts in the structure of occupations or by the upskilling of existing jobs. There is also a dearth of research on the differences between countries in the skill requirements of jobs and it is yet far from clear that the existing indicators used in national studies can be used to achieve this.

While the demand for higher qualifications has grown, there is increasing evidence that the supply has grown even more rapidly in some countries. But what exactly does such 'skill mismatch' mean and what are its consequences? Most such analyses have failed to take into account the type of qualifications that people possess, so in practice we know little about their relevance for the field of work. It is also important to establish whether situations of skill mismatch endure over time or represent transient phases in people's work experience (for instance reflecting entry points to jobs with career ladders). Depending on duration, the long-term consequences for skill development and motivation could be quite different.

Skills in aggregate may have risen, but, contrary to theoretical anticipation, there has been no general tendency for an improvement in the quality of work tasks. Although task discretion increased in Sweden and France from the 1980s to the mid-1990s, there was a marked decrease in Britain in the 1990s (and probably in other countries at the end of the decade). There was also no improvement in the degree of job interest as reflected in measures of variety or monotony. There are different possible explanations for this, but at the moment there is little firm research evidence for any of them. There may have been a sharp polarisation in the experiences of different groups or aspirations may have risen (possibly as a result of increasing levels of general education). Since such factors are central to theories of work motivation and work strain, they would repay careful exploration.

The widespread view that work pressure was increasing was generally confirmed until the mid-late 1990s, but after that there is some evidence that it levelled out or even may have declined. There are no existing theoretical explanations of why this should be the case. It raises the issue of whether research on work pressure may have been too pre-occupied with intra-organisational factors and may have neglected the broader economic environment with its implications for levels of organisational activity.

As with skills, the scenario of rising levels of in-work training seems to be confirmed by the evidence for most of our countries. However, training opportunities were sharply differentiated by previous educational attainment, so they may well have accentuated rather than to have mitigated existing inequalities in skill attainment. But there is a major gap in our knowledge with respect to the longer-term implications of work-life training. Is it largely symbolic in function, designed to strengthen a feeling of involvement in the work community? Or does it help to protect people from the risk of unemployment and open up new opportunities for career advancement?

Although it has been the most recent aspect of job quality to become salient in academic and policy discussion, the opportunities that jobs provide to achieve an acceptable balance between work and non-work activities has now become a central topic of research. Given its relative recentness, there is understandably less cumulative knowledge on this than on other job characteristics although it is expanding rapidly. The issues partly link with those of 'labour market precarity'. A-typical forms of employment may provide greater opportunities to devote time to the family when domestic pressures are greatest, but it remains unclear whether this is achieved at a high long-term cost in terms of people's careers. In part this depends on the degree of fluidity between a-typical and regular jobs, on whether people tend to become trapped in a-typical jobs or can move relatively easily into regular employment when their circumstances change.

Another key issue is the costs and benefits in terms of family welfare of different family employment patterns. Some evidence for instance points to a negative effect of women's full-time employment during the early child-rearing years on children's attainment, other research emphasises the positive aspects of increased and stable household income on children's development. But we understand little about the mechanisms that might underlie this and the factors that determine different forms of family adjustment to the pressures of dual labour market participation. Knowledge of the implications of family work patterns for other aspects of relations between partners and for the quality of leisure life remains very underdeveloped.

Finally, it has become clear in carrying out the review just how little truly comparable, high quality, data exist for examining differences between countries. National studies tend to use distinctive indicators so that while we can compare broad trends we can say very little about differences of level. The European data sets that exist have comparable indicators but they are often of a rather low level of precision and based on less than ideal samples. In particular, this makes it very difficult to assess whether differences in institutional structure or policy have significant implications for the issues of the form taken by upskilling, the nature of job design, the implications of work-life training, the precarity of a-typical work and the pressures of combining family and work life. There is a need then for more systematic investigation of the similarities and differences that exist between the patterns that emerge from national and European-wide data sets and for a thorough consideration of what would be required to produce adequate comparative evidence for the longer-term.

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THEME 4 CHANGES IN FAMILY LIFE

THEME COORDINATOR PROF. JAN O JONSSON

QUALITY OF LIFE – FAMILY RESEARCH

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INTRODUCTION

It could be argued that the quality of life, or living conditions, of most people center around some important social institutions. The family, the school, the labour market, and the welfare state are the most prominent in modern western societies. The role of the family is comprehensive. If we see it in a life-course perspective, the family is the crucial environment during the first years; the influence of the family on socialization and the continuous interaction during childhood and adolescence is of great relevance for the formation of an identity as well as for educational attainment and hence labour market opportunities; as adults, most form their own family with responsibilities towards a spouse, children and ageing parents – responsibilities that often have to be negotiated with the need and wish for gainful employment; and finally many rely on the family during their own old age. The functions of the family are, among other things, to provide social and economic support, intimacy, and socialization of children (though other institutions are also important in these respects).

Given the importance of the family for individual's resources and well-being, much attention has been drawn to questions about changes in the family institution. They range from pure demographic changes – such as the long-term decrease in fertility and thus sibship size – to changes of the social and economic role of the family, roles that have been taken over partly by other institutions such as the school and the welfare state. If we concentrate on the post-war period, the major changes that are of concern for social scientists have been:

- Decreasing fertility and sibship sizes
- Increasing schooling
- Increasing use of pre-schools
- Increasing support by the welfare state to families
- Decreasing economic dependency and division of labour between spouses, mostly due to increasing labour market attachment of women
- Increasing divorce rates and increasing family reconstitution rates
- Decreasing marriage rates and increasing cohabitation rates
- The rise of new family forms (also besides cohabitation)
- Changing patterns of nest-leaving
- Changing role of family for (social and economic) support (e.g. during old age)

These changes have of course been different in different countries with some “taking

the lead” on some dimensions. For example, schooling increased perhaps most strikingly in the U.S., day-care in France and Sweden, divorce rates in the U.S., while cohabitation first boosted in Denmark and Sweden. Other countries are more prominent for being exceptions to the general trends, such as Ireland which only recently has witnessed dramatically decreasing birth rates and Ireland and Italy in which divorce rates have stayed very low. Though there are hardly any paths that countries are predestined to travel, the commonality of changes has been impressive when it comes to, e.g., increased schooling and decreasing fertility.

Comparative studies show, however, that there is a great divide among European countries when it comes to family arrangements, a divide which to a large extent, though not entirely, overlaps with the religious divide between Catholic and Protestant countries. To put it simple, it appears that in Catholic countries there is “more family”. Thus, household composition is remarkably different with early nest-leaving being the rule in the Nordic countries, single-person households being common in most of northern and central Europe while three-generation households are much more common in the Mediterranean countries.

While family arrangements look different around Europe, it is still possible that much in family lives are basically the same. For example, it is very likely that the family is the absolutely most important base for socialization all over Europe (and probably the rest of the world), and it is not unlikely that the social support is similar (while the economic role of the welfare state has superceded that of family in some countries, e.g., via extensive pension coverage during old age). It is also possible that the consequences of family changes – such as divorce – are much the same across countries.

The current report will highlight some of the issues of “family change” in Europe and point to both similarities and differences. Most importantly, however, we will point to areas where there is little research, or inconclusive evidence, and questions which still need reliable answers. The report is in two parts. The first show descriptive statistics of major family changes, such as changes in divorce rates, in a comparative perspective (and already there we shall see that there are differences between countries in the degree to which we know about family structures). The second will review the research in a number of well-defined areas, concentrating on more analytical issues, such as causal effects of family changes. The areas we have covered must be seen only as a sample of a population of areas that is both indefinite and undefined; though we have aimed at treating the most important issues.

PART I: FAMILY CHANGE AND FAMILY PATTERNS IN EUROPE

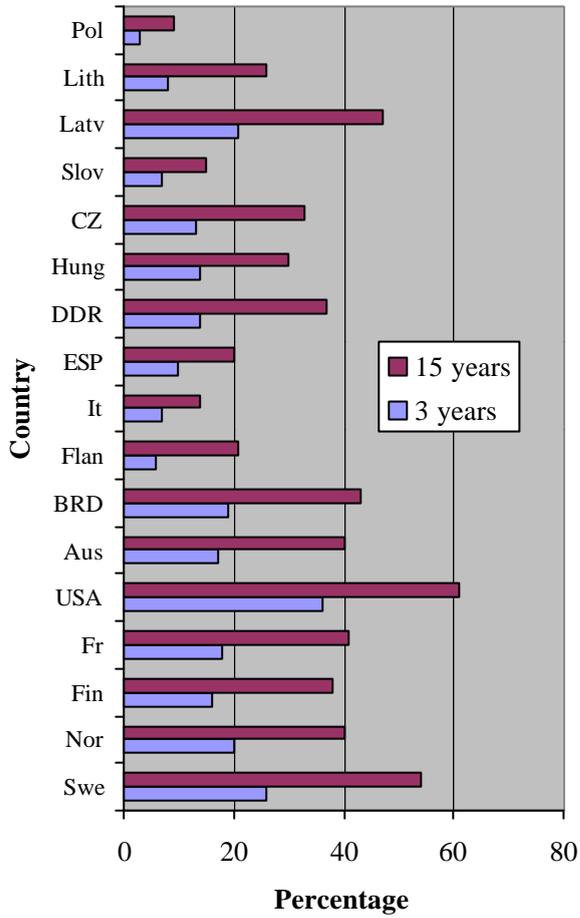
This part will consist of descriptive statistics of the most basic and important social changes that concern the family (where statistics are available).

DIVORCE AND SEPARATION

Jan O. Jonsson, Swedish Institute for Social Research

Goode (1993), in a much cited study compared divorce rates and trends in these across the world. One problem with those figures is that non-marital unions are not counted, so for those countries in which cohabitation is common the estimates are not particularly helpful. Another problem is that they are general figures averaging over cohorts at some cross-sectional time period. A superior way of studying separation statistics is to use information on the timing of cohabitation, marriage and separation. This information is collected especially in demographic family surveys, and Gunnar Andersson has cleverly compiled descriptive statistics on survival rates of unions across Europe and the U.S., using 16 national (and one regional) data sets from such surveys (Andersson 2002, 2003; see Andersson and Philipov 2001). By using an estimation model he calculated the likely separation rates for the six years preceding each survey (mainly conducted in 1990-1995) at different union durations. Figure 1 shows the cross-national picture for these estimated separation rates at 3 and 15 years of cohabitation or marriage (whichever comes first).

Fig 1. Cum % separated, all unions (Andersson 2003, Tab 3)



It is striking how great the between-country differences are in separation propensity. At the top of the “separation list” is the U.S.A., followed by Sweden and Latvia, then the other Nordic countries, Germany and Austria; and at the bottom end, where union dissolution is very rare, we find a number of nations (on both sides of the iron curtain) dominated by the Catholic church. (And Ireland is not in the study, which would otherwise strengthen this picture – but note that France does not belong to the lower part of the league.)

At least for those who take a non-religious stance on unions it is not especially important whether people live together or apart, or swap partners now and then, as long as children are not involved (this view is of course culturally influenced). It is thus particularly interesting to study separation from the children’s perspective. Andersson also calculated separation estimates for unions with children (starting with the birth of the first child or cohabitation/marriage in unions with children, whichever comes last), and found lower separation rates but a pattern that is fairly similar to the one in Figure 1 (Andersson 2003, Table 6). He also calculated the very relevant figures of what proportion of children who have experienced their parents’ separation at various ages in different countries, a summary of which is shown in Figure 2.

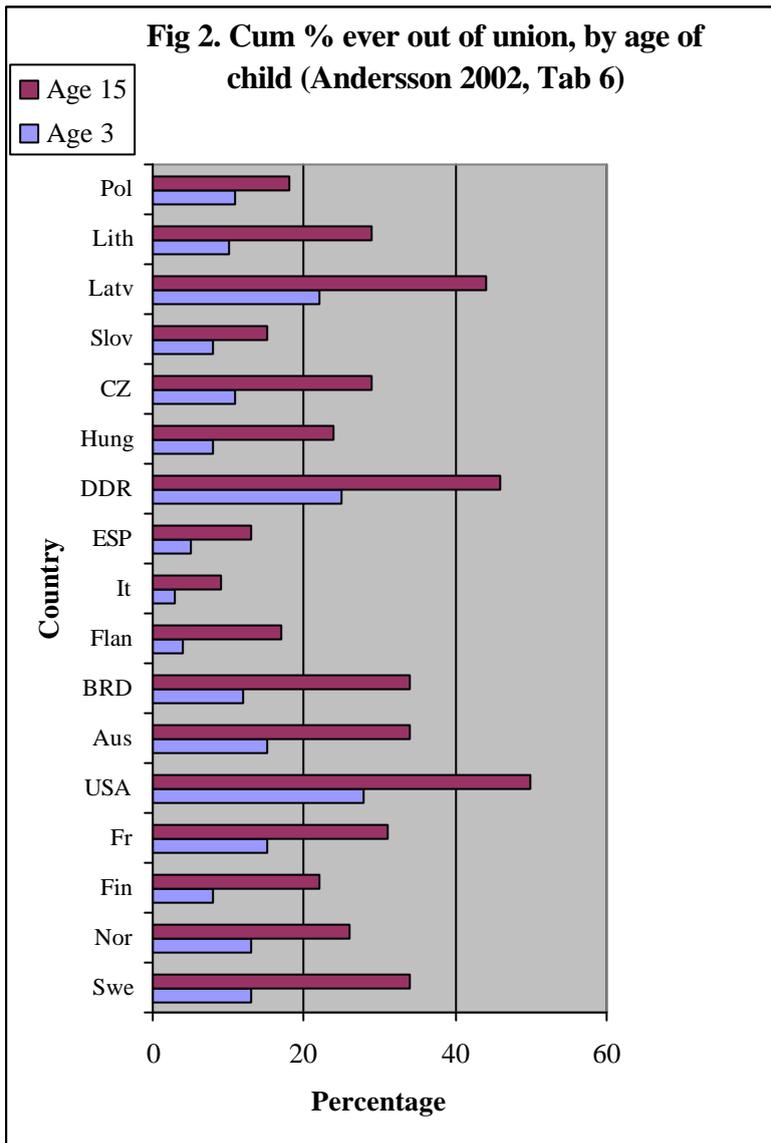


Figure 2 shows that the disadvantaged position of the Nordic countries is less accentuated when taking the children's perspective. Otherwise, the end positions of the U.S. and the Catholic low-divorce countries (Spain, Italy, Poland, and Slovenia) are very much in line with what was shown in Figure 1.

PART II: FAMILY RESOURCES, RELATIONS, AND STRUCTURE – A REVIEW OF CURRENT ISSUES

CONSEQUENCES OF DIVORCE FOR ADULTS

Michael Gähler, Swedish Institute for Social Research

Divorce is associated with a number of negative outcomes for individual adults. For example, divorcees exhibit substantially higher admission rates in psychiatric clinics and hospitals than individuals in intact couples, and they more often suffer from anxiety, depression, anger, feelings of incompetence, rejection, and loneliness. The divorced also exhibit a higher mortality risk, particularly behavior related mortality such as suicide, motor vehicle accidents, homicide, and they more often die from coronary disease and cirrhosis of the liver, a cause of death that is often a consequence of alcohol abuse. In addition, divorcees have smaller social networks and are more likely to lack social support. They also more often experience negative life events, job-related problems, and physical ill-health. Furthermore, divorced women are likely to be exposed to economic hardship (see the reviews by Bloom, White & Asher 1979; Holden & Smock 1991; Kelly 1989; Kitson et al. 1989; Kitson & Morgan 1990; Raschke 1987; Simons, Johnson & Lorenz 1996; and recent studies by Gähler 1998; Hemström 1996; Jarvis & Jenkins 1997; Johnson & Wu 2002; Lorenz et al. 1997; Mastekaasa 1995; Simon 2002).

Tempting as it may be, it would be premature to conclude that divorce, per se, deteriorates these living conditions. There are at least three important reasons to be cautious. The first, and most severe, is that, in principle, “effects of divorce” cannot be estimated. We cannot tell whether individuals would have fared in another way had they not divorced, since a proper test would demand “that the same individuals can follow two mutually-exclusive paths through the life-cycle and that the associated outcomes can be observed” (Ní Bhrolcháin 1997:3). This is a common problem in social science which cannot be solved. Lacking the opportunity to conduct a classic experiment, a “solution” to this problem, however, widely accepted among social scientists, is to control for differences, other than the divorce itself, in a multivariate analysis. If differences between divorcees and others do (not) remain after

relevant characteristics have been controlled for, it is an indication that divorce does (not) affect the individual. The other two reasons, *reversed order of causality* and *alternative mechanisms* will be discussed below, using the most frequently studied outcomes of divorce, psychological distress, as a main illustration.

Social causation or social selection?

The question whether a characteristic (i.e. psychological distress) is permanent in the individual or arises in the wake of changes in other living conditions (i.e. divorce) can only be answered using a longitudinal study design where objects are followed over time. Do the symptoms of psychological distress appear in conjunction with divorce or were they already apparent before it, i.e. does psychological distress increase the risk for divorce (social selection) rather than vice-versa (social causation)? Booth and Amato (1991) and Mastekaasa (1995), both using three-wave panel data (for America and Norway respectively), show that the level of distress is higher among those who have experienced a divorce than among individuals in intact couples. A difference, however, was apparent already at a time point shortly before the divorce but not at a time point much earlier to the divorce. The interpretation of this result has mostly been in favor of the social causation hypothesis. Mastekaasa (1995), however, problematizes this conclusion by his notion of *temporary selection*, which implies that distress may not be caused by the divorce, but that it appears, instead, for some other reason and causes a marital dissolution within a relatively short period of time. Thus, temporary selection and social causation, although being theoretically distinguished from each other, are difficult to separate empirically (Simon 2002). None of the referred studies, however, support the hypothesis on “permanent selection” (Mastekaasa 1995), which claims that divorcees are more likely to exhibit continuous personality traits that make them more prone to suffer from ongoing psychological distress and an increased risk to divorce.

The evidence is inconclusive on the issue whether a divorce affects the psychological well-being of women and men differently (Kitson et al. 1989; Kitson & Morgan 1990; Raschke 1987). Gähler (1998), however, notes an interesting interaction effect between family type and gender. Using data from two time points, the results show that at a time point prior to divorce, women who would divorce within a relatively short time period exhibited a lower psychological well-being than those who remained in the same relationship. This was not the case for women who divorced later or for men. Following divorce, there are also tendencies that women who divorced more recently have a lower psychological well-being

than women who had divorced earlier. The trend is the opposite for divorced men. These results are in accordance with findings in previous studies showing that women perceive marital problems earlier, and to a larger extent, and more often initiate a divorce than men (Kelly 1989; Levinger 1979; Pettit & Bloom 1984; Wadsby & Svedin 1992).

Alternative mechanisms

Given that divorce, or conditions associated with it, cause distress, what is it about the event that has this negative impact? The *crisis model* postulates that divorce per se causes stress in the individual. A divorce may be an ambivalent experience for many former spouses. On the one hand, there may be a feeling of relief about leaving a relationship where, at least in the time period just preceding the divorce, costs were perceived to exceed the rewards (cf. Johnson & Wu 2002). On the other hand, a bond of attachment between the spouses seems to persist even after divorce, regardless of “liking, admiration, or respect” and who initiated the divorce (Weiss 1976:139). The ‘separation distress’ caused by divorce, correlates with lower psychological well-being; “(c)ontinued bonds of attachment to a partner [...] from whom one is divorced are associated with symptoms of anxiety and depression” (Kitson et al. 1989:17). Given a decrease in frequency of contact with the former spouse, it is assumed that attachment declines over time (Weiss 1976). Thus, a reasonable hypothesis would be that most divorcees adjust to their new life situation. There is no consistent support for this assumption, however. Whereas Booth & Amato (1991) and Lorenz et al. (1997) show that the level of psychological distress was significantly higher for individuals immediately after divorce than in the following years, Mastekaasa (1995) finds no difference in psychological distress whether the divorce took place 0-4 or 4-8 years earlier and concludes that divorce implies “permanent strain” in the individual (also see Johnson & Wu 2002). As reported above, Gähler (1998) finds a difference between men and women in psychological distress by time since divorce.

In addition to the possibility that the crisis surrounding the divorce may be persistent, other possible sources of strain are negative changes in economic status, social support and social network. The importance of social support for physiological and psychological functioning and coping during stressful life events or life crises is well-documented (see reviews by Oakley 1992; Thoits 1995). Thus, divorcees may often be in need of emotional support from a “significant other”. Ironically, divorce by definition implies that the individual is deprived of the support formerly (ideally, at least) provided by the spouse. Furthermore, studies repeatedly show that divorcees, in addition to the lack of a partner, generally have

smaller social networks, i.e. a smaller number of potential providers of social support, than individuals living with a partner (see Gunnarsson & Cochran 1990 [Sweden and the U.S.]; Schöningh 1992 [Germany]; Milardo 1987 for a review). This is an important finding given that network size seems to be positively correlated with the emotional adjustment of divorcees (Wilcox 1981).

Although the effect of divorce varies between societies, it often has severe implications on the economic situation of women whereas the situation for men is unaltered or even improves (Gähler 1998; 2001 [Sweden]; Holden & Smock 1991 [the U.S.]; Poortman 2002 [the Netherlands]). This is mainly an effect of three conditions: women have lower wages, they lose economies of scale, and they take main responsibility for any children. The lower economic well-being of divorced women may not only be due to an unfavorable *change* in income. It could instead, or in addition, be a consequence of income selection out of marriage, i.e. couples with low incomes are more likely to divorce than more affluent couples. This hypothesis has received support in some American studies (see Voydanoff 1990 for a review), but not in Swedish data (Gähler 1998; Fritzell 1990). Low income, economic strain, and poverty are associated with anxiety and depression in children as well as adults (McLeod & Shanahan 1993; Voydanoff 1990). Socioeconomic status is also positively associated with network size, participation in social networks, and perception of social support which, in turn, are positively correlated with psychological well-being (Thoits 1995). Controlling for different indicators on economic well-being, social network and social support often reduces the difference in psychological well-being between divorcees and individuals in intact couples (Gove & Shin 1989) or makes it disappear entirely (Gerstel, Riessman & Rosenfield 1985; Lorenz, Simons & Chao 1996; Lorenz et al. 1997; Menaghan & Lieberman 1986).

Children, although being a joy for most parents, can also complicate the divorce process. With whom is the child going to stay? How much economic support should be provided by the non-custodial parent? How often can the absent parent see her or his child? Parents, in general, exhibit higher distress levels than non-parents, mostly due to time and economic constraints associated with parenthood (McLanahan & Adams 1987). These constraints are particularly severe for single parents, who are mostly mothers. Since they are the household's only provider, they often have to increase their labor supply as a consequence of economic loss, and assume sole responsibility for household chores. Thus, the combination of gainful employment and domestic demands may be particularly stressful for single parents (McLanahan & Adams 1987; Moen 1992). Single mothers may feel guilt about not being able to perform all they want to, and they complain more often than mothers in two-parent families

that they would like to spend more time with their children (Rydenstam 1992).

Parents with *absent* children (mostly fathers) also report higher levels of anxiety and worries, and lower levels of happiness. Thus, the effect of children for divorced parents is complex. Present children may both cause time and economic constraints and a sense of meaningfulness. Absent children, while relieving some burdens, may also cause longing and frustration (Hughes 1989).

Directions for future research

Divorce is a complex process which starts already some time, perhaps even years, before the formal divorce is a fact. Many former spouses also still have a bond of attachment to each other a long time after they have divorced. To fully capture the complexity of these dimensions, large demands on data must be made.

First, data must be longitudinal and be conducted at regular intervals, starting at a point long before the divorce is a fact. Such data is also required to distinguish the order of causality. If individuals are only asked about their living conditions at one point in time before the divorce and one point in time after it, it is not possible to distinguish in what order conditions have changed.

Second, most data sets and studies lack at least some vital information. As for studies on children, studies on adults often contain satisfactory measures on socio-economic, and demographic conditions. Most studies, however, lack information on how spouses view the relationship in which they live, their level of satisfaction, how committed they are to the relationship, and level of dissension. This information is important in order to make comparisons with the relevant reference group, namely comparing divorcees to individuals in relationships that do not function well rather than those in happy marriages. Studies including such data do, in fact, indicate that living in an unhappy marriage may even be more detrimental to psychological well-being than divorce (Gove et al. 1983; Ross 1995). Furthermore, most studies lack information on who initiated the divorce and the reason(s) behind this decision. Nor is there information on whether the divorcee has a new relationship without living together. It is likely that such a new relationship has implications for the individual's well-being following divorce. Other relevant information is how divorcing parents organize the custody of the children. To what extent do children live with both parents, and how does this affect the relationship between former spouses? All these areas still need to be more fully explored.

Third, and finally, comparative studies are rare. Thus, it is often not possible to study

whether the consequences of divorce differ between societies, and whether the mechanisms vary. We would need to establish which consequences seem to be of a universal nature, and which may be alleviated by structural factors, such as social and family policy. Most previous research in the field has been conducted in the U.S. These studies provide important information and knowledge on how adults and children fare after divorce. A problem, however, is that they cannot make claims of universal judgments about the consequences of divorce. Should explanations to changes in living conditions following divorce be sought in individual characteristics or are the effects also dependent on structural conditions? The fact that so much of our knowledge on these issues is biased toward one society, and the problem of not knowing to what extent these findings can be generalized, has raised a demand for studies conducted in other countries. In their review of research on consequences of divorce, Kitson and Morgan (1990:919) even claim that “cross-cultural research on divorce adjustment is sorely needed”.

CONSEQUENCES OF DIVORCE FOR CHILDREN

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Naturally, an important question about divorce is to what extent a separation between the biological parents has negative consequences for children. A comprehensive review of research findings mainly from the 1960s and 1970s by Hetherington, Camara, and Featherman (1983) concluded that there were a range of negative outcomes for children of divorce. They have lower psychological wellbeing, worse social relations to parents, less social adjustment, higher drop-out rates, worse educational achievements and lower attainments in general, and elevated risk for divorcing themselves. Some studies suggested that negative consequences were short-term though. Later reviews (e.g., Amato & Keith 1991b; Demo & Acock 1988; Seltzer 1994; Ni Bhrolchain 2001) tend, overall, to support the results of detrimental outcomes of family disruption. The majority of studies concern educational outcomes where evidence exists from a range of countries on a negative association between separation and educational attainment (for Holland: Dronkers 1994; for England: Kiernan 1992; for the U.S.: McLanahan and Sandefur 1994 among others; for Sweden: Jonsson and Gähler 1997; [for France? Germany?]). The results concern most educational outcomes and are valid for both boys and girls (but see Zaslow 1988, 1989). However, most studies also show that once controls are made for background factors such as

the custodial parents' occupation and education, remaining negative effects (in multivariate regression, typically) are weak, or disappear altogether. In many data sets, proper controls are missing, particularly parental income, which is a problem. Many of the early studies were also made on small and non-representative samples.

There are many strong moral views on divorce. Some, like Popenoe 1999, think that divorce is a fundamentally evil, while many adhere to the view that divorce is always right if the parents want it. Partly because of the strong moral tenet of the issue, there is confusion as to the interpretation of results. One line of argument, which is surprisingly common, is that divorce is not a problem because controls for socioeconomic factors make most of the negative association between separation and outcomes go away. This misses one important point: the most obvious and often immediate consequence of a divorce is to reduce resources for the child(ren) involved (Jonsson and Gähler 1997). This is simply because the mother normally get the custody and she is the one who in general has the lowest income and occupational status – in fact, while divorce for women often have detrimental economic consequences, men's economy is rarely affected much (for reviews, see Holden & Smock 1991; Kitson & Morgan 1990; Milardo 1987; Raschke 1987). As a consequence, especially in the cases where the father takes little economic or custodial responsibility, children lose resources by the divorce.

In the cases where the loss of resources causes problems in children, such as lowered wellbeing and increasing drop-out rates from school, it must be considered a negative consequence of divorce. However, this is complicated by considering the counterfactual: what would have happened if the parents would have stayed together? (We will never know for sure of course.) More importantly, though, it points to an interesting question for social scientist in understanding children's reactions and conditions; namely what the mechanisms are that produce the association between family structure and children's quality of life. And here, the available evidence is as yet forthcoming, because we need a longitudinal design that would single out how various resources – important for children – change with a separation. Jonsson and Gähler (1997) addressed some of these explanations – time shortage (indirectly), loss of economic resources, loss of (parental) educational resources, and downward social mobility – where the latter may be driving the process. For a more rigorous study we would however need to measure also how social capital (see Coleman 1988) change with a divorce – which is much the same as asking how present absent fathers are and how the social relations between parents and children are affected by the divorce. We would also need to know how dissent influences children, and how this change with divorce (where studies show that is

does not necessarily cease because parents move apart). And, perhaps most importantly, we would need to study what short- and long-term consequences the turbulence around the divorce may have for children; a turbulence that may be due to emotional stress but also to practical issues such as where the child should live (several studies show that children of divorce often relocate after the divorce, which seems to have negative consequences for their educational attainment (Astone and McLanahan 1994; Jonsson 1998)). One possible scenario is that children experience mostly short-term problems following their parents' divorce, but that these may create lasting problems in school.

The need for a longitudinal design is of course also needed for controlling for parents' characteristics and children's conditions prior to the separation. This is quite often noted in the studies referred to, but as Ni Bhrolchain (2001) has pointed out often overlooked in the conclusions. Thus, many empirical studies on cross-sectional data pretend to come closer to a causal interpretation than what is in fact warranted by the research design. What could the confounders be? Some, but far from all, studies manage quite well to control for socioeconomic circumstances, parents' education and the like. Few data materials, however, have data on family social relations (such as parental conflict) or on children's school achievements prior to the divorce. In addition, because separation is more common among those with social, drug, or alcohol problems (e.g., xxx), there may be a small group of children who are very likely to have problems too irrespective of their parents separate or not (in these cases it is probably often beneficial for children that the father moves). Thus, there is a need to control also for these kinds of parental characteristics. A recent Swedish study, based on a large data material, shows that children of divorce have great over-risks of suicide, psychological disorder, and alcohol problems (yyyy 2003), but conclusions about very rare behaviour are difficult without knowledge about equally rare (but for their children presumably highly consequential) characteristics of parents.

Fortunately, there are a few data materials that provide a possibility of reducing the risk of confounding factors, such as the UK National Child Development Study (NCDS) where children and parents are followed prospectively. Results from analyses on that data material show that negative consequences are less severe than cross-sectional studies suggest (e.g., Baydar 1988 [check]; Cherlin et al 1991 (which also uses longitudinal U.S. data); Morrison and Cherlin 1995; Ni Bhrolchain et al 2000). The NCDS, excellent opportunities as it provides for controlling for confounding factors, is still somewhat too small to get enough power in the analyses, so the evidence from the abovementioned studies are not as conclusive as one would have wanted (it is perhaps more correct to say that the problem is not the n

(around 8,000) but the number of children experiencing a parental divorce in the period (around 700)). Ni Bhrolchain et al (2000, Table 2) report a non-trivial negative effect (assuming it is causal) of divorce on early school-leaving, but the standard errors around the estimates are fairly large.

It is theoretically very interesting to compare the associations between parental separation and negative conditions for children for those whose parents remarry and those whose parents stay single. It is also of policy interest because so many do find a new partner [could we get comparative figures on that?]. Results diverge here: some studies (Astone and McLanahan 1991; Featherstone, Cundick, and Jensen 1992; Sandefur et al. 1992) find no difference while others tend to suggest that family reconstitution is even worse than singlehood (e.g., Beller and Chung 1992, Jonsson and Gähler 1997; Ni Bhrolchain et al 2000). The fact that remarrying does not counterbalance the loss of resources at the divorce – and may even create additional “problems” for children – suggests that there is a social dimension involved. One hypothesis is that the important resource is the time the custodial parent devotes (exclusively) to the child, and there may be shortage of such time both when a parent needs to take care of the household alone (and engage in gainful employment) and when a new partner arrives. Another hypothesis is that, much in line with Coleman’s idea, the intergenerational transmission of human capital is dependent on social relations; and if these relations are becoming worse during family reconstitution school work is hampered. A third hypothesis is that the relation with the non-custodial parent worsens when a step-parent arrives. (Support for the two latter hypotheses are given by a recent Swedish study in which it was shown that social relations between children and parents (as reported by children) are substantially worse in families of divorce and that goes for the relation both to the custodial and to the non-custodial parent; but the relations are even worse – in fact quite a lot worse – to the step-parent, if there is any (Jonsson 2001).)

THE DIVISION OF UNPAID LABOUR BETWEEN SPOUSES

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Central to the study of gender inequality is the division of paid and unpaid labour between spouses. It is assumed, and likely given the empirical evidence, that the burden of household chores both leads to women having lower chances in the labour market and, in the case they are gainfully employed, facing a stressful overall situation (need refs). Women’s “double

roles” or even “double shifts” may thus lead to lower accumulation of human and economic capital, lower psychological wellbeing and more psychosomatic problems (ref). Studies of the consequences of the division of household chores are important within the social sciences; and it is of course also of great interest to study the reason for this kind of within-family gender relation.

Explanations for the division of household labour are sought, mostly, in either of three perspectives, namely some kind of socialization theory; the “new home-economics” idea of specialization within the household; or the power relation theory, also including negotiation models. The most rigorous explanation, that is also most controversial, is the specialization theory, proposed by Becker (1981) and Pollack [?], among others. This theory sees the household as the unit of decision about how to divide the total time and assumes that the rationale behind the division is based on marginal productivity. The spouse whose extra hours put on gainful employment give most economic return specializes in market work and the other spouse are left with the household work (it may also be that the decision is based on the marginal productivity of cooking, washing, etc. but in line with other theories of comparative advantage this is not necessary for the theory to lead to a sharp division of labour). As this theory is formulated, it normally means it is rational that the woman does the homework.

There has been much criticism of the microeconomic theory, notably from sociologists and feminists, partly because it is seen as having normative elements. Much of the critique has been focusing on gender relations, arguing that it is not only the marginal productivity in paid labour that is important but power relations, and that rather than a “household decision” it is a question of gender interests. Sometimes this misses an important point, namely that the basic assumption that household maximizes income is sound. For families with children in particular, it is no doubt the case that parents do divide their time according to what gives the highest “return” (or what is most “efficient”). But this is of course not the *only* reason behind the resulting division of labour. There may be traditions involved, or couples want to adhere to equality norms, or they have a preference for non-specialization. A real challenge to the theory nowadays is also that individuals’ may be quite rational in thinking that the risk of divorce is so high that you object to a division of labour in which you lose out on human capital investments – in the U.S., for example, 60% of all couples have separated within 15 years (see above) which must make even those who are strong believers in lifelong marriages rather hesitant to spend most of the time doing household labour.

The second perspective on the household division of labour is that the spouse who possesses the greatest power (economic, social, or otherwise) manages best with avoiding

household work (e.g., Blood and Wolfe 1960). This may be because people want to avoid household work because it is tedious and/or because it gives less individual returns in the long run. Most research shows that the less the difference between spouses in resources (income, occupational prestige, the higher education, etc.) the more equal is the division of homework (e.g., Bianchi et al 2000; Presser 1994; Neramo 1994). However, this empirical result does not discriminate between the specialization and the power resource perspectives. [More about how to discriminate between the theories, more on empirical results]

The third theoretical approach takes as a point of departure that homework is an arena in which gender is produced symbolically; that while we carry out the gender-typical tasks that we are socialized into, we are “doing gender”, which is supposed to result in positive responses or feelings (Goffman 1976; West and Zimmerman 1987; Brines 1993). Empirically, this seem to have some support in that relative resources (time, income) are not particularly strong predictors of the division of household labour in families in which the woman has more resources than the man (Bittman et al 2001; Brines 1993, 1994; Greenstein 2000; Tichenor 1999).

To test the various theories of the household division of labour it is important to take into account the typical life-course pattern of household work. In societies with a high degree of female labour market participation it is normally [? comparative figures] the case that the amount of household chores in households without children is relatively small. When the children come the household working hours increase dramatically (e.g., Hörnqvist 1987). Pre-baby division of household chores may still be important for post-baby solutions. Importantly, one need to control for pre-baby differences in human capital to study whether marginal productivity explanations are in fact endogeneous to the division of labour between spouses. It is also essential to treat the leave period after childbirth as a period-specific division of labour that may impact on relative productivity both at home and in the labour market. Decision processes within households would also be helpful, but it is a moot point whether we would be able to measure individual’s anticipation of union duration or the actual dominance of one spouse over another in the negotiation situations. A case study of particular interest would be the decision on parental leave among spouses that just have had a baby.

CHILDREN'S RESOURCES AND WELL-BEING

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It is natural in a review of family research to incorporate studies of the lives and conditions of children and adolescents. This is primarily because they are most dependent on the family and because they also influence the wellbeing of other family members (which everyone with a sick child can attest to). Because changes in the family structure, such as divorce between parents and remarrying, are likely to affect children though they took little part in the decisions themselves, we also have a moral commitment as researchers to devote particular interest in children's living conditions. (In addition to the family angle, there are of course many other reasons for studying children, for example in social stratification.)

Studies of children are plenty. Within psychology, criminology, and epidemiology, for example, children and adolescents are often the group under study; and the same goes for a lively branch of "family research" (done primarily by psychologists, sociologists, demographers, and economists) as can be followed in *Demography*, *Journal of Marriage and the Family*, and *Journal of Family Issues*, among other leading cross-disciplinary journals.

There are also many good studies that summarize the available evidence and indicators used to study young people's lives, both in the U.S. (Hauser et al 1997) and for Europe (Micklewright and Stewart 2000). From these comprehensive reviews one can draw a number of theoretical and methodological conclusions. One is that the literature on children's welfare and well-being are overwhelmingly relying on indirect and aggregate measures. Children's mortality, household poverty rates, percentage of GNP spent on education, enrolment in day-care, coverage of children by health insurance, teenage birth rates, and so on, are the most prevalent measures of children's welfare. It is only rarely that researchers pay interest in (or have access to) children's own reports about their lives.

There are of course exceptions to the lack of studies where children are informants, such as those using indicators of young people's school achievements and health. But, and this is the second point, these studies do not treat children's living conditions "here and now". Rather, they typically adhere to the (often implicit) view that children's conditions are primarily important as an indicator of their wellbeing as adults. While some researchers have insisted in viewing childhood and adolescence as life stages that are of importance in and of themselves (Qvortrup 1994, 1997; Alanen 1992; Ben-Arieh 2000; Östberg 2000) this view is

still rare, and there is still a lack of data that are commensurate with that approach.

A third point, related to the first two, is that children are rarely seen as actors that would benefit from resources. Instead, they are most often analysed as passive objects that either react to external stimuli or could be more or less successfully socialized or adjusted. In fact, much previous research has treated children mainly as a problem: focus has been on deviant behaviour or “maladjustment”. These studies have a long tradition within psychology, sociology and criminology, for example.

A final point is that children’s lives, like adults, must be studied using a number of indicators, as is regularly done within the resource-oriented tradition of welfare research (e.g., Johansson 1973; Erikson and Uusitalo 1987; Jonsson and Östberg 2003). The importance of studying children’s well-being multidimensionally has recently been stressed by Thornton et al (2001, pp. 437-438), as the first out of 18 recommendations for research on children by the “Family and Child Well-Being Research Network” in the U.S. This is the view also taken by the large international research group on children’s well-being lead by Ben-Arieh (see Ben-Arieh and Wintersberger 1997; Ben-Arieh et al 2001) who lists five domains of children’s well-being and 49 indicators of particular relevance.

The foregoing should not be taken to imply that studies of children’s behavioural problems or psychological development etc. are wrong, or of less value than studies taking an alternative approach. It is important that various perspectives are used – for example, it is important for young people both how their everyday life in school is (“here and now”) and the long-term consequences of school achievements (“well-becoming” as Ben-Arieh et al 2001 puts it). The problem in current research on children’s quality of life is however that the latter view is totally dominating. One upshot of that is that the theoretical understanding of children’s lives is hampered; by ignoring young people’s positive resources (such as skills, creativity, and active involvement) there is a risk that we are stuck with a traditional view on young people as passive objects rather than active subjects and that, as a consequence, we do not study their own resources and their skills to use them (cf. Aber and Jones 1997; Resnick 1995; Ben-Arieh et al 2001; Jonsson, Låftman, and Östberg 2001).

Another upshot is that we in line with the omissions just mentioned abstain from asking children themselves about their wellbeing and living conditions, reproducing the strategy of data collection that we are used to. Indirect evidence on children is often crucial: for example, we should ask parents, not children, about the household economy and about parental occupation and education (which are important resources for their children). But in many instances, the views of children themselves are absolutely crucial. This goes for their

psychological well-being, their social resources and relations, their worries, and their civic skills, among other things. Also when it comes to economic resources, direct information from children may give a different picture than the ordinary (though equally important) method of calculating “children’s share” of the household income, as is regularly done in studies of child poverty, for example. This is because children do not necessarily get “their share” (they may get less, but perhaps more often become compensated when parents’ have economic problems) and because there are often other sources of economic resources than parents (such as grandparents). The risks with relying on parental information is evident from a recent Swedish study where similar questions about children’s mental well-being were posed to parents and children and where the answers of parents revealed a strong negative correlation with family structure and ethnic origin, while, according to the children’s reports, well-being was very similar in different groups (Jonsson and Östberg 2003).

Fortunately, asking children themselves about their living conditions and wellbeing on a large scale is neither particularly difficult nor necessarily especially expensive. Children are reliable informants about their own conditions and could be asked questions in normal survey type situations at least from the age of 8-10, though it is important that questions are straightforward and unambiguous, and response alternatives limited for the youngest (Scott 1997; Borgers, de Loew, and Hox 2000). The most promising approach for eliciting information from young people themselves at a low cost is to use a survey on adults and pose a questionnaire to their children (most practical for those who live in the same household). This has recently been done by “audio-questionnaires” in which children are asked questions from a tape (using Walkmans) and filling out answers in a booklet, a method which also maximizes confidentiality for children. It has the advantage of only incurring small marginal costs if used with a study on adults that is already financed; and such a design also ensures that we get reliable information on the household and that it is possible to connect parental and child information. Originally a method developed in the U.S.A. (Camburn, Cynamon, and Harel 1991), it has been used since 1994 by the British Household Panel Survey (BHPS), which runs a child survey for the ages 11-15 (Scott, Brynin, and Smith 1995); and in Sweden in the child survey of the Level-of-Living Survey of 2000 (Child-LNU) and in Statistics Sweden’s series of surveys of living conditions in 2001 and 2002, surveying children 10-18 years of age (Jonsson and Östberg 2003). The results are very positive: this method returns information of high quality with a low non-response rate and to low costs. If it was well-known, it would be fairly easy to collect data also in other nations on children’s quality of life; cross-national evidence would of course be of utmost relevance both for testing theories and for monitoring

children's well-being. Ideally, of course, this method should be combined with a longitudinal approach.

COMBINING GAINFUL EMPLOYMENT AND CARE FOR YOUNG CHILDREN

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Parental Employment

There is a vast sociological and economic literature on the intersection of family life and the labour market. A great deal of this literature has focused on the impact of caring for young children on women's participation and position in the labour force and the way this relationship varies across societies and has changed over time.

Comparisons of maternal participation rates across countries shows a wide degree of variation not only in the absolute level of participation, but also in the relationship between participation and the number and ages of children (Rubery et al. 1999). There is also a very significant divergence in the impact of lone-parenting on labour market behaviour (Bradshaw et al. 1996). Countries also differ in the extent to which part-time work is used to combine employment and caring roles (Blossfeld & Hakim, O'Reilly & Fagan 1998; Fagan & Rubery, 1996; Stier et al 2001).

A recent study by Rubery et al. (1999) showed that while in the majority of EU countries participation rates were lower among mothers with children under 15 than non-mothers, in Denmark, east Germany and Sweden, mothers had higher activity rates, while in France and Finland activity rates were similar for both groups. In most countries there was a successive decline in activity with each additional child (with particularly steep gradients observed in West Germany, Ireland, Spain and Italy) but in Belgium and France activity only declined sharply with three or more children. Mothers generally have lower levels of unemployment than non-mothers but this is partly due to definitional and measurement difficulties (Russell, 1996). Women attempting to return to the workforce following a period of caring often experience involuntary unemployment although it may not be officially recognised as such (McRae, 1993; Russell, 2000)

Recent years have seen a particularly strong growth in maternal employment in the UK (Brannen & Moss, 1998) and in Ireland (Russell et al. 2002) and much of the increase has been in full-time employment. Brewster & Rindfuss summarise the factors associated with the increase in female participation as follows 'an increasing preference among women for no-

domestic roles; the rising opportunity costs of homemaking as women's real wages rose; falling real wages for men, particularly those in the lower middle and working classes; and rising consumption aspirations.' (2000, p276-7). To this list I would add the increasing education levels of women which raise both earning power and career aspirations.

Research on the influence of children on fathers' employment is much less common. Nevertheless, it has been found in the EU that fathers are more likely to be economically active than non-fathers (Deven et al, 1998) but in the UK men with larger families are more likely to be unemployed or economically inactive (Brannen et al. 1994). A recent study of unemployed youth in nine European countries found that having a child slowed down transitions back to work for both fathers and mothers (Russell & O'Connell, 2001). A longitudinal UK study also found that unemployed men with large families spent longer unemployed because they had a higher reservation wage to meet their household needs (Daniels, 1987).

Research in the UK found a significant proportion of fathers were working long hours, with 39% of father working more than 48 hours a week and 12% working more than 60 hours a week in 2001 however there is no comparison with the hours of childless men (O'Brien & Schemilt, 2003). British fathers were also found to work more often during non-standard hours (La Valle et al, 2002). At the very least this is likely to impact on time fathers have to spend with their children. Further research is needed to explore these patterns in other European countries and to establish the effect of these working patterns on family relationships.

Explanatory frameworks

Explanations of these patterns of parental employment vary in the emphasis placed on supply-side factors (human capital, family utility maximisation, preferences, and gender attitudes) and the emphasis places on institutional and structural characteristics (e.g. welfare regimes, labour demand, employer policies, etc.).

A significant development in the comparative literature is the work on 'gendering welfare regimes', that is the development of typologies of national policy regimes based on the extent to which they support traditional male-breadwinner female-homemaker household forms and the level of reliance placed on families or rather women in the home, to provide care and other welfare services (e.g. Lewis 1992; Daly 1996; O'Connor, 1996; Korpi, 2000). Esping-Anderson (1999) has also revisited his original typology to more fully incorporate the extent to which welfare regimes assign welfare obligations to the family. This research

highlights the way in which a wide range of institutional factors such as taxation systems, leave arrangements, social service provision (or lack of provision), benefit systems, employment regulation, combine to structure the options individuals and families face in organising their lives.

Others have placed a greater emphasis on the supply decisions in explaining employment patterns of mothers. For example Hakim argues that these patterns (and often inferior pay and conditions) are shaped primarily by women's preferences. She argues that all those outside the labour market and the majority of part-timers see employment as subordinate to their primary role of motherhood 'the majority of part-timers..... see women as secondary earners whose primary (but not exclusive) responsibility is domestic work and home-making.' (Hakim, 1996:181). This conclusion has also been applied to cross European patterns of part-time work (Blossfeld & Hakim, 2001) even though there is virtually no direct evidence on women's preferences within the study - instead these are read off behaviour. Hakim's thesis has been criticised for failing to take account of the structural conditions within which women make decisions about paid and for assuming that women's orientations to work are stable across their lifetime (O'Reilly & Fagan, 1998; Ginn et al. 1996).

When attitudes to gender roles are compared, significant country variation can be seen. (Scott, 1998). Russell & Barbieri (2001) compared gender role attitudes in Denmark, the UK, France and Italy, and found that these attitudes were associated with the level of employment deprivation felt by unemployed women. Interestingly, the majority of respondents in all four countries agreed or agreed strongly that a mother must give priority to young child rather than her work, ranging from 87% in Italy to 68% in Denmark.

Economic models of labour supply also stress individual or household preferences. Labour supply theory suggests that women's decision to enter or re-enter paid employment is based on the trade-off between the value of work (as represented by the wage) versus the value of 'leisure' which is how all time outside employment is defined including childcare, and unpaid work in the home. However, more sophisticated economic models also take account of institutional factors such as leave schemes, and labour demand. (e.g. Klerman & Leibowitz, 1997). Becker's (1981) new home economics theory emphasises the role of husbands resources in the household decisions about female employment.

Childcare provision in Europe

Research by Gornick et al. (1997) provides one of the most comprehensive accounts of the institutional variation in support for maternal employment, although there must be some

concern that elements this highly cited may have been overtaken by policy developments. The authors compare 18 policy indicators across 14 countries relating to childcare (including after-school care), maternity leave, parental leave, school schedules, and cash transfers (e.g. children's allowances). The percentage of pre-school children in publicly funded childcare was highest in the Scandinavian countries (excluding Norway), France and Belgium, all of which have a statutory guarantee of public or publicly subsidised care. Child-care provision was lowest in Australia, the US, the UK, Canada. Provision for children under three years was also extremely limited (<6%) in Germany, Italy, Luxembourg and the Netherlands, however these countries had much greater provision for children aged 3 to 6 years.

Research by the European Network on Childcare (1996) provides information for some of the missing countries, and suggests that public provision for the under threes is also very low in Ireland, Greece and Spain, while in Portugal over 10% of the age-group are catered for.

Combining information on childcare with the wider range of policy measures Gornick et al (1996) produce an index of support for employed mothers with children under six and another for mothers with children aged six to twelve. The countries with the most supportive policy packages for the first group were France, FIN, DK, Sweden, Belgium and Italy, while Australia, the US and UK were at the bottom. However for mothers with older children policies were most employment supportive in the UK, Sweden and the US (although data were lacking for many countries).

Empirical analyses show that employment patterns among mothers are strongly linked to these policy configurations (Gornick et al. 1998). Stier et al. (2001) also presented empirical evidence for the view that female labour force participation strongly depended on the extent of supportive state family policies.

Another important policy dimension for the employment of mothers is the cost of childcare, again there is little recent harmonised information on this topic. Ditch et al (1998) estimate the average cost of full-time childcare for a child under five as a proportion of average earnings. The cost varies from zero % in Belgium and France where we have seen that public provision is guaranteed, to highs of 20%, 23% and 36% in Ireland, the UK and Greece respectively.

There is little if any cross-national research or comparative data on the use of informal sources of childcare yet national level studies show that this is an extremely important element of the story. A review by Deven et al (1998) highlighted the high reliance informal care, especially by grandparents, in Belgium, Italy, Spain, Greece and the UK. For example in a British study, McRae reported over 50% of arrangements for children under 5 were

informal, while an Italian study reported 70% of care was informal. Research in Ireland also found that the majority of mothers in paid employment used informal types of childcare (Williams & Collins, 1998). Similarly a survey of Irish Congress of Trade Union members found that 43% of respondents used informally paid childcare, 22% used unpaid childcare and 35% used formally paid services (ICTU 2002). With the exception of Belgium, these countries are all ones in which public childcare is very limited.

Little is known about the relative quality of formal, regulated childcare versus informal, unregulated childcare. An Italian study suggested that mothers worry less when family members are responsible for childcare, however this arrangement sometimes led to family tensions (Romito et al. 1996). Such tensions were also reported by Irish lone mothers who were highly reliant on their own mothers for childcare support (Russell & Corcoran, 2000). Brannen & Moss (1991; UK) found that informal arrangements were less stable than nursery care.

Maternity leave, paternity leave and parental leave

A number of the studies already mentioned document the wide degree of variation in leave policies across the EU and OECD countries (Gornick et al, 1997; Rubery et al, 1999). This diversity will be somewhat reduced due to the implementation of the EU Directive on Parental Leave. However key differences, for example whether leave is paid or unpaid, are likely to mean that the institutional constraints facing working parents remain highly stratified across countries. Some recent studies have shown that parental leave regulations affect the duration of interruptions by institutionalising an appropriate break period (Jonsson & Mills, 2001a SWED; Saurel-Cubizolles et al. 1999 FR, IT, ES; Ondrich et al. 1996 GERM).

The expectation is that providing maternity and parental leave will increase maternal employment in the medium term since it allows continuity of employment and prevents occupational downgrading by guaranteeing employment at the same level. For those who would take shorter leave in the absence of statutory or employer provision, it will decrease employment in the short term. Klerman & Leibowitz (1997) test this hypothesis by comparing female labour supply in US states that introduced statutory maternity leave to those that did not, they do not find a significant difference once demographic factors are controlled (although they do not distinguish between full-time and part-time work). However the main policy aim of leave schemes may not be to increase labour supply but to enhance family life. Allowing mothers and fathers time to be with their children in the early months is believed to be beneficial for child development and parent/child relationships.

Statutory provision to assist fathers to combine employment and caring are even more limited than those available for mothers. Only seven of the 15 EU countries have any paid paternity leave – Belgium, Denmark, Finland, France, Portugal, Spain, Sweden (eight when Britain introduces 2 weeks paid leave in April 2003). However, the duration of the leave is universally short, ranging from a minimum of 2 days on Spain to a maximum of three weeks in France. Norway provides two weeks unpaid paternity leave to fathers (O'Brien & Shemilt, 2003).

In all countries parental leave is available to both mothers and fathers, however in some countries entitlement is individualised (e.g. Belgium, Greece, Ireland, Luxembourg, Netherlands, Portugal, Spain), in others it is shared by both parents (Denmark, Finland, France) while in others still it is part individualised and part shared (Norway, Sweden, Italy) (O'Brien & Shemilt, 2003).

One of the most universal findings in studies of parental leave, is that such leave is more likely to be taken-up by mothers than fathers. Among fathers, Swedish men demonstrate the highest level of take-up (see Deven et al, 1998 for a review). However even in Sweden fathers took an average of 30 days leave compared to 350 days for mothers (Jonsson & Mills 2001). Research suggests that fathers are more likely to make use of an individual non-transferable entitlement to leave (Leira, 1999; Bruning & Plantega, 1999). Take-up of parental leave by both mothers and fathers is influenced by the level of income replacement (Deven et al. 1998 report such findings in Germany, Denmark, Italy, France Norway and the UK). However, the nature of the gender pay gap suggests the absence of payment or low earnings ceilings for benefits will particularly discourage fathers from taking leave.

Longitudinal studies

Many of the studies of parental employment consists of cross-sectional snapshots at different points in time, which do not adequately capture the life-course dimension of this phenomenon. One of the most fruitful developments in this area has been studies which use longitudinal data to analyse the interaction between individuals work careers and family events. Some of the earliest studies used the National Child Development Surveys in the UK (Macran, Joshi, & Dex 1996; Joshi & Hinde, 1993).

More recently, the volume edited by Blossfeld and Drobnic (2001) contains analyses of women's labour market transitions across a wide range of countries (Germany, NL, Belgium, Italy, Spain, Britain, US, Sweden, DK, Poland, Hungary and China). These studies use national datasets containing retrospective life and work histories. Recent studies of women's

re-entry to work have also been conducted in Sweden and Ireland (Jonsson & Mills, 2001a 2001b; Russell et al, 2002).

Many of these studies highlight the significant reductions in the length of labour market interruptions around childbirth and in the probability of returning to employment at all, among different cohorts of women across a wide range of countries (Joshi & Hinde 1993; Jonsson & Mills, 2001a; Gonzlaez Lopez 2001, Hendrickx, 2001; Blossfeld et al. 2001). Although in Germany there was no cohort effect for transitions from work to homemaking when other factors are controlled (Blossfeld et al. 2001). For example, in the UK Macran et al. (1996) report that half the 1958 cohort resumed employment less than 29 months after the birth of their child compared to 70 months for the 1948 cohort.

In addition to cohort effects, exits and re-entries to the workforce and length of leave is found to be related to be strongly related to women's human capital in the form of education, accumulated work experience (Macran et al. 1996; Jonsson & Mills, 2001; contributors to Blossfeld & Drobnic, 2001: p376). Family –cycle characteristics are also important, such as age and number of children, and age of mother at birth, (Blossfeld & Drobnic volume 2001). A number of studies have also demonstrated the role of demand side factors such as regional labour demand (Joshi & Hinde, 1993; Barnardi, 2001; Russell et al. 2001) and job characteristics¹ (Jonsson & Mills, 2001), although these are factors are more rarely considered. Family policies are also found to be significant in structuring the duration of leave (Jonsson & Mills, 2001a). These findings are generally consistent with economic predictions about opportunity costs and reservation wages.

According to Becker's (1981) New Home Economics theory, women's labour market participation should be influenced by their partners resources, i.e. the higher the man's earnings the greater the incentive is for women to specialise in household work. However the results of the research on this topic are mixed. In the UK, Joshi & Hinde (1993) found that the influence of husband's class on women's return had weakened over time, while (McCulloch & Dex 2001) found no effects of husband's resources on wife's labour market transitions. Russell & O'Connell (2002) also found that neither husband's employment status nor income had a significant impact on the probability of women returning to work in Ireland. Drawing on the results of the contributors, Drobnic & Blossfeld (2001) summarize that the effect of husbands status is negative in the conservative welfare states (Germany, NL,

¹ Employment in the public sector and in large organisations increased the likelihood of taking parental leave rather than leaving the labour market.

Belg)² and the Mediterranean states (Italy and Spain), has no effect in the Liberal welfare regimes (UK) and a positive effect in the Social Democratic (Swed, DK) and (former) State-socialist countries (Hungary, China). This highlights the role of the welfare state regime, and the gender ideologies built into these institutional arrangements, in shaping the division of paid and unpaid labour between spouses in a way that is not captured by Becker's economic theory.

Effects of time outside the labour market

Longitudinal research in the UK has shown that returners often experience downward mobility, reduced earnings and fewer promotion opportunities when they re-enter the job market (Joshi & Hinde 1993; McRae 1993). Occupational downgrading was also found among returners in Ireland at least at the aggregate level (Russell et al 2002). Here, returners were found to be concentrated in personal service occupations, which often replicated the unpaid work they performed in the home such as cleaning, child-care, catering and other domestic work. In Sweden where leave schemes are more extensive, women are better protected from downward mobility (Jonsson & Mills, 2001b).

Numerous studies have demonstrated that work interruptions have a negative impact on women's earnings across a wide selection of countries (Stafford & Sundstrum, 1996 SWED; Mincer & Ofek; 1983 US; Wetzels & Tjijdens 2002, NL; Beblo & Wolf 2002) and account for a significant part of the male-female wage gap (Albrecht et al 1999 SWED; Barrett et al, 2000 IRL; Waldfogel, 1995).

Beblo & Wolfe (2002, p209) suggest that the cost of time out of the labour market varies with the timing of breaks, so that an earlier interruption causes a smaller wage cut than a later one. (However this is partly due to the model specification since the depreciation rate is applied to all years prior to the break therefore the greater the accumulated experience the greater is the wage cut).

Results on the longer term wage effects of periods of part-time work are more ambiguous. In the US, Corcoran & Duncan (1976) found that periods of part-time work reduced female earnings and explained a significant proportion of the gender pay gap, however, Beblo & Wolfe (2002) found no wage depreciation for part-time work experience in

² However it should be noted that the Dutch authors themselves conclude that the 'human capital and the norms and values of their [women's] partners do not seem to play a very important role in women's employment histories.' (Hendrickxx et al. 2001, p95).

the Netherlands.

Unfortunately with the exception of Saurel-Cubizolles et al (1999), these are all single country studies and are therefore not directly comparable. Genuinely comparative research on penalties attached to labour market interruptions would be extremely illuminating both in explaining gender differences in the labour market and in revealing the mediating effect of welfare state interventions.

It remains to be seen how far this depreciation in wages is justified. Further comparative research would shed some light on this topic since there is little a priori reason to expect women's skills to depreciate quicker in one country compared to another (holding factors like education constant). Comparisons of the depreciation in earnings due to different types of interruption would also be useful in this respect. Albrecht et al (1999; SWED) find differential effects for various forms of labour market interruption and conclude that the wage penalty cannot be attributed to the depreciation in human capital.

Studies of occupational effects are often limited to the first job post-return (Russell et al, 2002; Jonsson and Mills 2001b. Future research that investigates the sustainability of these jobs and the conditions of subsequent jobs will improve our knowledge of the long-term effects of time spent on caring activities.³

Outcomes for children and family Life

The impact of increased maternal employment on child well-being is a contested topic, and one which has significant implications for social and welfare policy (not least for lone parents). The increase in mother's employment is likely to reduce the risk of poverty and all its negative effects on child welfare. However, the beneficial effects of increased income may be traded off against any negative effects of reduced time and interaction between mothers and children.

Research using time budget studies has attempted to trace the changes in parental interaction with children. Studies in the UK show that time spent devoted to child-related activities (*as the main activity*) has increased for both mothers and fathers between the mid 1970s and late 1990s despite the increase in maternal employment (Fisher et al.). Explanations of this paradoxical finding include the decline in housework time, and changing

³ One significant exception is Macran et al (1996, UK) who find length of gap had little effect on possibility of leaving the job within one year but after one year those who returned to work quicker were more likely to stay in work longer.

parenting styles. Bianchi (2000), also suggests that the difference in time spent interacting with children between employed and non-employed mothers is not as great as might be expected, because employed mothers cut out other activities to compensate. It is unclear however, whether time spent as a main activity is the decisive factor in relation to child well-being rather than total time spent with them.

There is mixed evidence about the impact of maternal employment on fathers' involvement with their children. Gershuny (2001) suggest that there has been a lagged adaptation at the aggregate level so that men's participation in childcare has increased. At the household level Ferri & Smith's study of the British NCDS found that father involvement in childcare tasks was greater in two-earners households with the most egalitarian arrangements among households where both worked full-time. Other analyses have shown that part-time maternal employment does little to alter the traditional divisions of housework and caring work (Layte, 1999). In contrast, a recent US study (Fuligni & Brooks-Gunn, 2001) found that fathers care-giving only increased when the mothers earned more than their partners (cited in O'Brien & Shemilt, 2003).

Economic impact of maternal employment

The economic impact of mothers' employment for their families is likely to vary with the hours worked, earnings, presence of partner, partner's employment status, cost of childcare and the level of income support for those not in the labour market. This suggests results will differ considerably within and across countries. Research in the UK shows that the proportion of family income provided by mothers increased by over 50% during the 1980s, and that without women's earnings the proportion of households in poverty would have been 50% higher (Harkness et al. 1994). Research by Russell and Barbieri (2001) found that married women's (*not necessarily mothers*) contribution to household earnings ranged from an average of 23% in Italy (due to the high proportion of women who had zero earnings) to 31% in Britain and France to 40% in Denmark. If the analysis is restricted to dual earner couples, women's contribution rose to over 40% in Italy and France and to 36% in Britain. Henz And Jonsson (2000) found that in Sweden women's contribution in household income was between 35 and 40%, and has increased significantly over time.

Where the level of state benefits are relatively low, the employment status of lone mothers is likely to be particularly crucial for the financial well-being of their families. Research in Britain showed that only 10 per cent employed lone mothers (and their households) were below the poverty line compared to two-thirds of unemployed and non-

employed lone mothers (Russell, 1996). Using the European Community Household Panel Pederson et al. (2001) show that the poverty rates for lone mothers are particularly high in the Southern European ‘sub-protective regimes’ and in the liberal/minimal regimes where benefits for lone mothers are poor and the institutional structure does not support maternal employment as a route out of poverty.

Impact on child development

The literature on the psychological or developmental impact of maternal employment on children is highly contested. For example a study by Belsky & Eggebeen (1991) using the US National Longitudinal Survey of Youth, which concluded that extensive maternal employment in the first two years lead to greater non-compliance among children aged four to six (but was not associated with shyness, behaviour problems or attachment insecurity), generated three responses criticising various aspects of the sample or methodology (Scarr, 1991; Vandall, 1991, McCartney, 1991). It appears that one of the main limitations of research in this area remains a lack of information on the nature or quality of non-parental care utilised by working parents and how this mediates the impact of maternal employment.

Directions for future research

This review suggests a number of important areas for future data collection and research

1. Need for improved information on the interactions between work and family life for men. The project focus on the quality of life brings to the fore issues of work-life balance for both men and women. Such research can also inform policy-developments for improving men’s access and take-up of family leave schemes.
2. Need for more longitudinal research. The relationship between working life and family life is dynamic, and changes over different stages of the life course. Therefore longitudinal studies, which can take account of this time dimension are extremely important for developing our understanding in this area.
3. Need for more comparative research using harmonised data (e.g. on take up of parental leave; costs of time-out of the labour market). Much of our knowledge in this area is based on single country analyses, however comparative research has outlined the central role of welfare and other structural factors in certain areas of research (e.g. length of interruptions around childbirth; the link between maternal employment and poverty). Further research of this nature is necessary to increase our understanding of other national patterns and differences observed.

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4. Further information is needed on women's attitudes and preferences that can be linked at the individual level to behaviour and outcomes. Too often it is assumed that women's preferences are exactly the same as men's (but highly constrained) or that they are very different (and are revealed by gender differences in employment patterns and outcomes).
 5. Information on the nature and quality of non-parental care is very limited and often not comparable across countries. Nor is it clear how this variable mediates (or not) the impact of increasing maternal employment on children. This links into the wider concern in family research about including children as stakeholders.

EMPLOYMENT AND FAMILY FORMATION

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Women's increased employment:

Recently women are more able to turn higher education into better job and career opportunities (Blossfeld 1989). According to Becker (1981) female employment reduces the gains to marriage as the traditional gender division of labour in the family collapses. Women therefore delay entering marriage or even avoid it completely. Secondly, as women's earnings increase, they are less likely to take time out of the labour market to care children and therefore, the relative cost of children increases and this in turn reduces the demand for children (Becker 1991).

Research on Becker's hypotheses has produced mixed results. Firstly let us look at research on marriage. Many studies have found that women's increased economic independence has no negative influence on marriage formation (Goldscheider and Waite 1986, Smock and Manning 1997, Olah and Fratezak 2001) and others (most notably Oppenheimer 1994) have argued that women's increased economic independence can encourage earlier marriage. However, no research has found a significant positive effect of women's work on marriage rates. Bukodi (2002) found that monthly earning had a negative effect on the rate on entry into first marriage for Hungarian women. It seems that more traditional family systems (like Hungary) women may be penalised for increased educational and labour market attainment when it comes to marriage prospects (Blossfeld 1995).

Research on fertility levels has produced more consistent results as many studies have found a negative effect of female wages and a positive effect of male incomes on total fertility rates (Schultz 1985, Heckman and Walker 1990, Merigan and St Pierre 1998). Heckman and

Walker (1990) conclude that higher female wages lengthen birth intervals and reduce overall fertility levels. Whereas higher male income is likely to accelerate family formation and shift the unconditional birth rate schedule towards younger ages. It seems that there is a significant negative effect of the level of career resources on the rate of entry to first motherhood across countries but this is not generally true in the analysis of rates of entry into marriage (Blossfeld 1995).

The flexible labour market:

It is argued that younger workers in the life stage of first union formation are more likely to hold precarious jobs and therefore are less likely to enter a partnership in the first place and more likely to choose the less binding option of cohabitation (Sommer, Klijzing and Mills 2000). As the proportion of people on precarious position increases, the proportion of young adults who delay entry in the labour market by staying in the educational system is expected to grow. This in turn leads them to postpone entry in marriage and parenthood. It is expected that the postponement effects of insecure labour market position will be stronger for males than females where men are still generally viewed as the main breadwinners.

Much cross-country research has taken place on the impact of labour market flexibility on family formation (Mills (2002) for Canada, Bernadi and Nazio (2001) for Italy, Noguera et al (2001) for Spain, Golsch (2001) for the UK and Kurz et al (2001) for Germany). The main conclusion is that both economic and employment insecurity affect the likelihood to form a first partnership and to have a first child. Research on the impact of employment flexibility on entries into first parenthood in the UK found that increasing economic and/or temporal insecurity increases postponement of first parenthood (Golsch 2002). Bukodi (2002) found that Hungarians with greater temporal uncertainty about their own economic prospects (that is individuals in fixed term jobs) tend to choose cohabitation over marriage. Liefbroer (2002) concludes that for the Netherlands young people who hold part-time jobs, temporary jobs and jobs outside of the service class postpone family formation.

Cross-National differences in fertility and female employment

The conventional view is that declining fertility and rising female labour force participation are mutually reinforcing: declining fertility frees up women to participate more fully in paid work, while increasing demand for female labour (as reflected both in higher wage rates and higher participation rates) gives women the incentive to have fewer children.

As is illustrated above there is abundant evidence from cross-sectional analysis within countries to support this view.

However, the picture becomes less clear-cut when comparisons are made across rather than within countries. In empirical cross-national research, it has proved extremely difficult to find robust links between fertility decline and *any* socio-economic variable, either across time in developed countries or across countries in the world today (Hirschman 1994, Alter 1992). In Europe, fertility decline emerged and developed at a similar time and pace in countries at quite different levels of socio-economic development, and the same seems to be true in many parts of the developing world today (Hirschman 1994: 213). It is hardly surprising, therefore, that in the broader cross-national picture, the relationship between fertility levels and socio-economic variables such as the rate of women's participation in the labour force is weak and is difficult to interpret.

Plots of the association between fertility levels and female participation rates across developed countries bears this out (see Brewster & Rindfuss, 2000, Fahey et al, 2000). The countries with the lowest fertility Italy, Spain Greece also have low levels of female participation. At the other extreme, the US, with the highest fertility, also has quite high female participation, while in the Scandinavian countries, both female participation and fertility are relatively high. In 1996 the relationship between fertility and female participation would appear to be in a positive direction – the more women participate in paid work, the *higher* their fertility

Another way of stating this is that the sharpest collapse in fertility across developed countries today occurs in those cases where women's options, as reflected by the level of market demand for women's labour, are narrowest (as exemplified at present by the Mediterranean countries of Europe). This is contrary to expectations, since the standard view is that the decline of fertility is associated with the widening of women's options and the consequent increase in the opportunity cost of having children. Attempts to date to account for this paradox generally do not abandon cost-benefit explanations, but point to the complex range of factors which shape the cost-benefit balance regarding fertility and which vary widely across developed countries (Esping-Andersen 1999, Bettio and Villa 1998, Calhoun 1994). These analyses imply that falls in fertility to Mediterranean levels may not reflect an emancipatory expansion of women's options but rather a new set of constraints which closes off child-bearing options which women might otherwise wish to pursue.

A recent study of EU candidate countries (European Commission, 2002) highlighted some of the constraints around childbearing faced by respondents in these countries. The

survey compared the actual and ideal/planned family size of respondents and asked those whose fertility plans were unfulfilled the reasons why they did not have the number of children they wanted (chosen from precoded categories). Ten per cent mentioned the difficulty of combining work and family, however 27% mentioned financial problems (which was the most common response) and 17% said the cost of children were too high. These responses were not broken down by sex. These results suggest that by providing additional income, employment may have a greater influence in realising fertility plans than preventing them. Unemployment (of both men and women) may play a strong role in preventing fertility, since many of these countries have experienced very high rates of unemployment.

PART III. DISCUSSION: FUTURE DIRECTIONS OF FAMILY RESEARCH

[This part is still very preliminary, and a new version will be distributed to the discussants before the Mannheim meeting]

Family and household changes are pivotal in any description of recent (say, post-war) changes in European societies. They are of central concern to social scientists because the way the family is organized determines fundamental social relations. As the main locus of early socialization as well as of social support and intimacy, the family is the most fundamental social institution in modern society. Questions about changes in the form this institution takes and of replacement of the functions it has traditionally fulfilled are thus of great importance; and both descriptive statistics (as often provided from demographers) and attempts to study the causes and consequences of change in the family institution are of great and obvious interest.

Nonetheless, all issues concerning the family are not necessarily of great interest to social scientists. It is of course difficult to rank order scientific questions according to importance, but it seems worth the while to address the question whether some issues would deserve more attention than others. In discussing strategies of future research this is all the more pressing.

The first concern when it comes to family research is that some of the changes that occur over time are driven by preferences and, by and large, are primarily affecting the private sphere. For example, in some countries – notably the Scandinavian – many people cohabit

instead of marry. This may be seen as an important change as statistics clearly show that the duration of cohabitations are less than those of marriages, also when there are children in the union (for recent evidence from European countries, see Andersson 2001). If people are selected into either of these family forms by some unmeasured variable that is correlated with union disruption propensity, which seems likely, cohabitation may be a signal of elevated separation risks but not the cause of them. Aggregate changes towards increasing cohabitation may thus not have much impact on average union stability but rather make visible a heterogeneous distribution of preferences or personal characteristics in a population. Likewise, many of the “new” family forms, such as the various LAT (Living apart together) family constellations or unions involving same-sex partners appear to be largely private matters – though they may of course say something about new working conditions and about the degree of intolerance in society. Nest-leaving, a much researched area, is also to a large extent something that is intuitively interesting but may still not be so important. There are arguments to the contrary, such as the gender-relevant experience for boys to form a household of their own before moving together with a partner, or the fact that early nest-leaving may be an indicator of relational problems in the family and late nest-leaving an indicator of a lack of resources of young people; but by and large the question of when children leave the home is a secondary problem (except for the parents and children themselves of course).

Family issues that should be of greater concern to social scientists are those in which one or several of the parties involved are involuntary participants. This goes primarily for the children. It is both scientifically interesting and morally abiding to study the consequences for children of living in different family forms (disregarding the great difficulties in determining causal effects). We would in this case profit from having direct information from children and from following them longitudinally – and ideally in a design that also involved early information on children and their parents (such as the design of birth cohort studies). As the relation between spouses is, among other things, a power relation (with men typically dominating women, particularly in economic terms), it is also important to study to what extent family formation and change are related to an uneven distribution of resources between men and women – and here the outcomes for spouses are of utmost interest.

Other family issues that should be of great concern to social scientists are those in which individuals and families are torn between their own preferences and various forms of external constraints and opportunities. These constraints and opportunities could be defined as anything that they take into account in trying to organize a family life. Two major institutions

are involved here, namely the labour market (including the employing organizations) and the state. In combination they influence the financial situation of the family and the division of labour that couples decide on (a decision that may also depend on unequal resources between spouses). Spouses' working conditions also impact on family lives, in many ways. It is an important issue for social scientists to study how changing demands and opportunities related to gainful employment interact with family life to create a total life situation of spouses and their children that could be harmful (or, perhaps, enabling). In particular, the situation of women (some of whom work "double shifts") and children would seem to be of concern. The importance of the state, lately of the welfare state, for family formation and family life, should also be stressed. There is definitely a political economy of the family (cf. Esping-Andersen 1999). Arrangements ranging from day-care, schools, and family policies, to social benefits and housing policies all set the stage for what families can achieve and thereby influence their quality of life.

Lastly, there is an over-arching question of great theoretical relevance, namely what the processes are that generate such rapid and sometime inter-nation diverging, sometimes similar trends in family forms. As was evident from the descriptive part, there is a huge difference across European nations in the extent to which children and spouses experience family dissolution and the relative share of different household types (with solo households being very common in the Nordic countries for example). As we know from demographic research, differences also exist in fertility. There appears to be a great divide between the Nordic countries and a number of countries that are more religious, particularly Catholic. Explanations for trends and country differences have been couched in terms of religious differences, norms, institutional set-up, and the spread of new "trends". One recent and interesting theoretical line of research is investigating whether there are any social interaction effects disseminating "new family forms" and making them legitimate.

Add: Multiethnic societies – mix of norms and traditional family forms. This is a real challenge but also a possibility of testing ideas about trends in family formation/assimilation etc.

Particular avenues for future research as related to the network:

Family and work (how work impinge on family life, gender inequality); family forms and children's welfare; family, multi-ethnicity and social cohesion; family and income inequality/poverty

Data needs: a) family surveys, demographic stuff – already underway; b) individual-

level data connecting family description with work-life information; c) interviews with children to study their welfare and how it is related to parents' work, household's resources and family type; d) cohort studies (cf. the Millenium cohort study in England)

In general: longitudinal study and internationally harmonised indicators.

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Cohabitation

March 31, 2003

1 Prevalence and trends

Cohabitation is not without historical precedent. Murphy (2000b) cites estimates that at the beginning of the nineteenth century as much as 20% of adults in England and Wales had cohabited at some stage. Most cohabitants at that time were either previously married or very poor. What is remarkable about contemporary cohabitation is: (a) that it has been adopted by young never-married people ('nubile' cohabitation (Kiernan, 1996)), and (b) its dramatic growth within a generation. As Bumpass and Lu (2000, 29) put it: 'Cohabitation has grown from a rare and deviant behaviour to the majority experience among cohorts of marriageable age.'

There are different ways to describe the dramatic growth of cohabitation. Taking a period perspective, Murphy (2000b, 44–45) reports that in the late 1960s in the UK 1% of women aged 18–49 were cohabiting. This rose to 10% in the early 1990s. He notes that data from different surveys give broadly consistent trends, although estimates from retrospective data are generally higher than those from contemporary report (Murphy, 2000a; Murphy, 2000b).

Taking a cohort perspective, Kiernan (1996, Table 2.2) reports that between the mid-1970s and the late 1980s the percentage of women aged 20 to 24 in live-in partnerships who were cohabiting rose from 57% to 78% in Sweden, from 48% to 75% in Denmark, from 21% to 59% in Norway, from 11% to 49% in France, and from 11% to 32% in Britain.

In the United States, 'the percentage of marriages preceded by cohabitation rose from about 10% for those marrying between 1965 and 1974 to over 50% for those marrying between 1990 and 1994 ... the percentage of women in their late 30s who report having cohabited at least once rose from 30% in 1987 to 48% in 1995' (Smock, 2000, 3). In the UK, 'around 70% of spinsters marrying in the early 1990s cohabited with their future spouse

before marriage compared with just 3% of those marrying during the late 1960s' (Berrington and Diamond, 2000, 127).

Using data from the BHPS, Ermisch and Francesconi (2000, 157) estimate that in the 1990s 79% of British men under thirty-five (71% for women) entered their first partnership as cohabitants. Indeed, the growth of cohabitation accounts for a large part of the postponement of marriage since the 1970s. For example, while the proportion of women who had ever married by age 24 dropped from 70% for the 1930–49 birth cohort to 21% for the 1963–76 cohort, if we were to consider the proportion who had ever been in a partnership (marriage or cohabitation), the figures would be 73.3% (1930–49) and 65.8% (1963–76) (Ermisch and Francesconi, 2000, Table 1).

In Europe, the level of cohabitation varies considerably. It is highest in the Nordic countries (Iceland, Sweden and Denmark), followed by Austria, Finland, France, Britain, the Netherlands, Switzerland and Germany, and lowest in southern European countries such as Italy, Spain, Greece, and in Ireland (Kiernan, 1996).

2 Who cohabits?

Although cohabitation has become popular in all social groups, cohabitants tend to hold relatively liberal attitudes (Clarkberg, Stolzenberg and Waite, 1995). They tend to be 'less religious, more supportive of egalitarian gender roles and nontraditional family roles' (Smock, 2000, 4). Research from the US also suggests that cohabitation is more common among those of lower socio-economic status. For example, among women aged 19 to 44 in the 1995 National Survey of Families and Households, 59% of high school drop-outs as opposed to 37% college graduates have ever cohabited (Bumpass and Lu, 2000, Table 2).

Using data from the 1958 NCDS cohort, Berrington and Diamond (2000, 142) report that in the UK 'the propensity to cohabit is ... associated with parental separation. Thus, among those aged 16 years the simulated probability of cohabiting by age 23 years is 0.17 for for men whose parents separated, compared with 0.11 for similar men whose parents had not separated. The probabilities for women are 0.21 and 0.14 respectively' (see also Kiernan, 2001). They also found regional difference in the prevalence of cohabitation, with people from the South and South-East more likely to cohabit than those from the North of England or from Scotland.

3 Characteristics of cohabiting unions

Cohabiting unions tend to be of short duration, Ermisch and Francesconi (2000, 157) estimate that ‘less than a fifth survive 5 years or more, and less than a tenth survive 10 years or more. The median duration is just under 2 years. About three-fifths of first cohabitations turn into marriage and about 30% dissolve within 10 years’. There is some tentative evidence to suggest that the median duration of cohabitation spells has increased slightly in the UK: from 20 to 29 months (Haskey, 1995).

In Britain at least, cohabitation tends to be a childless affair. Kiernan (1996, 70–71) points out that there are three groups of cohabitants in the UK. In descending order of size, they are the young never-married childless couples, post-marital cohabitants, and young never-married couples with children.

4 Does cohabitation lead to greater marital instability?

Cohabitation allows partners to learn more about each other. A more informed choice should mean a better match if the cohabitants eventually decided to get married. As a result, couples who cohabit with each other before marriage should have lower dissolution rates than those who marry directly. However, empirical evidence in the UK and the US tend to suggest the opposite. For example, using the UK NCDS data, Berrington and Diamond (1999) show that, controlling for variables pertaining to family background (parental housing tenure, parental separation), socioeconomic status (educational attainment, social class, employment status), as well as demographic and other factors (age at marriage, timing of childbearing, marriage duration, behavioural problem at 16, religious practice), premarital cohabitation *raises* the risk of marital dissolution. ‘Whilst 86 and 83 per cent of men and women [with average characteristics] who married directly are predicted to remain in an intact marriage [after 8 years of marriage], only 79 and 77 per cent of men and women who lived with their spouse for two years or more before marriage are predicted to do so’ (Berrington and Diamond, 1999, 32).

However, Berrington and Diamond (1999) point out that the effect of premarital cohabitation on divorce risk is modest compared with other factors such as the timing of entry into marriage and parenthood. This effect also varies with the duration of premarital cohabitation, which is strongest for those who cohabited for a short period of time (0–2 months) and for those who cohabited for more than 2 years. They argue that the former group of cohabitants might not have tested their mutual compatibility rigorously

enough, while the latter group might have particular reasons for marriage (e.g. ‘to save the relationship’) which are associated with higher divorce risks.

The association between premarital cohabitation and higher divorce risks could be explained in one of two ways. First, that cohabitation changes the behaviour or values of the cohabitants which makes them more prone to divorce should they get married eventually. Second, couples who choose to cohabit before marriage are systematically different from those who marry directly. If such difference is not adequately controlled for in the hazard model, the parameter estimates for premarital cohabitation would be biased. In other words, the observed association is due to self-selection.

The self-selection hypothesis is directly tested by Lillard, Brien and Waite (1995). Using a simultaneous equations framework, they analyse data from the US National Longitudinal Survey of the High School Class of 1972. Under this framework, two models are estimated simultaneously. The first model is a standard hazard model in which the risk of divorce is the dependent variable, and premarital cohabitation is a dummy predictor variable. Other standard controls for divorce risks are also included in this model. The second model is a probit model in which premarital cohabitation is the dependent variable.

Lillard et al. (1995, 451–453) show that cohabitation has the often observed positive and statistically significant effect in a stand-alone hazard model. But they also show that, in their simultaneous equation model, where the error terms of the two equations are allowed to correlate, the effect of cohabitation in the hazard model disappears. Moreover, the correlation of the two error terms is estimated to be positive (.36 in one specification and .48 in another) and statistically significant. This lends support to the argument that the observed association between cohabitation and increased divorce risks is due to self-selection. In other words, individuals who are especially prone to divorce are also prone to cohabit.

5 Is cohabitation a substitution for marriage?

Is cohabitation a substitute for marriage, or is it just a stage in the courtship process? Most researchers seeking answers to this question compare the experience of cohabiting couples with that of married couples. However, Rindfuss and VandenHeuvel (1990) report that cohabitants in the US are much more similar to singles than to married people, over a range of issues such as fertility expectation, employment status, school enrollment, home ownership, and financial independence, ... Given such pattern, they argue

that cohabitation should be compared to single life instead. As Rindfuss and VandenHeuvel (1990, 721) acknowledge, they have not discussed whether cohabiting couples and married couples are different in terms of ‘sharing of financial resources, number of hours spent together, and the division of domestic tasks’. To this list, one could add whether there are differences between cohabitants and married people in terms of their friendship networks, relationship to partner’s family, similarity of views and attitudes, the degree of homophily or homogamy . . . Limited data are available on such topics in survey data of some countries. This will be a very fruitful area of research.

6 Summary

Cohabitation among young and never married people has risen dramatically in many countries in the last two decades. Researchers have documented that cohabitation is more common among people who hold less traditional values and attitudes, and among those who had experienced parental separation. Cohabiting unions tend to be of short duration (median duration about 2 years in the UK), and for many countries, it is still a childless affair.

There is considerable evidence to show that marriages which began as a cohabiting union are less stable. However, it is quite possible that such an association is spurious, reflecting a selection process whereby people with less commitment to their partner choose to start their partnership as a cohabiting union. On the other hand, it is possible that the cohabiting experience does change individuals. We need panel attitudinal data to address this issue.

Cohabitants are found to be more similar to singles than to married couples in the US. But one must realise that the cohabitants are likely to be a diverse group. There are those who live together and still maintain a more or less single lifestyle. Others cohabit as a precursor to marriage. Still others might be ideologically committed to cohabitation. It would be important to keep this possibility in mind while cohabitants are compared to married couples.

We still have to explain why premarital cohabitation has gained popularity so quickly in so many countries. Rindfuss and VandenHeuvel (1990) as well as others have pointed to the effect of ‘normative, cultural, ideational and ideological changes’. Specifically they suggest that secularisation and individualism are important social forces effecting the drastic changes in the family formation process. While this is certainly true, a systematic framework which link social norms, cultural change to individual choices is required. A promising candidate in this regard is what some researchers have called ‘social interactions models’. These are sketched very briefly in the

section on marital stability.

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Theme 5 Social Integration and Social Cohesion

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Introduction to thematic papers

Basic concepts

In everyday language, the terms social integration and social cohesion might seem more or less synonymous but in the social sciences, particularly those areas of the social sciences which take their cues from social and economic policy debates within the European Union, they have acquired something close to mutually exclusive technical meanings. This is particularly true of the concept of ‘social cohesion’ which is a key element in the conceptual architecture of EU integration policy. Used in that context, it refers to *equality between countries and regions within the EU*, particularly in regard to level of economic development. It is measured by the degree to which key economic indicators at the national or regional level, such as GDP per capita, converge towards an EU-wide mean (always in the expectation that that mean is on an upward trajectory even as member states converge towards it). A socially cohesive EU, in this sense, is one where no country or region is much poorer or less economically developed than the norm for the EU as a whole.

The concept of social integration is not as central to EU policy as the concept of social cohesion but a closely related pair of concepts – those of social exclusion and inclusion – are. Social exclusion/inclusion (which some would say differs little from the more refined versions of the concept of poverty used in present-day research) can almost be thought of as the within-country counterpart of the cross-country concept of social cohesion. Its concern is with within-country inequalities between individuals or households, rather than cross-country inequalities between countries or regions. It does not take account of the full range of the social distribution within countries but focuses on a dichotomy between the bottom tail of the distribution – the socially excluded minority who are ‘cut off’ – and the rest, which is assumed to constitute the ‘mainstream’. A socially inclusive society, in this sense, is one where no individuals or households fall below the threshold of living conditions which is thought to provide the minimum necessary basis for participation in the normal life of a society.

Neither social cohesion nor social inclusion makes direct reference to social bonds between individuals or communities, nor to a sense of common belonging which some might hope to see emerge among citizens of Europe as a whole. Social integration can be thought of as referring to just such connectedness, social bonding and solidarity among groups and individuals in society. As such, it is a Durkheimian concept which carries echoes of the concern with 'loss of community', 'anomie' and the decline of 'social capital' which, in one form or another, has run through certain strands of sociology since the nineteenth century. Its recurrent theme is that modern society is in danger of shrivelling up or falling apart because people have become so individualised, privatised or non-engaged in their relationships with each other that social life atrophies. An image of this shrivelled up social world which has become well-known in recent years is presented in David Putnam's study of social capital, *Bowling Alone: The Collapse and Revival of American Community* (2000). The image advanced in this study is that of the typical middle American who goes bowling alone, or who sits at home watching television alone, because he lacks the bonds with neighbours, friends and family members which he would require to do these things in the company of others. The problem here is not social exclusion, since the people affected are not poor or cut off by lack of material resources, but a straightforward lack of social engagement, or 'social capital', which is said to permeate all levels of society.

The EU's social cohesion concept, the social inclusion/exclusion framework and the Durkheimian social integration concept are not wholly detached from each other. There is sometimes a strong, albeit often implicit, theoretical link between the three in that material inequalities (whether between individuals or households within countries or between countries) may be considered as impediments to social integration (whether within societies or across societies as in the special case of the European integration project). Generally, however, these links across concepts are less the focus of research than the nature and dynamics of each of the concept domains on its own.

The *Changequal* papers

The set of papers produced for the 'Social Integration and Social Cohesion' theme within the *Changequal* network reflect the diversity of meanings which can be

attached to those terms and in consequence are not grounded in single theoretical framework, nor do they focus on a common set of questions. Rather, they provide an indication of the diversity of topics which can be brought within the range of the Social Integration and Social Cohesion heading.

The EU's social cohesion perspective is represented least, in that none of the papers takes cross-country inequalities as its main theme. Frank Kalter's contribution on migration comes closest to this issue, since cross-national economic inequalities are at the heart of many models of migration behaviour. Anthony Heath's piece on migrant integration in host societies, which is included in the same document as Frank Kalter's, contains elements of both the social exclusion perspective and of the Durkheimian intergrationist perspective. The Whelan-Layte-Maître paper on multiple deprivation falls within the poverty/social exclusion tradition of research, and Fahey's paper on urban spatial segregation looks at a spatial dimension of the same set of concerns. The Degenne-Forsé paper deals with social capital and so might be placed within the Durkheimian social intergration tradition. However, apart from challenging the empirical validity of Putnam's declining social capital thesis, it also demonstrates the diversity of levels at which the concept of social capital might be defined and so indicates how many-sided the question of social integration can be. Richard Sinnott's paper deals with what many would see as the archetypal symptom of social disengagement in today's developed societies – the growing disinclination to vote. However, his account is more concerned with how voting turnout might be explained than with anxieties about its significance for the social integration in democratic societies. Taken individually, each of the papers points to a rich field of research. Taken collectively, the papers point to the challenge of integrating diverse research perspectives within a single coherent framework.

Ethnic minority research in comparative perspective

Anthony Heath & Frank Kalter

The causes of migration: New phenomena? New theories? New data?

Challenges to traditional research

For a long time the question of why migration occurs was only casually addressed by sociologists, but largely left to demographers, geographers and, above all, economists (Schmitter Heisler 2000: 77). The human capital model (Sjaastad 1962; Speare 1971) and the related push-pull paradigm (Lowry 1966; Lee 1966) have been the workhorses of empirical studies for many decades. They have proved to account for major empirical trends in many contexts, especially when analyses are conducted on the macro level. The ongoing prevalence of the economic approach gets especially obvious, for example, when looking at past and actual debates on the consequences of the upcoming EU Enlargement: Most predictions about the extent of future migration movements from East to West rely at least implicitly on a cost-benefit model and predictions are based on regression models consisting mainly of macroeconomic push and pull factors, such as wage differentials, differential unemployment rates, etc. (for an overview see: Fassmann/Münz 2002).

The confidence in the empirical strength of these kinds of models, however, stands in sharp contrast to more general observations and discussions within migration theory. Nowadays, many authors have come to the conclusion that the paradigm – although well-equipped to deal with internal or past transatlantic migration movements – is no longer adequate to account for the current migration patterns in the world. Massey et al. (1998: 8–14) list a series of empirical phenomena that obviously contradict the model's basic ideas and conclusions. Basically, the critics can be roughly divided into two general 'anomalies':

On the one hand, in many contexts there is just '*too little migration*' occurring as compared to the predictions deriving from such models. One example can be found in the case of the EU-South-Enlargement, where actual migration turned out to be greatly overestimated by predictions relying on wage differentials. Another example is labour migration from less developed Southern countries to the North. Although some authors already speak of the 'age of migration' (Castles/Miller 1993) one could even say that given the actual disparities the absolute amount of current migration movements is only minimal (see also: Faist 2000: 3–8).

On the other hand, in a few contexts there is '*too much migration*' occurring with respect to the usual assumptions. Once started migration streams occasionally are self-sustaining even

introducing new barriers and they develop a dynamic that can hardly be explained by economic factors alone. A label for phenomena like this is the term 'cumulative causation'. Here one can think of 'family reunification' processes in European countries after the decline of labour recruitment in the 1970s, or of unbroken Mexican-US immigration in spite of the US Government spending billions of dollars to deter it (Massey et al. 2002).

While these objections have been well-known in the literature for a long time, in recent years a new kind of critics has been added. Labelled under keywords like 'transnationalism', 'transnational social spaces', or 'transnational communities' (e.g. Glick Schiller et al. 1992; Faist 2000; Pries 2001; Smith 2001) it is argued that major changes in the 'type' of migration are also apparent, and that a simple cost-benefit approach is unable to deal with them. While in the model the act of migration normally is considered as a unidirectional and relatively permanent shift to the receiving country, authors point to the increasing relevance of semi-permanent migrations, i.e. to the fact that immigrants even in the receiving country sustain multiple ties to the home country, sometimes commuting frequently between both contexts, thus organizing their life in a bi- or multi-local resp. in a transnational way. An increasing amount of the literature is devoted to typologizing and describing these phenomena and nowadays in journals like 'International Migration Review' almost every second contribution shows a 'trans' in its title.

Theoretical tools available

Although one may doubt whether the phenomena labelled under these new words are really 'new' (Al-Ali/Koster 2002: 1; Schmitter/Heisler 2000: 84; Jacobson 1995), they obviously challenge the traditional framework of migration research. Further to that an answer to the two above mentioned anomalies is still pending. In the meantime sociology provides many suggestions to overcome some of the problems referring to rather diverse approaches. Partly, they involve a complete theoretical reorientation, partly they rather resemble modifications of the general cost-benefit approach.

On the macro level new attempts are made to derive hypotheses about the current migration patterns out of a general system theoretical framework. Relying on world systems theory (Wallerstein 1974) and referring to other assumed macro changes, above all 'globalisation', some authors focus their ideas on the penetration of capitalistic nations or organisations into precapitalistic peripheral societies and its consequences (Portes/Walton 1981; Sassen 1988; 1991).

On the micro level the simplifying assumptions of the economic human capital model are complemented or substituted by more realistic ones.

Accompanied by developments in social psychology (Wolpert 1965), the value-expectancy model keeps up the idea of maximizing behaviour but emphasizes the importance of the subjectivity of the model parameters as well as of non-pecuniary utility terms (e.g. Chemers et al. 1978; De Jong/Fawcett 1981).

Further to this the basic rule of individual maximizing behaviour has been questioned, although the general idea of 'rational actors' is not completely dropped. The New Economics of Migration (Stark/Taylor 1989; Stark 1991) assumes that decisions are not made to maximize outcomes of isolated individuals but of whole households and that risk aversion and risk diversification play a major role. In other models the idea of bounded rationality (Simon; Riker/Ordeshook 1973) has been picked up proposing refined multi-stage decision making models to explain the phenomenon of inertia (Speare et al. 1975; Kalter 1997).

Nearly all authors emphasize the crucial role of social ties and networks in order to understand current migration patterns. Within system theories networks are seen as the link between the system level and the actor level (Boyd 1989). In actor oriented approaches relying on the work of Bourdieu (1980) and Coleman (1988) the concept of social capital has become central. Dynamic accumulation of host-country specific social capital is seen as the major mechanism to account for the phenomena of so-called 'cumulative causation' (Massey/Zenteno 2000).

A general theoretical framework for the fact that social capital or human capital is to a certain degree 'specific' for a societal context can be seen in the concept of Social Production Functions suggested by Lindenberg (1989). This is worth noting because in our view global phenomena like growing economic interdependence etc. may be interpreted as a change of the 'modes of production' for many actors. Therefore, this concept may be a fruitful starting point to address the phenomena associated with 'transnationalism' because it can link them to the idea of capital and thus save the advantages of theoretical approaches on the micro level.

Tasks and starting points for further comparative research

Nowadays, these and many other supplements to traditional migration theory are well-known and recognized. What is still missing, however, is a thorough theoretical integration. In many contributions theory building is understood as just adding up the arguments and approaches, stating that there may be some truth in each of them (including the human capital model).

Although it is true that the relevance of particular causes is in the end an empirical question (Massey et al. 1993: 455), additive theory building is not really sufficient, not at all for comparative research. To understand why several mechanisms may have different weights in different contexts they have to be linked to a general model which specifies the conditions under which they will more or less likely work.

In addition to the theoretical work there is a lot of empirical work to be done. First, the assumed 'new' phenomena have to be ascertained more systematically. So far research on topics like transnationalism has mainly focussed on case studies and qualitative approaches. But how widespread are temporary and repeated migrations, bi- or multi-local life-patterns and are they really new? Besides assuring the explanandum, second, critical tests between competing explanations and more direct proofs of the assumed mechanisms are necessary.

To achieve the empirical tasks specific data sets are needed. So far, quantitative research is mainly based on census data or on standard surveys, however these sources do not provide proper information. As rule these data can not identify undocumented or short-term migration and do not allow longitudinal analyses. Therefore they are unable to account for the assumed new migrations patterns and their developments. Further these kind of data sets usually miss important variables, above all network measures.

Currently the most promising data set to overcome these kind of problems and to handle the empirical challenges is the data of the Mexican Migration Project (MMP) which was established by Douglas S. Massey and Jorge Durand in 1987. After a successful pilot study in 1982 (Massey et al. 1987), each year since 1987 they have gathered data from representative sample of households in Mexican communities and out-migrants from the same communities in the United States. This has resulted in an impressive database of life-histories of potential and actual Mexican, permanent and temporary, documented and undocumented immigrants (e.g. Massey et al. 2002: 165–172). As the data on individuals is enriched by household information, information on social ties and numerous context variables, it can be used to test conflicting hypotheses referring to the above mentioned theoretical approaches (e.g. Massey/Espinosa 1997; Massey/Zenteno 1999; Palloni et al. 2001; Sana/Massey 2000). In the meantime the project idea has been transferred to study migration to the US also from Puerto Rico, the Dominican Republic, Nicaragua and Costa Rica ('Latin American Migration Project'; LAMP).

The general project idea and design seems also applicable to study new migration patterns and its causes in European contexts. At the moment a pilot study on Polish-German migration is

prepared at the MZES in collaboration with the University of Pennsylvania at Philadelphia (Douglas Massey) and the Centre for Social Studies at the University of Warsaw (Krystyna Iglicka). In a long-term perspective it is planned to add further data from Poland as well from other sending countries to Germany. Similar studies can be easily imagined for other migration systems in other European Countries and thus the MMP-approach may represent an idea to steadily accumulate data for European comparative research on the causes of migration.

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The consequences of migration

There has been a great deal of research, particularly by economists drawing upon the human capital model, investigating the labour-market experiences of the migrants in the countries of destination (eg Chiswick). In addition to the standard human capital ideas of education and experience, scholars have emphasized the selective nature of the process of migration and the question of the portability of human capital (Friedberg), that is the extent to which human capital acquired in the country of origin has economic returns in the country of destination. These models rarely suffice to account for the whole of the economic disadvantages experienced by the first generation: even after controls for human capital and where it was acquired, certain ethnic groups (especially black groups) continue to show substantial ethnic penalties. Some economists interpret these penalties as evidence of discrimination while others attribute them to unmeasured differences in the quality of the human capital that the migrants possessed (arising as a consequence of the selective process of migration). In addition to discrimination, other more sociological processes have been suggested, such as the first-generation's lack of social capital and of the 'weak ties' that have been shown to be important in the job search (Petersen et al).

Within the sociological tradition, there has been a major interest in the ethnic enclave. Following Putnam's work, we can distinguish between the bridging social capital that links minorities with the host society, and bonding social capital that provides for strong social ties within the ethnic community. Ethnographic work has suggested that bonding social capital can, under certain conditions, give ethnic minority entrepreneurs substantial advantages over their competitors in the host society. These links with co-ethnics also occur in the transnational community and have been suggested as one reason for the economic success of, for example, Chinese trading groups. However, it is unclear whether the advantages also accrue to the subordinate members of the ethnic community or are restricted to the entrepreneurs (Portes, Light).

Attention is now shifting to the experiences of the second generation (both in education and the labour market). The issues about the portability of human capital, lack of language fluency and so on do not apply to the second generation, who have been educated in the

country of destination and received all their labour market experience in the country of destination. But there is growing evidence that the members of the second generation, particularly black groups, continue to experience major disadvantages in the labour market. A major interest for research is to understand which groups in the second generation continue to suffer ethnic penalties and which achieve parity with (or superiority to) the host society. Research in countries with longer-standing histories of migration (such as the USA, Canada and Israel, where there are greater numbers of second or later-generation groups to investigate) suggest that white groups achieve parity relatively quickly (in generational terms) while blacks do not.

Black disadvantage has been a major focus of American research. In addition to discrimination and the legacy of slavery, research has focussed particularly on the role of the ghetto and ethnic segregation, the lack of opportunities in the ghetto, the absence of role models and of social disorganisation (Massey, Wilson). These ideas have been developed by Portes and Zhou with the concept of segmented assimilation and applied to a wider range of ethnic minority experience. This line of theory suggests the importance of contextual effects and some research is now developing multi-level models to investigate individual and social influences on educational and labour-market experiences of the second generation. However, there are a number of major technical issues in the interpretation of contextual effects. Much of the research to date in this area is ethnographic, and there are relatively few statistical analyses that permit one to quantify the substantive importance of social influences or the conditions under which they are important.

Nor is it clear that the results of American research can be applied directly to other countries. The nature and conditions of the American ghetto are probably unusual in the developed world. The contexts of reception experienced by the migrants and successor generations will also differ cross-nationally. These contexts include not only the experience of discrimination and social closure, but also economic conditions in the countries of destination (Model et al 2002). Cross-national research on gender inequalities, for example, has found a negative relation between the dispersion in earnings within nations and the male-female wage gap across nations; that is, the greater the overall level of earnings inequality in a nation, the greater the male-female wage gap (Blau and Kahn 2000). Model and her colleagues (2002) suggest that similar considerations might well apply to ethnic minority disadvantage.

Partly because of the availability of data, the bulk of quantitative research has focussed on labour market experiences of the first generation, that is their rates of unemployment, their chances of entering the salariat, and their wages. There has been much less emphasis on the classic themes of social integration (self-identity, intermarriage and value change), although this is of growing interest in research on the second generation. British data certainly suggest that patterns of social integration are largely orthogonal to patterns of economic integration: second generation Black-Britons for example exhibit hyphenated identities, high rates of intermarriage with whites but continuing high levels of unemployment and economic disadvantage. While it is possible to label this segmented assimilation, a systematic theory predicting the conditions under which economic and social integration respectively will occur is still lacking.

The host society's response to migration and social diversity

Another major research theme, although one that has been little integrated with ethnic minority research, is the study of prejudice in the host society and the treatment of migrants and ethnic minorities. Here there have been a vast literature on far-right extremism (Husbands, Kitschelt, Nonna Mayer). There has also been a longstanding interest in the role of contextual effects on prejudice and support for racist parties. There is also a major socio-psychological tradition looking at intergroup contact and prejudice (eg Hewstone's work on Northern Ireland).

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Social Exclusion and Multiple Deprivation

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Introduction

While, as Matasganis and Tsakloglou (2001) note, the popularity of the term social exclusions is probably not unrelated to its vagueness, most recent attempts to clarify the concept involve reference to dynamics and multidimensionality (Atkinson, 1998, Burchardt, 1998, Hills, 1999, Sen 2000). In following this lead we wish to distinguish between *cumulative disadvantage* and *multiple deprivation*. We will use the former term to refer to the dynamic process involved in the accumulation of disadvantages of social position over time. In employing the latter term we wish to focus on multi-dimensionality at a point in time and the notion that social exclusion involves not just low income but exposure to a range of deprivations. In what follows we focus on multiple deprivation

Spirals of Precariousness and Social Cleavage

Of course the social exclusion perspective sees multiple disadvantage as emerging from a process of cumulative disadvantage and our treatment of the issues will reflect this fact. The process by which people come to be exposed to multiple deprivation and a progressive rupturing of social relations has been a central concern of the social exclusion literature. Berghman (1995) views social exclusion as involving a social process in which the creation and reinforcement of inequalities leads a to state of deprivation and hardship from which it is difficult to escape. Paugam (1996a) focuses on the process leading from labour market precarity to social exclusion, or as Paugam (1996b) labels it, the 'spiral of precariousness'. In each case the need to move from a static definition of poverty based solely on income to a dynamic and multi-dimensional perspective is stressed. Kleinman (1998) notes that one consequence of employing the term social exclusion to denote multiply deprived groups is that it defines the key social cleavage as between a comfortable majority and an excluded social isolated minority. This tendency is also stressed in Room's (1999:171) discussion of notions of continuity and catastrophe in the social exclusion literature.

Attempts to grapple with the changing nature of social stratification have thus provoked increased reference to the emergence of forms of multiple disadvantage, which are

qualitatively different from that formerly associated with working-class disadvantage or with exposure to income poverty. Yet, at the same time as the shift from a unidimensional to multidimensional perspective, from static to dynamic analyses and to an emphasis on social relations has become a defining characteristics of the social exclusion perspective, the volume of research documenting the nature and extent of multiple disadvantage has been rather modest and has focused largely on the effects of unemployment and employment precarity on social isolation (Paugam, 1996 a and b, Paugam and Russell, 2000).

Analysing Multidimensionality

In view of this, it is regrettable that much of the treatment of social exclusion overstates both the novelty of emphasising multiple disadvantage and the limitations of traditional poverty analysis. In relation to the first issue, a variety of studies have shown the danger of assuming, rather than establishing, the existence of multiple deprivation by demonstrating that a relatively weak relationship exists between income poverty and deprivation. A substantial proportion of those on low incomes are not suffering deprivation (Halleröd, 1996, Mayer and Jencks, 1988, Muffels, 1993, Nolan and Whelan, 1996 a & b). Furthermore, as Heath (1981) stresses, if we wish to document the *scale* of multiple deprivation, we have to go beyond the degree of association between variables for the population as a whole and demonstrate the extent of overlap at the extremes. With regard to the second issue, it is necessary to point out that panel analysis of income data has led the way in highlighting poverty dynamics and persistence and in offering an opportunity to assess the consequences of sustained exposure to poverty (Bane and Ellwood, 1986, Duncan, 1984). The availability of such data in the ECHP data set now offers the opportunity to connect questions of income poverty persistence to those relating to multiple disadvantage.

In pursuing these issues it is necessary to keep in mind that the nature of ones results will be substantially influenced by the dimensions one chooses to examine and the deprivation cut-off points chosen. A variety of such analyses have recently been conducted making use of the European Community Household Panel Study (ECHP). (Whelan *et al*, 201a, 2002, Gallie and Paugam, 2002 Moisiso, 2002 and Tsakoglou and Papadopoulus, 2002). There are important differences in the approaches adopted, and Moisiso's analysis by focusing on social risk or 'independent' variables, comes nearer to what we have labelled cumulative disadvantage. However, the findings of each of these studies point in a broadly similar direction.

A Comparative Analysis of Multiple Deprivation

In order to illustrate the type of issues that arise in the analysis of multiple deprivation, we draw on the set of analyses reported in Whelan *et al* (2001a, 2002) relating to the original twelve EU members states with the exception of Luxembourg. They make use of the first three waves of the ECHP to calculate annualised ‘counts’ of years in poverty. They then seek to examine the extent to which those respondents who are poor in the sense of being members of households that fall below 70% of median income in all three years are exposed to multiple life-style deprivation.

Whelan *et al* (2001b) identify 23 items in the ECHP data set that could serve as indicators of deprivation in the sense enforced absence due to lack of resources. Five common dimensions were identified.

Basic life-style deprivation - comprising items such as food and clothing, a holiday at least once a year, replacing worn-out furniture and the experience of arrears for scheduled payments.

Secondary life-style deprivation - comprising items that are less likely to be considered essential such as a car, a phone, a colour television, a video a microwave and a dishwasher.

Housing facilities - housing services such as the availability of a bath or shower, an indoor flushing toilet and running water.

Housing deterioration - the existence of problems such as a leaking roof, dampness and rot in window frames and floors.

Environmental problems - problems relating to noise, pollution, vandalism and crime, and inadequate space and light.

In each case a weighted version of the variable is employed in which each individual item is weighted by the proportion of households possessing that item in each country, thus taking into account what is customary in the society. In addition dependent variables are in each case constructed by taking the deviation from the national mean divided by the corresponding standard deviation. Thus we are looking at the impact of persistent poverty on individuals’ *relative* positions in their own country in relation to current life-style deprivation.

While in each case the dimensions are positively correlated only in the case of the primary and secondary dimensions, where a value of 0.45 is observed, does the correlation exceed 0.25. The pattern of association is a great deal weaker than one might expect on the basis of *a priori* expectations arising from the extent to which multiple deprivation has come to be emphasised in the social exclusion literature.

Whelan *et al* (2002) proceed to examine the differences in terms of standardized scores between the persistently poor and all others.¹ The persistently poor are clearly differentiated from all others in their exposure to basic deprivation of food, clothing, furniture, holidays and inability to make routine payments. On average across the eleven countries included in the analysis they have basic deprivation scores that are 0.89 standardized units higher than all others. They are also clearly differentiated in terms of the secondary deprivation dimension, which involves the enforced absence of a range of consumer durables, with an average score of 0.72 standardized units higher than others.

The persistently poor group are thus exposed to a degree of basic and secondary deprivation that sets them apart from all others. They also display higher scores on the housing facilities dimension, which comprises items relating to basic amenities such as hot running water, bath or shower and indoor flushing toilet. However, the differences are a good deal smaller than in the earlier cases. The average difference across countries is 0.41 standardized units. The trend towards a weaker relationship with persistent poverty continues with the housing deterioration dimension, which comprises items relating to damp, rot and leaking roof. The average difference in deprivation across countries is 0.26. Finally for the dimension relating to environmental problems, which comprises items pertaining to noise, pollution, space, light and vandalism we generally find no significant relationship to persistent poverty with the average difference being 0.18. Thus while persistent poverty is associated with higher deprivation across the range of dimensions the magnitude of such differences varies sharply across the dimensions.

¹ A more detailed treatment of the relationship between persistent income poverty and deprivation is provided in Whelan *et al* (2003).

A great deal of recent discussion of the nature of poverty and social exclusion shares with the ‘underclass literature,’ a focus on the spatial concentration of disadvantage in areas or neighbourhoods and the manner in which isolation from mainstream values leads to behaviour and orientations which contribute to a vicious circle of deprivation.² However, as Whelan *et al* (2002) stress, with the exception of Ireland, the ECHP results reveal no systematic relationship between persistent poverty and reports of vandalism or crime in the neighbourhood. Furthermore the vast majority of the persistently poor do not report such problems in their area. Given the weakness of the observed association, variation across countries in the extent to which the persistently poor experience such problems largely reflects cross-national variations in the overall level. The highest figure is observed for the UK but even here almost 70% of the persistently poor fail to report such problems. In seven of the eleven countries this figure ranges between seventy and eighty percent, while in the remaining four it rises to between eighty five to ninety five per cent. The odds ratio, which compares the odds of being in such an area for those persistently poor with all others, ranges from 0.50 to 1.35 for ten of the eleven countries. Thus, the persistently poor experience problems of vandalism or crime on a scale that reflects societal problems rather than any specific difficulties with persistent poverty as such. This of course does not preclude the existence of ‘black spots’ characterised by persistent poverty and chronic neighbourhood problems relating to crime and vandalism, but it does imply that only a rather small minority of those exposed to such poverty will be found in these areas.³

The Scale of Multiple Deprivation

In order to extend the analysis of the degree of overlap between persistent poverty and the range of dimensions of life-style deprivation Whelan *et al* (2002) took the numbers continuously below 70% median income between 1993-1995 as an initial benchmark. Then in each country, for each of the relevant dimensions of deprivation, they created a threshold corresponding as closely as possible to the persistent poverty threshold. For example, in the UK where 15% are persistently poor they identified the point on the basic deprivation

² For recent discussions of this literature see Friedrichs (1998), Kleinman (1998) and Nolan and Whelan (2000).

³ Gallie and Paugam (2002), in an analysis of sixteen countries based on Eurobarometer data collected in 2001, also find a relatively weak relationship between income level and an index which includes reports of “run-down housing where I live” and “drug-addiction problems where I live”.

dimension above which 15% of respondents in the UK are found. They then assessed the extent to which the persistently poor overlapped with the corresponding segment of those experiencing extreme specific deprivations. In each case the degree of consistency can potentially range one from zero to hundred per cent.

It should be clear from the earlier findings that were we to conduct such an analysis employing all five dimensions of life-style deprivation the numbers falling below the threshold on multiple dimensions would approach zero rapidly. Focusing on the most strongly correlated dimensions of basic and secondary deprivation we find that, excluding Denmark where the relationship is exceptionally weak, the percentage of the persistently poor located above *both* thresholds ranges from 13% to 22%. These rates are extremely high in comparison with those who are not persistently poor. However, the vast majority of the persistently poor do not experience multiple deprivation. Since this is true where the dimensions in question are moderately correlated, it is clear that this will hold with even greater force where an extremely weak degree of association exists between variables.

Persistent Poverty and Social Isolation

At this point we shift our focus from economic considerations to issues of social involvement and social isolation. The issue of social integration or social isolation, as Gallie and Paugam (2002) note, is at the heart of the concern with social exclusion. It raises issues relation to extent to which marginalisation is accompanied by the breakdown of networks thereby reinforcing the rupture with mainstream norms and value.⁴ Such isolation has come about through financial pressures or loss of self-confidence, through stigmatisation or through rejection of mainstream values. What evidence is there that those exposed to income poverty over a period of time become detached from social networks and participate less actively in society? The range of indicators covering such issues in the ECHP is considerably narrower than one would ideally like. In particular, it contains relatively little information on the quality of networks. However, given the limitations of the existing literature it still offers a valuable opportunity to examine the impact of persistent poverty on important aspects of social

⁴ Similarly in Wilson's (1987) elaboration of the 'underclass' concept what is crucial is a combination of weak labour force attachment and social isolation. However as Wacquant (1993) notes, there is no European counterpart to the Afro-American experience of long-term negative discrimination and restriction of opportunity.

participation. From the available information in the available the ECHP database Whelan *et al* (2001a) construct three indicators of social isolation. These are as follows.

Not being a member of a club or an organization.

Talking to neighbours less than once weekly.

Meeting people outside the home less than once a week.

Their findings show that only in Denmark are a majority of the persistently poor members of clubs or organisations. In all countries persistent poverty is associated with lower membership. However, the degree of association is generally modest with the value of the odds ratio varying from 1.31 in Denmark to 3.67 in Greece. Persistent poverty is associated with lesser opportunities to participate in social life particularly in the poorest countries. However, it is difficult to construe such membership as a deprivation indicator having comparable meaning across societies. Substantial cross-country variation is also observed for the second indicator ‘talking to neighbours less than once weekly’. The pattern of variation suggests that such contact seems to have a great deal more to do with cultural variations across countries than degree of exposure to poverty within them. With the final indicator “meeting people outside the home less than once a week” we observe similar cross-country variation. Although the odds ratio is positive in nine of the eleven cases, the degree of association is generally very modest. Taken together the findings suggest that persistent poverty contributes little to such isolation. Here our conclusion is in line with Gallie and Paugam (2000:269) who conclude, on the basis of a consideration of the impact of unemployment and labour market precarity in the ECHP countries, that sociability in societies has its “own distinctive dynamics with longer-term historical roots in very different paths of economic and cultural development”. The findings are also consistent with those reported by Gallie and Paugam (2002) on the basis of Eurobarometer data although they find that those with low incomes are less satisfied with their social networks.

This does not exclude the possibility that those exposed to persistent poverty may suffer disadvantage in the quality of their networks in relation to factors such as access to employment opportunities. However, while Gallie *et al* (2003) using the ECHP found that unemployment increased the risk of poverty, and poverty in turn made it difficult to return to

work, they found no clear support for the view that social isolation is directly caused by unemployment. Rather the risk of social isolation was seen as being contingent upon broader cultural patterns with respect to household structures and local sociability, which differ between countries. However, the evidence argues against any type of general claim linking multiple disadvantage with social isolation and should make us wary of vicious circle type arguments in which such isolation is a key mechanism.

Conclusions

The social exclusion perspective has focused attention on the processes leading to exposure to multiple disadvantage and social isolation. Despite the influence the perspective has had on both academic and policy discussions, conceptual analysis has remained imprecise and empirical evidence modest.

The persistently income poor clearly constitute prime candidates for exposure to multiple disadvantage and a spiral of precariousness. However, even in case of life-style deprivation, the observed pattern does not conform to one of systematic multiple disadvantage. This is perhaps most vividly illustrated by the fact that the persistently poor are not a great deal more likely than others to consider that they live in areas affected by vandalism or crime and the vast majority of the poor do not live in such areas.

Furthermore, portraits of those exposed to continuous poverty as socially isolated appear to be seriously misleading. This does exclude the possibility that they suffer additional disadvantages related to the quality of their social networks but this is something rather different from social isolation or a rupturing of social networks. These findings may seem less surprising when we note the recent observation by Portes (2000:5) that the problem in poor inner city areas in the United States “is not that people do not know each other or help each other, but the resources to do so are so meagre and the social ties so insulated as to yield meagre returns”.

Understanding deprivation cannot simply involve a focus on a cleavage between a multiply deprived and excluded minority and a comfortable majority. A more accurate picture is likely to be that painted by Heath (1981) who sees “deprivation as a vicissitude (sometimes

transitory) which strikes broadly and unpredictably across the working class (and indeed white collar groups) in response to the vagaries of economic and social policy and life-circumstances". A focus on multiple disadvantage tends to direct attention to the manner in which 'problem' groups emerge, the emergence of alternative value systems, the spatial concentration of poverty and the need for interventions to break the vicious circle of poverty. In that context wider inequalities relating to disadvantages experienced by broad class and status groups in relation to access to education, employment and the operation of the taxation and welfare transfer system, and the manner in which the impact life-of cycle stage and life-events are mediated by such inequalities can come to be obscured.

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Urban Spatial Segregation and Social Inequality: A note on the potential for comparative European research

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Introduction

Social policy at both the EU level and in many member states has shown a high level of interest and innovation in ‘area-based’ and neighbourhood responses to urban disadvantage (e.g. the ‘neighbourhood renewal’ programme in the UK, *Contrats de ville* and *Zones urbaines sensibles* in France – see OECD 1999). However, the research basis for these policy responses remains uncertain: the proportion of the poor living in poor areas is generally small, and it is unclear to what extent the apparent disadvantages associated with living among poor neighbours is due to selection effects and the remote effects of national or transnational structures rather than the real proximate effects of the local social ecology. In consequence, much academic work has argued that area-based responses to social exclusion are either misguided or overstate their potential benefits (see, e.g. Townsend 1979 for a particularly strong version of this argument). The most that can be said with any confidence is that such interventions may bring some benefit to some of the poor in some deprived neighbourhoods but should not be expected to be anything more than of secondary, or even lesser, importance (for a balanced assessment, see Glennerster et al.).

In that context, the purpose of the present note is to assess the potential of this area of investigation for comparative European research. Particular attention is paid to the American origins of some of the dominant research orientations on urban spatial segregation, the difficulty in transferring these orientations to Europe, and the intractability of many of the conceptual, methodological and data-related problems which arise in investigations into the nature and effects of urban spatial segregation. Illustrations of some of the research issues involved are drawn from a recently completed TSER study (the BETWIXT project) which examined spatial segregation and social precarity in seven European cities, using a combination of city-wide statistical analysis of census data and local neighbourhood studies (Bertaux *et al.* 2002). The conclusion offered is cautionary: while the interest of the subject matter in

this area is great, real advances in research are difficult to achieve and the level of research effort to be expended in the area should be decided with care.

Main research traditions

Two over-lapping strands in social research on the interconnections between urban spatial segregation and social inequality can be distinguished. One is the quantitative analysis of large-scale data sets, largely drawn from census sources, which aims to measure the nature and extent of urban spatial segregation, track its evolution over time, and offer some insight into the causal connections between urban spatial segregation, social inequality and social deprivation. In this tradition, the typical unit of analysis is the city and it is common to include a number of cities in a single study. The other tradition is based on the neighbourhood study, which usually is heavily qualitative though it may also have strong quantitative elements. The typical unit of analysis in this approach is the neighbourhood, the usual focus is on deprived parts of either a single city or a relatively small selection of cities, and the over-riding concern is to provide in-depth analysis of the social and cultural character of deprived neighbourhoods and a largely qualitative assessment of their effects on residents lives.

Various combinations of these approaches can be found, along with variants which fit into neither approach. Yet the approaches are sufficiently distinct and sufficiently inclusive of research on urban spatial segregation for it to be useful to treat them separately here.

The quantitative tradition

American background

From a European perspective, an important aspect of the tradition of quantitative social research in this area is its American origins and its transferability from those origins to European contexts. It developed in the United States in response to the large-scale migration of American blacks from the rural south to the northern industrial cities from the 1930s onwards and the consequent emergence of the black ghetto as a major feature of American metropolitan life (Cutler et al. 1999). Black ghettoisation amounted to a more extreme form of segregation than that based on any other form of ethnic, social or economic differentiation in American cities (Massey and Denton 1993). As such, it became a major target of quantitative social scientific

investigation from the 1950s onwards (Duncan and Duncan 1955 was a seminal study, followed by Duncan and Duncan 1957; from the very extensive recent literature see, e.g. White 1987, Massey and Denton 1993, Quillian 1999, Jargowsky 1996, Cutler *et al.* 1999).

The American decennial census provided the main data foundation for this research. The classification of population by race (within which 'white' and 'black' were the two key categories) had been included in the census since the nineteenth century. Successive refinements in small-area data collection from 1940 onwards greatly enhanced its value for the analysis of spatial segregation. The definition of 'census tracts' in the 1940 census was one such innovation. Its purpose was to identify socially homogenous small areas which would provide meaningful units of analysis for urban spatial patterns, replacing the previous primary area base used for that purpose, the political-administrative unit represented by the ward (Cutler *et al.* 1999: 497-503, White 1987: 286-295). That census also introduced a household income measure which has been retained in the US census since then. The 1950 census added a definition of the Standard Metropolitan Statistical Areas (SMSAs) which were intended to identify cities as functional entities rather be guided by administrative boundaries which might have limited functional significance. Again the purpose was to strengthen the statistical basis for the analysis of substantively meaningful urban units. By the 1990s, more than 300 SMSAs were identified in the US Census. The tract data on these cities provided a powerful statistical foundation for the analysis of spatial segregation, particularly since time series dating back to 1940 could be constructed directly from these data and, with some adjustments and interpolation, those time series could be extended back as far as late nineteenth century (Cutler *et al.* 1999).

Within the body of research which emerged from this foundation, much effort was expended on the 'index wars' which were waged over the best ways to measure segregation. Duncan and Duncan's (1955) index of dissimilarity (IoD), which represents 'the percentage of one group or other which would have to move if there were to be no segregation between groups' (Lieberman 1981) won an early lead in these wars and, despite some continuing criticism, retains that lead to the present (Massey 1988, Gorard and Taylor 2002). Other indices measure the degree to which segregated areas abut each other (clustering index), the degree to which they consist

only of members of the minority group (isolation index), the amount of physical space occupied by the minority group (concentration index), and the proximity of segregated areas to the city centre (centralisation index) (Massey 1988). Further complications arise when the type of segregation being measured relates to a continuous variable such as income rather than a categorical variable such as race (Jargowsky 1996). The proliferation of these indices indicate the complexity of segregation as a social phenomenon and the problems associated with quantifying it even when the underlying statistical base is quite good.

The most valuable products of this body of American research are mainly descriptive, relating especially to levels and trends in black-white segregation in large numbers of American cities (see, e.g. Massey and Denton 1989 for data on 60 US cities and Cutler et al. 1999 on 127 US cities). The picture painted is one of extremely high levels of segregation – or ‘hypersegregation’ as Massey and Denton (1989) call it. The average black in American cities lives in a neighbourhood that is 57 per cent black (Cutler and Glaeser 1997: 827) and in the larger US cities large areas that are virtually 100 per cent black are common ().

Attempts to analyse the effects of segregation on the segregated have been less successful and point to limitations in data, analytical techniques and conceptualisation that have proved difficult to overcome. Reviews of the literature express disappointment at the meagreness of the causal conclusions which can be drawn from the flood of research in this area. Small and Newman (2001: 35), for example, criticise both the methodological inadequacy and lack of conceptual sophistication in causal analysis in such research and conclude that ‘many of the studies of neighbourhood effects [are] unsatisfying, both because they often fail to account for the methodological problems which make them unreliable and because often the most they can tell us is that census tracts are highly correlated with certain social problems’.

European perspective

European interest in urban spatial segregation and neighbourhood effects on poverty has been strongly influenced by this American background. In consequence, reference to ghettoisation have cropped up in debate about European cities, often with alarmist overtones (Ostendorf et al 2001). There is a widespread presumption that the problems of ‘distressed urban areas’ have a certain universality in the cities of the

developed world and that a degree of continuity exists between European and American patterns in these areas.

However, on closer view, it is evident, first, that Europe lacks the tradition of research in this area that is found in the United States. This is so partly because, apart from some of the Scandinavian countries, European countries generally lack the rich small-area data base on racial composition and related issues which provides the foundation of American research on segregation provided by the US census, and second, that in so far as country studies and selected city studies have been carried out, spatial segregation in European cities is much less pronounced than in the US and produces nothing like the black ghettos found in US cities. Major differences exist between on those living in deprived areas has been influential in Europe

Studies often fail to find statistical evidence for any significant effects of neighbourhood on residents in segregated areas (e.g. Scott and Crowder 1999) and where significant correlations are found, researchers are often at a loss in trying to account for them (e.g. Cutler and Glaeser 1997). For the (or what) main descriptive findings from this American research were striking and consistent: racial segregation between blacks and whites had become extreme and widespread in American cities from the 1950s onwards (Cutler et al 1999). Ethnic enclaves of many different kinds had a long history in urban America but only blacks could be said to have become 'ghettoised'. According to Peach (1996: 217), a ghetto can be said to exist when two conditions are fulfilled: a residential district is populated almost entirely by a single ethnic or racial group and almost all of the members of that group are found in such areas. She cites as a case in point Duncan and Duncan's (1957) evidence on Chicago as indicating a case in point, (Peach 1996: 217). In Chicago in the 1950s

important urban bases. While census tract boundaries have often changed over time in response to changes in the social and economic topography of cities, into a rich and sophisticated source for the analysis of urban spatial segregation. It subsequently developed to include wider issues of socio-economic segregation as well as racial segregation, and it is rather on this broad aspect that the BETWIXT project has focused. While many of the best-known US studies of this topic from the 1950s

onwards focused on individual cities or even individual neighbourhoods (see e.g. Suttles 1968, Farley et al 1979), there also developed a strong tradition of cross-city quantitative measurement of spatial segregation and its effects. This was facilitated by the rich standardised data on American cities which was available from the US Census of Population and which provided the quantitative foundation on which much of the discussion of urban spatial segregation was based (the initial study was Duncan and Duncan 1955; from the very extensive recent literature see, e.g. White 1987, Massey and Denton 1993, Quillian 1999, Jargowsky 1996, Cutler *et al.* 1999).

European research on urban spatial segregation has been strongly influenced by this American background, its concepts and questions. In consequence, reference to ghettoisation and related aspects of spatial segregation have cropped up in debate about European cities, often with alarmist overtones (Ostendorf et al 2001).

However, in evaluating this transatlantic transfer of research focus, some researchers have questioned whether the parallels between European and American urban patterns are as strong as are often assumed. It is questionable for example whether any large ethnic minority in Europe is normally subject to the degree of spatial segregation – or ‘hyper-segregation’, as Massey and Denton (1993) call it – experienced by blacks in American cities. In addition, the welfare state appears to play a stronger role in Europe than in the US, mitigating the wider social inequalities that are bound up with spatial segregation (Musterd and Ostendorf 1998).

From this background, basic questions emerge about the levels of spatial segregation in European cities, whether by reference to segregation based on social inequality (as measured through socio-economic indicators such as un/employment or educational level) or on race or ethnicity (as measured by indicators of race or ethnic minority). Questions also arise about the relationship between spatial segregation and such issues as the general patterns of social inequality in cities, the presence of ethnic minorities, and the way these evolve over time.

A key problem faced by European research in tackling these questions is the lack of a strong quantitative foundation which has characterised corresponding research in the United States. Segregation patterns in many individual cities in Europe have been examined (e.g. Edwards and Flatley 1996, see also the chapters on individual cities in Musterd and Ostendorf 1998) and these have sometimes included elements of comparison within national boundaries. But Europe as a cross-national entity has nothing to compare with the range, detail and harmonised nature of the American census. Nor, within national boundaries, has any individual European country the number and diversity of urban centres which would compare with the 300 plus cities available to American researchers. In consequence, Europe lacks the foundation for the quantitative analysis of urban segregation patterns which has existed in the United States for over half a century.

It is precisely this lack of harmonised data and research infrastructure that is being tackled by Eurostat and by the research programme of the European Union, which has co-funded the BETWIXT project. Other recent EU initiatives are working in this direction. On social and employment dimensions, two well established examples are the European Community Household Panel Survey and the harmonised Labour Force Survey. More recent developments include the EU social inclusion programme (DG for Employment and Social Affairs), with its emphasis on comparative evidence, policies and indicators, and the Urban Audit (DG for Regional Policy), with a more spatial emphasis on quality of life data for cities. The latter is particularly relevant to studies of urban spatial segregation as it describes data at super-, sub- and city levels for 58 EU cities. However its ability to produce results based on harmonised sub-city data is as yet embryonic, hampered precisely by the lack of a single data source such as a European census, and thus by the great variety of systems, boundaries, definitions and contexts involved in the comparison. These difficulties are well known in international comparison (European Commission 2001, Musterd et al 1999).

It is in this context that the present study undertook as its first task a comparative, quantitative analysis of segregation patterns in seven European cities. The analysis was exploratory, in both methodological and substantive terms. Its methodological

purpose was to explore what could be done to overcome the diversity of data systems found across the seven cities and extract from them comparable, reliable measures of spatial segregation. The substantive purpose was to try to assess the overall levels and patterns of spatial segregation revealed by those measures and, to a lesser extent, consider the direction of change in those patterns over a ten-year period. We now turn to consider separately the responses to each of these two purposes.

Methodological results

The principal source used for the measurement of spatial segregation in the seven cities was the small-area data obtained from the national census of population. However in the case of the two Scandinavian cities in the study (Helsinki and Umeå) census data were supplemented by extensive registration data which were available on a small-area basis. Census data (much less national registration data) have not been subject to systematic harmonisation at EU level; they therefore had to be extensively trawled through and evaluated in order to extract comparable variables and area units for analysis. Census data are notoriously inflexible for secondary analysis, the more so for international comparison (Musterd et al 1997, Musterd and van Kempen, 2000). However the outcome was that certain variables were identified which were available for all of the cities and which provided a meaningful basis for analysing and comparing segregation patterns across the seven cities.

Though the findings emerging from this exercise (as outlined below) were useful and valid, they were subject to some of the usual limitations. Firstly, the common variables were few in number and were largely confined to labour market indicators. Other crucial indicators were available only for sub-sets of the cities and so could not be used for comprehensive comparisons (though in these cases useful comparisons of sub-sets of the cities could be made). The most serious gap arose in connection with income: reliable measures of income levels on a sub-city basis were only available in Helsinki and Umeå, the two cities using registration rather than census data. (In the US, by contrast, the census has covered income data since 1940 and, this, in conjunction with data on race, has provided a central source for the analysis of urban segregation patterns since then.) However, for our European analysis, spatial concentrations of income poverty could not be directly measured and compared

across the seven cities. Since the spatial concentration of poverty is a major concern of nationally based research in this field, this lack represents a significant limitation for international comparisons. Even in the case of labour market indicators, there were doubts about the comparability of some important variables, particularly those relating to the definition of the borderline between unemployment and economic inactivity. Hence the main attention was concentrated on measures relating to rates of *employment* rather than unemployment.

Thus the limited range of comparable variables imposed a major constraint on the comparative analysis of segregation patterns across the seven cities. In the event a total of 17 possible comparative indicators was whittled down to five and subsequently four, of which two (male and female employment rates) were quite robust, one (unemployed youth rate) relatively so, and one ('foreigners'/ethnic minorities) barely so, but included for interest.

A second difficulty arose in connection with the area units to which these variables applied. The intention was to focus on sub-city areas of comparable population size. In practice, again for reasons of data availability, there was significant variation in the average size of area units, ranging from a low of just under 3,300 in the case of Dublin to over 15,000 in Lisbon. (There was also considerable variety in the size range around the average.) A test of the stability of measures of spatial segregation in connection with area units of differing sizes was undertaken (by Flatley) as part of the analysis of segregation (Flatley and McIntosh 2000). These confirmed the known effect that level of segregation varies inversely with size of area unit, but showed that our measures were reasonably stable for area units within the range 5,000-15,000 population. Analytical allowance was made for this, particularly for the two cities with area unit size outside that range: Dublin, with a smaller, and Lisbon, with a larger, size (see above). In general, although the diversity in size of area units did not undermine the comparative analysis, it did affect the comparability of measures of segregation; this is taken into account in interpreting substantive findings on segregation patterns set out below.

A third difficulty, partly methodological and partly conceptual, arose from issues about city boundaries. In the case of a number of the cities, legal or administrative boundaries bore little relationship to the cities as operating entities. While the concept of a city as an operating rather than legal-administrative entity is anything but clear-cut, it was nevertheless evident that in most cases the city, as it was imagined in people's minds and as it operated in day-to-day terms, spread well beyond the core municipalities defined in legal-administrative terms, even though its outer limits were also typically unclear. There was thus a certain arbitrariness in deciding what the city was and how it should be defined for analytical purposes. For most cities, there were distinctions between the city centre, the city itself and the outer area or region beyond the city. Our aim was to identify the city as a single continuous built-up entity, in so far as that was possible. That approach seemed to be applicable in a reasonably consistent way across four of the cities (Dublin, Toulouse, Turin and Umeå). In Helsinki however the pattern of suburbanization emerging from the Finnish approach to urban design (based on a vision of urban housing areas interspersed with forest and water) meant that the idea of continuous built-up areas had little relevance and it was necessary to focus on a more dispersed metropolitan region. London on the other hand was distinctive largely on account of the huge size of the continuous built-up area. For Lisbon there was a choice only between the old small city centre and a very large agglomeration area which included some peripheral semi-rural areas; by necessity this latter was chosen. This issue of boundaries has implications for the analysis of patterns of spatial segregation found within the cities.

These difficulties reflect the pragmatic nature of the comparison undertaken: the research teams had very limited scope for choice of data at sub-city level, having to work largely with the area unit sizes and dates available through census data. As noted earlier, this is a problem common to such international comparisons. Awareness of these methodological issues informed the whole analysis, and particularly two final summary diagrams of the data. These compared levels of spatial segregation for the cities by combined male and female employment rates, plotted against rate of change between the 1980s and 1990s. The first summary plot was based on the actual data, and the second was based on the data with (specified) adjustments to take methodological issues into account.

Measures used

Analysis of the small-area data in order to identify segregation patterns used a combination of measures and techniques. For measuring levels of spatial segregation, the main instrument was the interquintile range (IQR) of areas, ranked according to certain agreed common indicators (see below), and grouped into fifths or quintiles. The IQR measures the distance between the top of the bottom quintile and the bottom of the top quintile of areas, thus spanning the central three quintiles and ignoring the influence of outlying variables, which can unduly skew results if the full range is taken. This measure was visually expressed through the use of box-and-whisker plots, in which the boxes represented the IQR (the central three quintiles) and the whiskers, the top and bottom quintiles. The Index of Dissimilarity (IoD) was also used. First developed by Duncan and Duncan (1955) to measure racial segregation, it, along with other such measures, has been subject to criticism, but has still been widely used, and is appropriate here as a back-up measure. In fact an analysis of a large number of different indices relevant to quantifying spatial segregation found that IoD scores were more robust than any other (Massey 1988). It measures the extent to which groups at risk are concentrated or dispersed. It produces a score between 0 and 1 (sometimes expressed as a percentage), with 0 signifying perfect integration (i.e. groups having the same representation within each area unit as their representation in the city as a whole) and 1 perfect segregation. A common criticism of the IoD is that the same score can represent two very different physical patterns: one where segregated areas are geographically clustered and another where they are scattered. To overcome this problem, the seven BETWIXT teams also constructed mapped data across the cities. All cities were mapped for male employment rate during the 1990s; this allowed observation of the location and clustering of deprived areas at one point in time. Three cities further mapped change in the physical patterning of deprived areas (see below).

Between them these means provided a range of measures, visual representations and physical observation of spatial segregation of the seven BETWIXT cities.

Findings

Levels and patterns of segregation

Within the methodological limits outlined above, the findings which emerged from the analysis of urban spatial segregation in the seven cities could be summarised thus:

Levels of segregation

On the variables examined, using the inter-quintile ratio of local areas ranked by each indicator, levels of spatial segregation varied widely across the seven cities. There were some differences in the patterns revealed depending on the indicator used, but a fairly consistent picture emerged at each end of the scale. This is exemplified by results using combined male and female employment rates, which yielded IQR scores for the 1990s ranging between 22.7 for Dublin and 8.1 for Helsinki. Grouping these scores, segregation was narrowest in the two Scandinavian cities (Helsinki, and Umeå in the 1980s) and widest in Dublin and London. The three other cities – Toulouse, Turin and Lisbon, and Umeå in the 1990s – ranged between these extremes. Uncertainties about the data make it impossible to *rank* the cities precisely in relation to each other on a scale of overall segregation (this was particularly true in the case of Lisbon, where the boundaries for the underlying data were least compatible with those of the other cities). However, this finding is more reliable in outline when the cities are *grouped*, i.e. classified into broad categories according to high, low and intermediate levels of segregation.

Spatial segregation and social inequality

The consortium attempted to explore whether and in what ways patterns of spatial segregation in the cities were linked to background levels of social inequality. However, although much detailed work on this dimension was carried out and is available within the city reports (see Flatley and McIntosh, eds 2000), direct comparisons of social inequality at city level proved impossible due to the lack of harmonised data on some variables at sub-city level, particularly in regard to income distribution. In the absence of comparable data on social inequality for the cities, national level comparisons were drawn upon to provide a proxy comparison of levels of social inequality in the cities. The assumption was that the seven cities would broadly reflect the patterns of the societies in which they were located on this issue.

These national level comparisons placed Portugal at the top end with most inequality, ahead of Ireland, the UK and Italy – and Finland and Sweden at the bottom end, with France in an intermediate position.

There was a loose association between the level of spatial segregation in the seven cities and the overall level of social inequality in the host societies of each city.

Dublin and London, the more highly segregated cities, were found in societies with relatively wide income inequalities, while the low level of segregation in Helsinki and Umeå was paralleled by the narrow income inequalities in Finland and Sweden.

Toulouse and Turin occupied intermediate positions in regard to both urban spatial segregation and national income inequalities. Data for Lisbon indicated low levels of spatial segregation, which contrasted with a very high level of income inequality for Portugal; here discontinuities in the data made the relative position of Lisbon somewhat uncertain, and the final judgement (in the plotting of amended data) was that spatial segregation in Lisbon was at the higher end of the intermediate group. A certain amount of spatial mixing (see below) was evident both in central Lisbon, due to modified rent control, and across the city where shanty dwellings existed in proximity to more prosperous housing.

3. *Linking mechanisms*

Urban spatial segregation in the seven cities was linked to background national patterns of social inequality through two distinct mechanisms – spatial mixing and spatial redistribution. First, a narrowing of social inequalities seemed to be associated with an increase in *spatial mixing* (which is the opposite of *spatial segregation*). In Helsinki, for example, low income households often lived beside better-off households, and the gaps in living standards between the two were not very wide. Indeed, here welfare policy had an explicit spatial dimension in that spatial mixing of different housing tenure categories within neighbourhoods had long been a central goal of housing policy and urban planning. However, the association between spatial mixing and low levels of social inequality was not exact: there was somewhat less spatial mixing in Umeå despite its historically low levels of social inequality, and there was some evidence of increased spatial segregation in Toulouse, alongside relatively low levels of social inequality.

The second spatially significant mechanism which came into play was *spatial redistribution*, which is the negation of spatial *inequality* rather than of spatial segregation. Even in the more egalitarian cities, spatial mixing had its limits and segregation by social class did occur – Helsinki and Umeå had working class or disadvantaged areas, as did Dublin, London and the ‘intermediate’ BETWIXT cities: Turin, Toulouse and Lisbon. However in the Scandinavian cities the redistributive mechanisms of the welfare state meant that working class areas were simply better off than their counterparts in the less egalitarian cities and were less evidently different from middle class areas in their own cities in living standards and outward appearance. In other words, redistributive patterns meant not that the different social classes lived together, but rather that where they lived apart they lived relatively equally. The resultant lack of clear spatial gaps in living standards in Helsinki and Umeå was evident both through direct observation on the ground (by all research teams of all seven cities) and quantitative measures of living standards. In the other BETWIXT cities by contrast, the social class profile of an area could generally be read off simply by looking at it, that is, by noticing the standard of the housing and the quality of the local physical environment. Toulouse, for example, similar to Umeå as noted above in having less social inequality and less spatial mixing, was here quite different from Umeå, in that there was relatively little spatial redistribution, and deprived areas were clear from observation.

Quantitative measures of living conditions in these latter cities confirmed the existence of the wide disparities which appeared evident to casual observation. The overall implication is that in Helsinki and Umeå the welfare state has reduced the extent and impact of spatial segregation, through the two mechanisms outlined above. One is the promotion of spatial mixing of the population (especially in Helsinki) and the other is by spatial redistribution, that is, by reducing the gaps in living standards between those socially differentiated areas which have emerged in spite of spatial mixing policies. This in turn suggests that even where policies which promote general social equality do not directly target or eliminate urban spatial segregation, they can nevertheless make such segregation less significant by removing the conditions under which there can exist wide disparities in living conditions between different areas of a

city. In terms of the goal of overall social integration in urban contexts, this conclusion raises questions about the relative value of *general social policy* - seen as a tool for promoting overall social equality - and *urban spatial policy* - seen as a tool for directly targeting urban spatial segregation. (See further discussion in the next chapter on the policy implications of the study.)

4. Changes in spatial segregation over time

Between the 1980s and 1990s, area segregation by combined male and female employment rates rose in all the BETWIXT cities except for Dublin, which started from a very high base. Rather than this movement of spatial segregation being seen as inevitable, it can be historically located in the context of falling employment rates in most cities. Some support for the latter position can be gained by looking at employment rates separately by gender and connecting the trends with the differentiation of *areas* based on male and female employment rates. Male employment rates tended to fall during the period (except for a marginal rise in Dublin), and spatial segregation of areas measured on male employment invariably rose. For women, the picture is different: in four cities (Dublin, Lisbon, London and Toulouse), female employment rates rose, reflecting women's increasing participation in the labour market. In these cities rising female employment rates were associated with falling spatial segregation measured by female employment - except in London, where both rose. In the remaining three cities (Helsinki, Turin and Umeå) where female employment fell alongside male employment, there were rises in spatial segregation. This suggests that the economic context is relevant to changes in spatial segregation, and that areas with low employment rates are particularly vulnerable to the effects of wider economic change. However the number of intervening variables and differences of historical and policy context within a comparative context make it hard to generalise here about the policy implications of the relation between economic and urban policies.

5. The physical pattern of spatial segregation

Location of areas of deprivation and privilege: The project elaborated on the measurement of levels of spatial segregation through mapping the small areas of the seven cities in the study according to (male) employment rates. These maps showed

that for the five continental European cities (Helsinki, Toulouse, Turin, Lisbon and Umeå), relatively deprived areas tended to be located on or near the periphery of cities, and more prosperous areas in or near the city centre. However for London and Dublin, deprived areas were primarily located in the inner city with some additional presence on the urban fringe, and more prosperous areas were more likely to be suburban. This is a pattern closer to that of US cities, with their typical combination of inner city deprivation and suburban prosperity.

Our maps additionally enabled observation of *physical clustering of deprived and prosperous areas*. Such clustering was clear in Dublin, London and Turin, least clear in Helsinki, where there was considerable scattering of more deprived areas, and intermediate for Lisbon, Toulouse and Umeå. Clustering may also develop over time (see below), and is associated with a lack of effective public (planning/ urban/ housing) policy aiming to prevent the build-up of large areas of deprivation or to provide for the spatial mixing of neighbourhoods.

6. *Changes in physical patterning over time*

For all cities, we found considerable and not surprising *continuity in the location of deprived and prosperous areas over time*. In addition the teams in three cities, London, Turin and Helsinki, carried out extra work (though not harmonised, based broadly on employment indicators) on the changes of physical location of deprived areas between the 1980s and 1990s. These maps showed that for London and Turin, in the context of both falling employment rates and rising spatial segregation, there was clearly increased clustering of deprived areas (and in London, also of prosperous suburban areas). In both cases, those areas falling into deprivation were often contiguous to already deprived areas; thus in these cities the creation of larger areas of deprivation was evident over time. For Helsinki, the picture was mixed and open to debate: in the context of a slight fall in employment rate and a slight rise in levels of spatial segregation, the overall location of areas remained fairly scattered, but there was recent evidence of increased clustering of prosperous areas in the west of the city and the consolidation of relative deprivation in the older working class areas to the north east of the inner city. This mixed picture seems to reflect the effect of recent changes in Helsinki, superimposed on the historical background of relatively low

income inequality and strong spatial mixing policy in the city. These recent changes are the deep recession of the early 1990s, and the subsequent economic recovery, led by relatively unregulated growth of the IT sector in the west of the city.

Although the consistency of indicators and the number of cities does not allow generalisation, this extra work raises the possibility that changes in the physical patterning of spatial segregation as well as its level are related both to economic context, and to the degree to which income inequality and spatial segregation are mitigated by public intervention, whether through social or spatial policy. Thus London and Turin, with relatively weak social and spatial intervention policies, show unhindered growth of deprived areas, whereas Helsinki appears to show a combination of effects reflecting the timing of varying social and spatial policies.

7. International comparisons of segregation Comparing EU segregation and US ghettoisation

Although levels of spatial segregation varied considerably across the seven European cities, the variation is not so great when seen in wider international perspective. It is worth noting in particular that none of the seven cities came anywhere near the levels of segregation based on race which are found in American cities. (Here we refer to 'racial segregation' as in US parlance, to mean the equivalent of 'segregation by ethnic minority', the more usual UK terminology.) International comparisons here are difficult because racial segregation is of such – empirical and conceptual – significance as a major structuring force in American cities (Massey and Denton 1993, Cutler *et al* 1999) that it is hard to find in the US literature recent measures of segregation based on socio-economic variables other than race.

In addition, the differing histories of the US and European countries mean that it is complicated even to compare measures of racial segregation. In the US, immigration of non-black groups is seen a relatively normal means of joining American society, whereas most discrimination, residential or otherwise, takes place against indigenous black groups, usually African Americans whose origins lie in the history of American slavery - and to a lesser extent against Hispanic Americans, who are usually initially immigrants (S. Fainstein 1998). In European countries, by contrast, (which were

however often implicated in the slave trade to the US), discrimination, including residential, takes place against all non-white and many white ethnic minorities, all of which are the product of immigration, either recently or in previous generations. The implication is that a realistic comparison of racial segregation in the US and the EU should probably be between black/ African Americans (plus possibly Hispanic Americans) and all ethnic minorities in European cities.

Despite these difficulties of comparison, it still seems possible to conclude from the BETWIXT analyses that such spatial segregation as is found in European cities, along no matter what dimension, nowhere approximates to the level of racial ghettoisation found in American cities.

In Massey and Denton's (1989) study of 60 US cities the mean score for black racial segregation using the Index of Dissimilarity (IoD) was 0.69 (where 1 means complete segregation and 0 means no segregation). The mean IoD score for Hispanic segregation in the same cities was 0.44. Major cities such as New York, Chicago, Miami, San Francisco and Los Angeles had IoD scores for black segregation in excess of 0.7. Chicago, the most segregated city, had a black segregation score of 0.88 (see also Cutler et al 1999 where similar data are presented for 127 American cities). What this, along with the size of such racially segregated areas, means in practice is that a black ghetto-dweller in a large American city is likely to encounter few white residents not only in the same neighbourhood but in any of the surrounding neighbourhoods; in other words significant portions of 'mixed' metropolitan cities are likely to be largely mono-racial (Massey and Denton 1989, p. 389).

In the BETWIXT cities, by contrast, *no IoD score on any variable for any of the cities exceeded 0.35*. London achieved that upper limit in its IoD score for ethnic minority segregation. Dublin had IoD scores in the range 0.3 to 0.33 for segregation on certain labour market variables (such as male employment rates and youth unemployment rates). More commonly, however, IoD scores for the BETWIXT cities were below 0.3 and in some of the cities fell below 0.1 on many variables. As noted above, IoD scores are an imperfect means for comparing levels of spatial segregation across time or place. However, the gap in IoD scores in the present instance is wide enough strongly to suggest: first, that none of the seven BETWIXT cities have racial ghettos in the American sense or *scale*; and second, that insofar as other axes of spatial segregation are present and could be measured in the BETWIXT cities, none of them

offered a real parallel to the *degree* of segregation represented by racial ghettoisation in American cities. Massey and Denton (1993) pointedly entitled their classic study *American Apartheid* and elaborated: “Although Americans have been quick to criticise the apartheid system of South Africa, they have been reluctant to acknowledge the consequences of their own institutionalized system of racial separation.” (op.cit, p.16) While European citizens are undoubtedly also responsible for institutionalized *social* discrimination, our findings suggest that it would be hard to apply as strong a *spatial* concept as apartheid to the BETWIXT cities, at least in comparison to both the *degree* of racial segregation and the *large size* of ghettos in American cities. Certain provisos need to be made here. The centrality of racial ghettoisation to American cities has to be kept in mind when drawing comparisons from American research on urban spatial segregation with the European context; and the emphasis of BETWIXT, as a European project, has been on socio-economic rather than racial segregation. Its indicators of racial segregation were the least robust of all for comparative purposes, and too much weight should not be given to them. However noting that no BETWIXT city indicator exceeded 0.35 on the IoD compared to a US threshold of 0.6 for ghettoisation, and an actual score of over 0.8 in some US cities, is sufficiently broad, and the gap is sufficiently wide, to stand. This finding is consistent with other research in European cities (Musterd et al 1997) on (ethnic minority) segregation, which finds that the level of segregation of particular ethnic minority communities hardly reaches 0.3 on the IoD in five out of their six EU cities, being higher, at about 0.4, only in Brussels). However, there are higher scores in a few specific cases (see below).

b. Questions of scale and degree of segregation

Thus, insofar as the BETWIXT cities experience spatial segregation, there does not appear to be the joint effect of the *high degree* and *large scale* of segregation characteristic of the American ghetto in the BETWIXT cities. However we have indications that the potential for ghettos cannot be ignored. *Over large areas to a lower degree* there is significant segregation by employment in some of the BETWIXT cities (Dublin, London and Turin – see above evidence on clustering, and on clustering over time). *And to a greater degree at the meso- or micro-level*, there are undoubtedly pockets, at small area - estate, street or block - level, of concentration or segregation – in terms of employment, race, and probably income (not used as an

indicator here due to problems of availability and comparability). Even inter-quintile ratios (IQRs), representing spatial segregation across cities as a whole by employment rate, were significantly higher when calculated for smaller area units. In Umeå, for example, IQRs, although remaining at relatively low levels, more than doubled for 77 small, as opposed to 7 larger, urban areas, and in London reached high scores of 19.4 for male employment rates and 18.6 for female employment rates when calculated for small area units of 430 population. In some cases high scores at these lower geographical levels may be for largely methodological reasons (the 'ecological effect', see Edwards and Flatley 1996). But it may also be that small pockets of segregation group together to form somewhat larger areas whose boundaries do not coincide with those captured statistically, and whose measured levels of segregation are thus 'averaged out' by other less segregated parts of areas (Robson 1995). Thus it is possible that there are areas of some size where segregation is more concentrated than appears in our findings. Another research project, for example, (Musterd et al 1997) provides evidence from six European cities which finds significant concentration of specific ethnic minorities: Turkish and Moroccan communities in Brussels (IoDs of over 0.6), the Bangladeshi community in London (IoD close to 0.7), and the Japanese in Düsseldorf (IoD over 0.6). However even taking these arguments into account, areas of deprivation or ethnic minority segregation in the BETWIXT European cities do not appear to reach the combination of concentration, large area size and frequency of occurrence, of American ghettos.

c. Change over time

A further cautionary point should be made, from our findings on change. Thus *development over time in the direction of ghettoisation in European cities cannot be ruled out*. We have found increases in spatial segregation (based on combined male and female employment rates of areas) between the 1980s and 1990s in all BETWIXT cities except Dublin, where it was already very high and showed only a small reduction. Even at one point in time, some cities show considerable physical clustering of areas of deprivation (Dublin, London). And over time, there is indicative evidence in two cities (London and Turin) of the considerable build-up of larger physical swathes of deprivation, in the context of falling employment rates and rising spatial segregation. Overall, of the BETWIXT cities,

Dublin and London have high enough scores of spatial segregation to suggest a potential for development in the direction of ghettoisation.

d. Socio-economic segregation

On socio-economic segregation – here, the segregation of the rich from the poor, the employed from the unemployed – we have not found directly comparable socio-economic indicators for US cities considered independently of race. The issues of poverty and segregation in US research appear to be dominated by and seen through the prism of race and are often conflated in analyses of social inequalities (see, e.g. Massey’s complaint concerning ‘the conflation of race and class that unfortunately has become endemic in [American] literature on urban poverty’ – Massey 1998, p. 572; see also Jargowsky 1996). Thus it is difficult to say how levels of socio-economic segregation in the BETWIXT cities compare with those of US cities.

Summary

Our overall findings from the first city-wide comparison of spatial segregation based on employment in the BETWIXT cities show that there are distinct differences between the BETWIXT cities in terms of their degrees of spatial segregation, with the Scandinavian cities showing least, Dublin and London showing most, and the other cities at intermediate levels. Generally, spatial segregation increased in the BETWIXT cities between the 1980s and the 1990s, although there is some inconsistency between indicators on this finding. There is considerable continuity over time in the location of deprived areas; there is also some evidence of their physical clustering in all but the Scandinavian BETWIXT cities, and there are indications of their increased clustering over time in two of the cities. Even in the most inegalitarian BETWIXT cities, however, overall spatial segregation is relatively mild by US standards. Segregated areas in those cities are not marked by the combination of large size and severity of segregation which characterise black urban ghettos in the US. At the same time, some BETWIXT cities have reasonably large areas which are affected by milder levels of segregation and there are also smaller areas of quite severe segregation. These patterns indicate that the possibility of future ghettoisation in European cities should not be ruled out.

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The concept of social capital: A consideration of a definition and an empirical application

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The expression “social capital”

The combination of the two words “capital” and “social” suggests on the one hand that we are talking about a resource that can be accumulated and used when required and on the other that this resource differs from economic capital and human capital.

Economic capital is embodied in objects; it can be owned and exchanged. Human capital is embodied in individuals and relates to what they have learnt and to their experiences; it belongs to the person, but it is not exchangeable. Social capital is embodied in interpersonal relationships. As a general rule it can neither be owned nor exchanged.

One is struck, after even a very rapid examination of the literature on the topic, both by the large body of work that exists and by the diversity of the approaches that have been employed. The concept appears to be at the same time vague and polysemous. As with other concepts, the meaning of social capital depends on the viewpoint of the researcher.

Three viewpoints: Macro, Micro and Meso

Some authors take the “macro” viewpoint and use the term social capital to denote the resources that are shared by all the members of a large group or a society. These resources include the various forms of regulation that govern life in society. According to this definition, social capital involves general (and therefore abstract) concepts such as values and norms which make life in society possible. In this case the concept is difficult to differentiate from that of culture, which has prompted some sociologists to question the need for two terms.

Those who take the “micro” viewpoint consider social capital as being a set of highly personalized resources which are connected with the concrete ties possessed by an individual or a group of individuals.

Between the two we find the work of researchers whose starting point is relationships but who try to find in the structure of the system they form, in particular in the case of groups or organizations, the origin of the capacity to act together and generate social norms. This is the “meso” level.

Let us now consider these three levels (macro, meso and micro) in order to gain a clearer picture of these three viewpoints with regard to social capital.

Social capital at macro level: has there been a decline?

Bouglé (1922) addressing teachers in his *Leçons de sociologie sur l'évolution des valeurs*, argued thus: “Assisting humanity to escape from animality thanks to a social capital, this is the task which primary schooling should take on: to succeed it is necessary to consider the entire soul of the child and to mould its judgment as much as its knowledge” Social capital is therefore what is transmitted by socialization, in particular at school. The same idea can be found in Loury (1977, 1987) who uses the term “social capital” to describe the social resources that individuals are able to access. It is what generates continuity in society. For Loury, social capital is a set of resources that inhere in family relations and in community social organization and that are useful to the social development of a child or young person.

A large-scale debate ensued from Putnam’s thesis (1995) that social capital has been diminishing in the United States since the 1970s, an idea which he deduced from a number of indicators such as membership of associations and civic engagement networks.

There has been a fall in the membership of voluntary bodies in the United States since 1970 (when educational attainment is controlled for). This does not affect all types of association to the same degree, but the author nevertheless concludes that: “American social capital in the form of civic associations has significantly eroded over the last generation”.

He also noted a decline in the stated level of trust: “The proportion of Americans saying that most people can be trusted fell more than a third between 1960, when 58% chose that alternative and 1993, when only 37% did.”

“In America, at least, there is a reason to suspect that this democratic disarray may be linked to a broad and continuing erosion of civic engagement that began a quarter-century ago”.

This argument is rooted in the following premises:

- Social capital relates to forms of social organization such as networks, norms and trust which facilitate co-ordination and co-operation with a view to mutual benefit;
- A strong and active society strengthens democracy.
- Norms and social engagement networks also affect the performance of elected governments;

A parallel should be drawn between this conception and that of Tocqueville (1835). Although Tocqueville obviously does not use the term social capital, Putnam's direct mention of him encourages his inclusion in this overview:

Americans of all ages, all conditions, and all dispositions constantly form associations. They have not only commercial and manufacturing companies, in which all take part, but associations of a thousand other kinds, religious, moral, serious, futile, general or restricted, enormous or diminutive. The Americans make associations to give entertainments, to found seminaries, to build inns, to construct churches, to diffuse books, to send missionaries to the antipodes; in this manner they found hospitals, prisons, and schools. If it is proposed to inculcate some truth or to foster some feeling by the encouragement of a great example, they form a society. Wherever at the head of some new undertaking you see the government in France, or a man of rank in England, in the United States you will be sure to find an association. [...] In democratic countries the science of association is the mother of science; the progress of all the rest depends upon the progress it has made.

Among the laws that rule human societies there is one which seems to be more precise and clear than all others. If men are to remain civilized or to become so, the art of associating together must grow and improve in the same ratio in which the equality of conditions is increased.

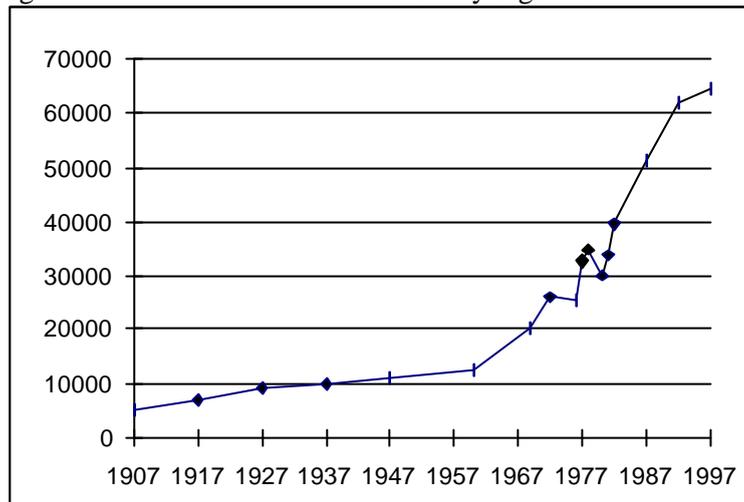
Taking up Tocqueville's theory, according to which the ability of Americans to form associations in order to solve the problems of public life constituted one of the best forms of democracy, Putnam reasoned that democracy could be in danger. Even if these two thinkers do not associate social capital directly with socialization, they do seem to see it as a cultural trait or a set of norms which regulates exchanges between Americans.

This view is close to that held by Fukuyama (1995) for whom: "Social capital is a capability that arises from the prevalence of trust in a society or in certain parts of it. It can be embodied in the smallest most basic social groups, the family as well as the largest of all groups, the nation, and in all other groups in between. Social capital differs from other forms of human

capital insofar as it is usually created and transmitted through cultural mechanisms like religion, tradition or historical habit.”

However, other studies show that the empirical evidence is perhaps not so convincing, for either the United States or Europe.

Figure 1 - Raw numbers of new voluntary organizations in France



Source: M. Forsé, ‘Les associations se développent selon un rythme ralenti’, in Louis Dirn (ed.) *La société française en tendances*, Paris, PUF, 1998, pp. 257-266.

Table 1 - Adult membership in 1+ voluntary organizations

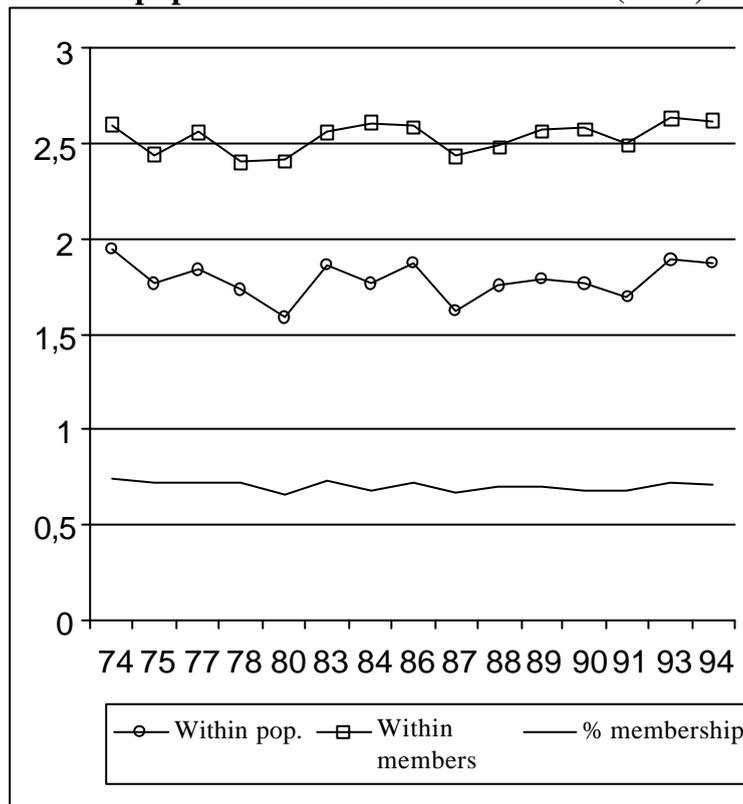
Year	Share French Adult Pop.
1967	37%
1983	42%
1985	44%
1990	45%
1996	45%

Source: INSEE for 1967, 1983 and 1996;
CREDOC for the other years

Similarly, several US studies (Ladd 1996; Paxton 1999) have seriously questioned whether any decline has taken place in that country. We (Forsé, in press) therefore re-examined the *General Social Survey* that provides the basis for Putnam’s study and do not interpret the data as pointing to a decline since the 1970s. Rather, we perceive a slight increase, especially in the 1990s (see Figure 2). Admittedly, Putnam’s results take account of trends in education.

But it is not appropriate to control for education here because the goal is first to make a global diagnosis of trends in social participation and then to explain these trends. In any event, other factors should be reckoned into the explanation. On the whole, and disregarding explanatory factors, a conservative evaluation of the trend for the entire period speaks for a stable amount of social capital.

Figure 2 – Share of membership in 1+ voluntary organizations, Number of memberships within the adult population and within members (USA, 1974-1994)



Source: General Social Survey.

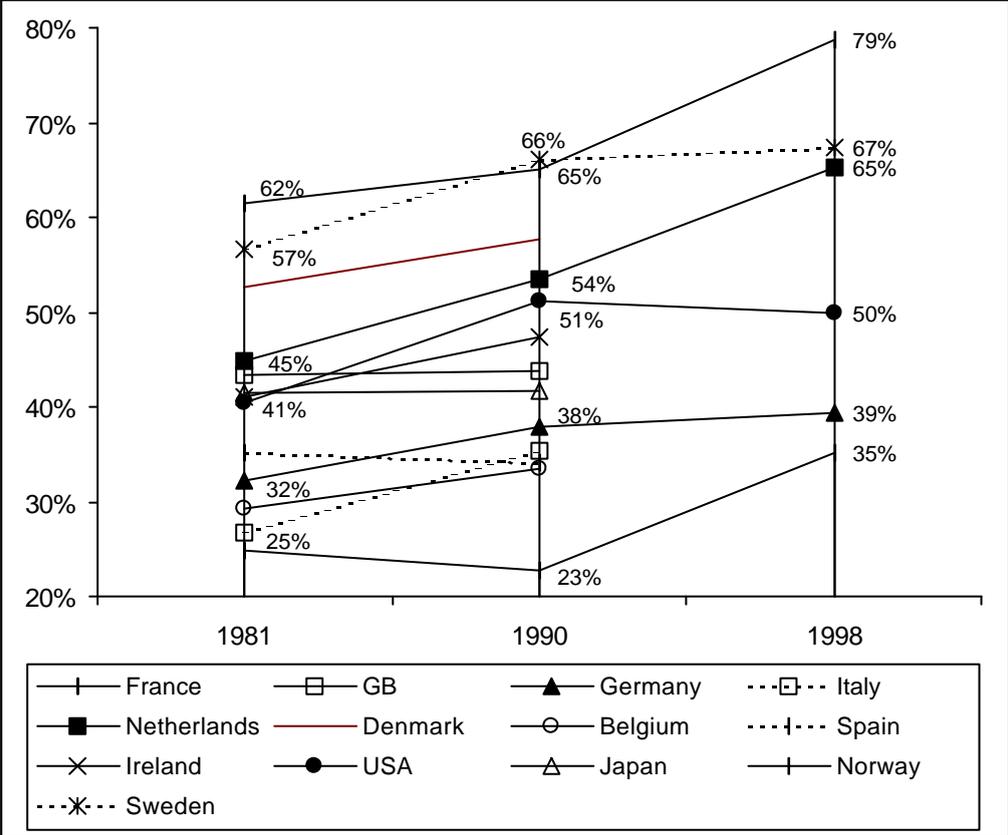
The same conclusion appears in data for trends in trust in people (or ‘social trust’ as Putnam terms it) spanning the early 1980s to early 1990s for countries participating in the *World Value Survey*. As Galland (1999) shows, there has been a general increase in social trust. The data also confirm a significant correlation between membership in one or more associations and trust, as predicted by the theory of social capital.⁵ The correlation even improved over 1980 to 1991 with a Cramer's V up to 0.20 from 0.16.

Responses to a question on social trust in the 1998 *ISSP* survey provide insight into recent trends for trust. For the time being, data is not yet available for all the countries participating

⁵ All else being equal, the level of trust and social participation rises with education.

in this programme, but what there are clearly show that the ranking order of countries remains relatively stable and that there is a general tendency for trust to rise, even in countries like Norway where the level was already very high at the start of the 1990s (see Figure 3). It therefore seems difficult to speak of a decline using any social capital indicator. The level of social capital in both Western Europe and the USA has been stable or risen slightly over the past 25 years.

Figure 3 – Trusting People



Source: 1981 and 1990 World Value Survey; 1998 International Social Survey Programme (Question: 'Generally speaking, would you say that people can be trusted or that you can't be too careful in dealing with people?')

Social capital at the micro level: a personalized resource

Writers who use the term social capital often refer to Bourdieu's very short article of 1980, from which we have taken the following definition: "Social capital is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition; where, in other terms belonging to a group, as a set of agents who not only share common properties (which

may be perceived by an observer, or by others or by themselves) but who are also united by permanent and valuable ties”.

The emphasis is thus placed on personal relationships, which provide recognition and which may be of assistance. This is the viewpoint that is generally adopted by sociologists who analyze social networks and which informs a great deal of research into social relationships. It crops up once more in the definition employed by Snijders (1999) for whom social capital is an individual characteristic derived from personal relationships: *“The value of an individual's social capital is the total expected value of the benefits that this individual can obtain from his ties to other individuals”.*

The work of Snijders represents a step in the direction of utilitarianism. The question which will be raised is the measurement of an individual's social capital. This will entail a consideration of the relationship, the resources available to the person with whom one has ties and the extent to which he or she is willing to make these resources available to one.

Sandefur and Lauman (1998) also define social capital in terms of the benefit that an individual can derive from it (as regards information, influence and control of interactions and social solidarity) and conclude that its measurement is closely linked to the nature of this benefit and therefore the context in which the social capital is mobilized. Unlike the other researchers who we cite they do not consider the possibility of an a priori measurement independent of a concrete situation.

In France, one study (Forsé, 1997) has demonstrated that social capital is an important resource in the context of finding a job and exerts a specific influence which is distinct from the other components of status (qualifications, level of urbanization, age, social origin) on the level of the job that is found. From this viewpoint it should be noted that it is no more possible than in the case of the macro level to speak of a decline.

For the last 30 years, the French Labour Force Survey has contained a question which asks all jobseekers about jobhunting techniques (allowing multiple responses). After eliminating those firms who were not targeted by the question in both surveys, 71% of respondents reported mobilizing personal kin and/or non-kin connections in 1971, either exclusively or in tandem with other techniques. The corresponding 1998 figure is 78%⁶. This increase might be

⁶ With a 99% confidence interval, 69% to 73% mobilized personal networks in 1971 compared with 77% to 79% in 1998. The Confidence intervals do not overlap, so the increase over this time-frame is significant.

surprising because economic growth and full employment reigned in 1971 in contrast to weak growth and double-digit unemployment in 1998.

We might have imagined that higher unemployment would break down some forms of sociability⁷, thereby undercutting network mobilization. Under full employment, investment in human capital may secure many jobs by itself. But the higher skill levels required by new technology and the increasingly competitive job market have resulted in a need for higher qualifications, which no longer suffice in themselves to secure a job. The ability to secure personal recommendations and fresh job tips, say through personal networking, offers a bigger head start in the job-hunt today than 30 years ago.

Furthermore personal networking, or social capital, does not rise with social status to concentrate finally in the hands of the elite (Forsé, 1997). All social categories can access social capital even if it will vary in type from one category to the next. The most vulnerable to social exclusion are the chronically jobless whose personal networks have collapsed (Paugam 1995). Meanwhile, although the more recently jobless will have lost some of their contacts, they can still expect support from their network, e.g. the young from their parents. Since this support is available, it seems reasonable to find it is now being exploited more intensively than before. In short, social capital exerted a significant net effect on attained status in France in 1998 and this effect has probably risen mildly in the past 30 years.

Social capital at the meso level: an agent of collective control

For Coleman (1990) social capital is associated with a group and the structure of the ties between the individuals in the group. Some of his propositions, which are to a considerable degree derived from his research into the emergence of norms, are given below:

“Social capital ... is created when the relations among persons change in ways that facilitate action”.

“The closure of a network facilitates the emergence of norms”.

“An important form of social capital is the potential for information that inheres in social relations”.

“When an effective norm does exist, it constitute a powerful, but sometimes fragile, form of social capital”.

⁷ Blanpain and Pan Ke Shon (1998) used the 1997 INSEE Social Contacts survey to show that working persons average 9.7 personal contacts per day, against 7.7 for the unemployed. Community monographs (Mendras and Stankiewicz 1986) raise suspicions of a sharper fall in urban neighborhoods than in rural areas.

“A ... factor which affects the creation and destruction of social capital is the stability of social structure”.

“ Organisation brought into existence for one set of purposes can also aid others: any form of organization thus constitutes social capital”.

Social capital is therefore embodied in the ties between persons, and has its source in their collective memory, whether this is embodied in an organization or exists only because the individuals in question share a common history. In this context we can mention shared knowledge and it is clearly apparent that Coleman considers that social capital provides a kind of bridge between the level of individual ties and that of norms. Moreover, he does not reject the idea that an individual’s social capital might be measured, as he states: “ *If actor A has transferred rights of control of certain actions to another actor B, then B has available social capital in the form of those rights of control*” . The structure of the system of ties is one of the keys to this conception of social capital.

Other researchers have also laid emphasis on structure, but with an insistence on its importance with regard to the resource provided by the personal network (Granovetter, 1973, Forsé, 1997). Burt (1992, 1995) holds the view that in a highly competitive situation it is advisable for an individual to manage his/her relationships in such a way that the persons with whom he/she is in contact have no ties with each other. This researcher posed the question what would be an optimal strategy in order to draw maximum benefit from one’s network of relationships. As there is a cost involved in maintaining any relationship, priority should be given to valuable relationships. Which are they? Burt is interested in the structure of the network. A dense network ⁸, is one in which everyone knows each other and talks to everyone. In a dense network everyone has more or less the same information and everyone has access to the same resources. A network of this type is therefore redundant: it is not beneficial to maintain links with every member in it, all that is required is to be able to contact a single member and conserve one’s energy for contacts with people in other circles without strong links with the first network. From this viewpoint, it is not the links which are characteristic of an effective network, but the absence of links or *structural holes* as these mean that one has access to different circles, and therefore different resources.

	The concept of social capital is	Social capital is defined by its
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⁸ The density of a network can be measured by, for example, the ratio between the number of ties which really exist and the number of ties that are possible.

	independent from the circumstances in which it is used	operationalization in a given situational framework
	<i>Respondents are questioned about their representations</i>	<i>Individuals are asked about real events</i>
Greater importance is given to the resources possessed by the individuals who make up the personal network	Fisher, Schweizer et al: the personal network, Nan Lin: position generator	Sandefur and Lauman How people find jobs: Granovetter: weak links, Forsé
Emphasis is placed on the structure of the personal network	Burt: structural holes	Granovetter and weak links
Emphasis is placed on the cultures of membership groups and shared knowledge	Coleman: social capital and the emergence of norms Fukuyama: Trust Surveys "Values" Putnam: looking for changes in collective practices Tocqueville: Democracy in America	

It would seem to be impossible to give a single definition of social capital because different researchers approach social reality from different levels of generality and abstraction. One can, moreover, perceive in the fact that the concept is open to so many different points of view one of the reasons for its success in the context of the debate on social ties.

Measuring social capital

The point of view one takes and the definition that depends on it obviously determine the ways in which social capital can be measured.

In the case of macro-level social capital, the instruments used will be very similar to those used by anthropologists to explore cultures or certain aspects of them.

The way Putnam assesses change in social capital in the United States, by taking participation in the management of public life as an indicator, provides a good example of this. The concept of trust (in others or in various institutions) can be used to perform comparisons. Surveys that investigate the values held by societies (Bréchon, 2000) are also an effective tool.

There are many ways of measuring the representations of certain social norms and how these representations change among the population, but it has to be recognized that few large-scale surveys have investigated this topic. It would be interesting, for example, to possess indicators that describe preferences for personal or collective ties in order to construct a

collective good. Do individuals prefer to be *free riders* or do they prefer the public good? Do people feel they have a responsibility to remind others of the rules or would they prefer to delegate this to an authority? In all such cases investigation is possible by means of dilemma surveys (Hampden-Turner and Tormpenaars, 1993).

At the intermediate level

Recently, the sociology of organizations has paid a considerable amount of attention to analyzing concrete relationships and the structures these form. Network analysis has made a valuable contribution to the measurement of the capital that is built up as a result of the exchanges that take place as a consequence of working together and also as a result of affinitive relationships. These elements act together to form resources which enable the organization to function and fulfil its goals and are just as important as the organization chart (Lazega, 1994, 2001).

The manner in which the social capital that is produced within concrete groups can be dissociated from its original context, become more abstract and give rise to new ways of regulating exchanges and norms remains one of the main topics for ongoing sociological research, indeed one of the most promising (White, 1992). According to White and Coleman what is involved is a double movement;

- dissociation in one direction, which, by a process of abstraction and generalization, permits the transition from concrete ties to cultural traits,
- a movement in the opposite direction by which the cultural traits are reintroduced into concrete ties gradually transforming them,

This double movement is the main point of interest for the sociologist of the concept of social capital and justifies the retention of the term to describe processes that are observed at macro, meso and micro levels.

The measurement of personalized social capital: generating names

The variety of ties is actually infinite and the words which occur most frequently in surveys are hardly precise: family, friends, neighbours, colleagues. We can nevertheless attempt to describe their nature and use it as a basis for a typology and as a means of identifying concrete “circles”.

In the case of the family, we can refer to the criterion of identity. In the case of colleagues, Lazega (2001), for example, considers three principal dimensions; someone with whom one shares one's work; someone who one asks for (or gives) advice; someone with whom one has an extraprofessional relationship. In the case of neighbours, the frequency of contact, the nature of the exchanges, the type of mutual assistance, whether mutual invitations are exchanged etc. can be considered. This links up with the questions that can be asked about friends; what do people do when they are together (nothing in particular, talk, go out, go shopping, go to a show, perform a specific activity such as music, sport, theatre, DIY, etc.), the location (in a club, an association, a religious group); the circumstances in which they first met (in the residential environment, during childhood, at school, in the army, at work, in an association, a club, a religious or political group, during the holidays).

When the survey is conducted using a questionnaire it is obviously important to use quite short series of questions, particularly if it is to be self-administered. Here are some examples which have been tested. The first is taken from a survey of a multiethnic population in southern California in order to study mutual assistance (Schweizer, Schnegg, Berzborn, 1998). In approach it resembles the survey used by Fisher which was taken up by Grossetti (2002).

Q1 Suppose you need sugar or something like that and the shops are closed, or you need a piece of equipment. Who would you ask to lend you these sort of things?

Q2 Suppose you need help with jobs in or around the house, for instance holding a ladder or moving furniture. Who would you ask for this kind of help?

Q3 Suppose you have problems with filling in forms, for instance tax forms. Who would you ask for help with such problems?

Q4 Most people from time to time discuss important matters with others. Looking back over the last six months, who are the people with whom you discussed matters important to you?

Q5 Suppose you need advice with a major change in your life, for instance changing jobs or moving to another area. Who would you ask for advice if such a major change occurred in your life?

Q6 Suppose you have the flu and must stay in bed for a couple of days. Who would you ask to take care of you or do some shopping?

Q7 Suppose you need to borrow a large sum of money. Who would you ask?

Q8 Suppose you have serious problems with your partner which you cannot discuss with him or her. With whom would you talk about such problems?

Q9 Suppose you are feeling depressed and you want to talk to someone about it. With whom would you talk about such problems?

Q10 With whom do you go out once in a while, for instance shopping, going for a walk, going to a restaurant or to a movie?

Q11 With whom do you have contact at least once a month, by visiting each other for a chat, a cup of coffee a drink or a game of cards?

Q12 Is there anybody else who is important to you, not mentioned so far? In-laws, relatives or co-workers who are important to you?

In this case data is collected solely about the persons with whom the respondents have direct ties and whom they think they might contact in the circumstances described. Principally, the survey explores the respondents' representation of their personal network as a potential resource. This is an general indicator of the social capital of individuals. It is interesting to note that the 2001 ISSP survey asks the same type of questions and could provide the basis for a European comparison.

The second example (after Lin, 1999, 2002) is a proposal for creating a standard measuring instrument that is able to identify the respondent's "social interface", that is to say the different professional circles with which he or she has ties. This investigation was conducted in order to assist research in the area of social stratification and mobility.

Here is a list of jobs (show card). Would you please tell me if you know someone (on a first neame basis) having each job?

Job	1 Do you know anyone having this job?	2 How long have you known this person (no. of years)?	3 What is your relationship with this person?	4 How close are you with this person?	5 His/her gender?	6 His/her job?
Job 1						
Job 2						
Job 3						
etc.						

If you know more than one person choose the one you have known the longest. The list of jobs should be long and quite wide-ranging.

In the last example of a name generator, taken from Burt, the respondent is asked about a small number of persons, and also about the links that exist between them.

*“From time to time, most people discuss important personal matters with other people. Looking back over the last six months, who are the people with whom you discussed an important personal matter? Please just tell me their first names or initials. Select a maximum of five names: Name 1, Name 2, etc. We are now going to ask you a few questions about each person you have just mentioned. First, can you remember who you mentioned first, second, etc?
Which of these people do you feel close to? For Name 1, Name 2 ... 1. yes, I feel close to this person, 2 No I don't feel close to this person, 3. Don't know.
Now think of the ties between the persons you have just mentioned. Some may be total strangers to the extent that they wouldn't recognize one another if they bumped into one another on the street. Some would recognize each other but as far as you know there are only weak ties between them. Others may be very close.*

Circle the correct response in each box in the matrix below, according to whether the persons in question are complete strangers, have weak ties, close ties or whether you don't know.

Individual	Name 1	Name 2	Name 3	Name 4	Name 5
Name 2	1. Complete stranger 2. Weak tie 3. Close tie 4. Don't know				
Name 3	1. Complete stranger 2. Weak tie 3. Close tie 4. Don't know	1. Complete stranger 2. Weak tie 3. Close tie 4. Don't know			
Name 4	1. Complete stranger 2. Weak tie 3. Close tie 4. Don't know	1. Complete stranger 2. Weak tie 3. Close tie 4. Don't know	1. Complete stranger 2. Weak tie 3. Close tie 4. Don't know		
Name 5	1. Complete stranger 2. Weak tie 3. Close tie 4. Don't know	1. Complete stranger 2. Weak tie 3. Close tie 4. Don't know	1. Complete stranger 2. Weak tie 3. Close tie 4. Don't know	1. Complete stranger 2. Weak tie 3. Close tie 4. Don't know	

The questionnaire was followed by a series of questions about the mentioned persons, the length of time the respondent has known them and the nature of the ties between them and the respondent.

Links between the micro meso and macro levels

Since Simmel (1908), we have known that it is possible to make hypotheses about the links between different levels, but with the notable exception of Peter Blau (1984) and his colleagues, few researchers have explored this area empirically. Comparisons that relate to marital homogamy (involving various criteria) could provide a means of investigating these links between the different levels. The argument put forward by Paxton (1999) should also be taken into account: a large amount of meso level social capital (such as in the case of separatist groups) can diminish the amount of macro level social capital.

Conclusion

It hardly seems possible to give a single definition of social capital which covers all the different currents of thought. A concept which relates to cultures viewed from the general

standpoint cannot be merged with a concept which considers social capital to be an individual attribute. Bourdieu's definition (1981) failed to make a real decision about whether social capital is an attribute of a group or an attribute of a personal network.

Some comments strike us as being necessary:

- it seems very important to develop tools to measure social capital as discussion frequently remains at the level of ideas while the concept of social capital can only take on a precise form through a measuring instrument.

- when social capital is considered as a resource that is embodied in social circles, including the largest such as nations, we are speaking about a body of shared knowledge which is indistinguishable from the culture of the circle in question. Use of the term in this context has the value of drawing attention to the fact that the central concern is the resources for collective action that are present in the culture and that one may be interested in the production and use of this capital. It should be noted that, in France at least, sociologists have not shown themselves to be very willing to undertake empirical studies in this area.

In any case, it is important to be able to monitor temporal changes.

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**Electoral participation/abstention: a framework for research and
policy-development**

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Prepared for meeting of FP5 *Changequal* network, Mannheim 10-12 April 2003

Introduction

The purpose of this paper is to provide an overview of the issues that arise in the study of electoral participation/abstention and to put forward an integrated framework for dealing with both the research and policy aspects of the problem. It is not intended to be a comprehensive review of the literature on the subject. Neither does it aim to provide a comprehensive summary of research findings. The paper is the product of on-going research and reflection on the issue of electoral participation at the subnational, national and supranational levels in the context of the Fifth Framework project "Democratic participation and political communication in systems of multi-level governance"¹.

The political and research problems

Electoral participation/abstention varies substantially across countries, over time and in relation to different electoral arenas as defined by different levels of governance. Figure 1 shows the change in turnout between the first and last national elections that took place in a period of approximately three decades (1970 - 2002) in the 15 member-states of the European Union. Turnout ranges from 93.2 per cent in Italy in the beginning of the period to 59.4 per cent in the United Kingdom at the end of the period. Significant falls in turnout occurred in 12 of the 15 member states and a significant increase occurred in only one.

Turnout in European Parliament elections is subject to broadly similar trends. Table 1 presents the data on turnout in EP elections since 1979. If we confine attention to the member states that do not have or have not had compulsory voting during the period in question and where there were no concomitant national or nation-wide regional/local elections, turnout in EP elections declined from 52.9 to 39.4 per cent between the first European Parliament election in 1979 and the most recent one in 1999. In this case, declining turnout might be regarded as all the more surprising given the substantial increase in the powers of the European Parliament over the same period.

As one would expect, turnout also varies substantially across socio-demographic groups and such variations have significant implications for issues of equality and

¹ I would like to express my gratitude to my colleagues on the FP5 project for the helpful suggestions, objections, qualifications and patience with which they have responded to successive versions of the ideas presented in this paper.

social exclusion. Focusing again on European Parliament elections (for reasons of data availability) and using a measure of self-assessed probability of voting (on a ten-point scale), Figure 2 shows that there are substantial bivariate relationships between propensity to vote and a standard set of socio-demographic variables. Thus, the highest net positive propensity to vote² in European Parliament elections is found among those in general management occupations, among farmers and among middle management. Somewhat lower but still positive net propensities to turn out are found among those in the highest income quartile, those with third level education, those in professional occupations and those aged 55-64 or 65 plus. On the other end of the scale, the socio-demographic groups with a substantial net negative propensity to vote in European Parliament elections tend to be larger. They include manual workers (skilled and unskilled), young people (both those aged 18 to 24 and those aged 25-34) and people with incomplete secondary education.

Any observations one might be tempted to make on the basis of the data in Table 1 would be subject to a range of methodological caveats arising from measurement problems, the bivariate nature of the analysis etc. However, perhaps the most important though not the most obvious caveat is that it is far from clear what the relationships suggested by the data in Figure 2 mean in either theoretical or practical terms. An attempt to overcome this difficulty by introducing social-psychological and other variables compounds the problem by confirming that a whole host of demographic, social-psychological, communication and political factors influence participation and abstention³. In short, the analysis of turnout is subject to a proliferation-of-variables problem that makes general tendencies difficult to discern and policy prescriptions difficult to devise.

The proliferation-of-variables problem is no accident but rather lies in the nature of the phenomenon of turning out to vote. In a review of rational choice approaches to the analysis of abstention, Aldrich has argued that ‘...turnout is for many people most of the time a low cost, low benefit action. Turnout is a decision almost always made “at the margin”. Small changes in costs and benefits alter the turnout decision of

² Net propensity to turn out to vote in European Parliament elections is measured as follows; [(options 9 + 10) – (options 1 to 8) * (1 – (Don’t know / 100))]. This procedure ensures that the net figure receives a lower weight if the share of respondents who picked the don’t know option was large.

³ For an overview of the range of variables that affect propensity to vote in EP elections see Sinnott and Lyons, 2003.

many citizens” (Aldrich, 1993, p. 261). If this is so, it follows that the decision to turnout or to abstain is potentially subject to a myriad of particular influences. This leaves us with two options - an unsatisfactory one and a challenging one. The unsatisfactory option would be to simply document and illustrate the wide range of factors affecting the decision to vote. The challenging option would be to attempt to categorise the influences so that each particular effect is a recognisable instance of some class of effects. . If one could go on from this to suggest some ways in which these categories of effects might be related to turnout and, perhaps, to one another, one would have taken a second significant step.

The literature on turnout has tended to respond to the problem of the diversity of influences on turnout by producing what are apparently alternative and mutually exclusive theories or explanations of turnout. Thus, for example, Blais (2000) notes that, in addition to the rational choice approach (which is his main concern), "There are four alternative explanations for why people vote. These are the resources and mobilization models, and what could be called the psychological and sociological interpretations" (Blais, 2000, p. 12). While he notes that there is some overlap and some complementarity between these various approaches, his review of the theoretical explanations suggests that these tend to be regarded as alternative or competing accounts. Similarly, Franklin argues that the many theories that have been proposed to explain variations in political participation "essentially boil down to explanations involving three different features that distinguish people from one another: resources, mobilization, and the desire to affect the course of public policy (what we shall call "*instrumental motivation*")" (Franklin, 1998, p. 219). He goes on to explain that "instrumental motivation is the sense that individuals may have that their actions (at least taken in concert with the actions of other individuals who share the same concerns) might affect an election outcome" (ibid.). He appears to endorse the notion of competing theories when concludes that "the instrumental approach to understanding political participation is superior to the other two common approaches because it subsumes them both by explaining additional aspects of political participation that neither of the other approaches can address" (p.222).

The problem of the fragmentation of the existing literature into competing and mutually exclusive explanations or schools of thought is compounded by fragmentation across different research traditions -- in particular as between

approaches that take countries as the units of analysis and approaches where the units of analysis are individuals and as between those who use aggregate data and those who use individual-level data. Clearly, a comprehensive account of the problem of abstention must draw on the strengths of each of the competing theoretical perspectives and each of the various methodological approaches⁴. The first step in this direction would be to devise a classification of the independent variables that influence turnout (rather than a classification of competing theories). If this could be done it would provide the basis for integrating the disparate insights at present scattered across the various approaches.

A typology of the factors affecting participation/abstention

A step in this direction is suggested by Blondel, Sinnott and Svensson who argue that the factors affecting turnout can be thought of in terms of facilitation and mobilization (Blondel, Sinnott and Svensson, 1998. pp. 246-257). This distinction has the merit of being related to an important behavioural distinction between circumstantial and voluntary abstention (ibid, pp. 40-54). Thus high facilitation lowers circumstantial abstention and low facilitation increases it. Likewise high mobilization lowers voluntary abstention and low mobilization increases it. But there are also potential interaction effects -- high mobilization may overcome low facilitation or low mobilization may be offset by high facilitation. In summary, a starting point in devising a comprehensive typology of factors affecting voter participation can be found in the distinction between facilitating turnout and mobilising turnout, understanding both these terms in a broad and inclusive sense. Facilitation refers to any process or variable that makes voting easier. Mobilisation is any process or variable that provides an incentive to vote.

The second essential element in the attempt to construct a typology is based on taking account of the location of the variables, recognising that the processes of facilitation and mobilisation operate both at the level of institutions/organisations and at the level of individuals. Cross classifying the two distinctions leads to the typology of

⁴ The FP5 project referred to above attempts to do this by conducting a comparative multi-level analysis of turnout using both individual-level and aggregate data. Given the problem of exaggeration of propensity to vote and of reported voting and given the probable bias towards non-voters in non-responses in survey research, the aggregate data plays a particularly important role, especially in identifying levels of turnout among socially excluded groups. The utility of aggregate data is enhanced by a recent advances in techniques of technological inference.

influences on turnout/abstention displayed in outline in Figure 3 and in detail in Figure 4.

Institutional facilitation consists of two sets of variables that are not usually put in the same box. The first is the set of practical *administrative* arrangements that govern the way in which the election is conducted (e.g., the presence or absence of compulsory voting, the month in which the election takes place, whether polling takes place on a weekday or at the weekend, the hours of polling, the accessibility of polling stations, the availability of postal voting etc.). There is an obvious sense in which factors such as these can be said to facilitate voting. But there is a second set of institutional processes that also facilitate voter participation by increasing citizens' capacity to deal with political issues and by increasing their level of political knowledge. This can be thought of as a process of *cognitive* facilitation. It includes neutral information campaigns related to the election or to the institution in question; it also includes the extent and quality of media coverage of electoral politics and election campaigns, the availability of free television air-time for party broadcasts, the occurrence of televised debates related to the election, the availability of adequate resources for mounting election campaigns etc.

Institutional mobilisation has long-term and short-term aspects. In the long term, the characteristics and the role of the elected body lead to stronger or weaker incentives to vote. These characteristics include the degree of concentration of power in the elected body, the scope of its policy competence, its relationships with other institutions of governance, the nature of the electoral system etc. The short-term aspects of institutional mobilisation include the campaigns by the parties and the candidates, but they also include partisan media coverage and non-partisan campaigns urging higher turnout.

Individual facilitation refers to the attributes of the individual that make voting easier or more difficult. These attributes include practical matters such as, for example, disposable time, residential stability, proximity to the polling station, etc. These practical considerations are different for different people, depending on constraints and opportunities related to various individual variables such as an individual's occupation, family responsibilities etc. It is vital to note, however, that individual facilitation variables also include politically relevant resources and capacities such as

the individual's level of education, level of media consumption, political knowledge and sense of political competence.

Individual mobilization comprises the attributes of individuals that provide incentives to vote. These include long-standing attitudes such as, for example, party identification, ideological commitments, sense of civic duty, sense of social solidarity etc. However, they also include short-term perceptions, experiences and preferences acquired in the course of the campaign, such as issue and leadership preferences, sense of issue salience, and election-specific party and candidate differentials

The advantages of the typology

The advantages of this fourfold classification of the variables affecting turnout can be illustrated by considering a number of examples. We know, for example, that turnout is strongly (curvilinearly) related to age. The problem is that it is not immediately apparent what this means or what the implications are. The typology in Figure 4 helps to clarify the issue by bringing out the fact that the relationship between age and turnout can be a matter of facilitation or a matter of mobilisation and can indeed reflect different processes of facilitation and different processes of mobilisation. Thus, the typology suggests that the relationship between age and turnout can reflect different aspects of the process of facilitation - the relationship being due to practical considerations such as residential mobility/stability or due to cognitive factors, older people having learned by experience about how political institutions at the national or supranational level function. Alternatively, the typology suggests that the relationship between turnout and age can be due to a different form of political learning, i.e. learning to have partisan preferences and a party identification, in short, becoming politically mobilised. Finally, according to Figure 4, the relationship between age and turnout can reflect a process of generational mobilisation or demobilisation in which different generations acquire habits of political participation or non-participation in early adulthood and carry those habits forward into later life.

A second example of the value of the typology is the manner in which it brings out the different ways in which occupation can be related to turnout - occupation can act as a resource that facilitates discussion of politics and of issues in the election; on the other hand it can be an indicator of the presence or absence of an occupation-related time constraint that makes voting more difficult or easier in practical terms; more generally, it can be a proxy for the presence or absence of a variety of resources that

make voting easier or more difficult; finally, occupation may be a mobilizing or demobilising factor in so far as it gives a person a stake in the political process at national or at supranational level.

On the institutional side of things, the typology helps to clarify the differences between various forms of communication and how these are related to one another. Thus, there are fundamental differences between efforts to increase the facility or capacity with which citizens approach elections and efforts to persuade citizens to act in a certain way (i.e. to turn out to vote or to vote this way or that). The crucial point is that the success of the latter (that is of mobilizing efforts) is heavily dependent on the success of the former (that is, especially, on the success of cognitive facilitation). If people have no sense of how government functions or of what the parties stand for, it is a very difficult to persuade them to turn out to vote or to prefer this or that party or this or that candidate. Contrariwise, increasing people's knowledge and understanding of political institutions and of the political process makes it much more likely that they will notice and respond to appeals to turn out to vote or appeals to support particular parties or candidates.

The connections between the four types of variables

The connections between the four types of variables and turnout are summarised in Figure 5. The five numbered arrows represent the main causal connections or processes influencing turnout in any given election. While much research needs to be done to clarify the nature of these connections and their relative strength, this paper concludes by considering each⁵ of the hypothesised connections in order to engage in some speculative policy-oriented thinking and to test the potential applicability of the approach.

Administrative facilitation (arrow 1 in Figure 5) Research has shown that a substantial amount of abstention in elections is due to the circumstances in which individuals find themselves around the time or on the day of the election (Blondel, Sinnott and Svensson, 1998, Lyons and Sinnott, 2003). This "circumstantial" abstention can be reduced by practical measures to facilitate the act of going to the polls to cast a vote. In an ideal world, polling would be spread over two days; the

⁵ Please note that the current version of the paper deals separately with connections one and two but provides only a more limited discussion of connections three, four and five taken together. The final version of the paper will provide a more detailed discussion of or all five processes.

preferred polling days in such a scheme would be a Sunday and a Monday to facilitate both types of voters - those for whom Sunday is inconvenient or unacceptable and those for whom weekday voting poses practical problems. Also in an ideal world, though perhaps a bit more within the realm of the practicable, polling should not take place during the main holiday season⁶. Finally, and in very practicable terms, national electoral management bodies should make sure that voter registration lists are as up-to-date as possible, that the hours of opening of polling stations are as long as possible, that the option of postal voting is as widely available and as simple as possible and that information about these and all other practical aspects of the election is as widely disseminated as possible. Administrative facilitation measures are potentially relevant to all citizens. However, they are likely to have a particular effect on turnout among young people and among those whose occupation or other commitments make voting within a very constricted time period difficult. Accordingly, the specific target groups for this intervention include working women, young people, skilled and unskilled manual workers and those on lower incomes in weekday voting countries, and students.

Cognitive facilitation (arrow 2 in Figure 5) For many people politics is a remote realm. Accordingly it is necessary to facilitate participation by such people by improving their understanding of the basic institutions and process of politics and by providing them with a way of relating the issues that concern them to the representative political process. Becoming a voter depends on learning about politics and the evidence suggests that much of this learning takes place in adulthood. While learning about politics may be largely a matter of experience, an effective communication strategy can accelerate the learning process and, in this way, substantially increase turnout in elections. The targets of cognitive facilitation measures include both demographic groups and groups defined in terms of their level of attention to or knowledge of politics. The evidence of the socio-demographic correlates of turnout suggests that these communication or cognitive facilitation measures should be directed in particular at three key demographic groups - those with incomplete secondary education, those aged under 25 and those aged 25-34.

⁶ In particular, given its low level of turnout, it is not sensible for the European Parliament to hold its elections on (in most member states) a Sunday in mid-June.

Political mobilisation (arrows 3, 4 and 5 in Figure 5) Institutional mobilisation takes two forms - long-term (arrow 3) and short-term (arrow 5). Institutional influences on long-term individual mobilisation derive in part from the structure and nature of political institutions. As illustrated in Figure 5, these include the degree of concentration of power in the elected body, the scope of the powers invested in elected institutions and the characteristics of electoral systems that expand or limit the choices available to citizens and translate those choices more or less proportionately into distributions of political power. Long-term processes of institutional mobilisation also include the nature and structure of political cleavages and the extent to which these are rooted in fundamental socio-cultural cleavages in the society in question.

The individual-level effects of the long-term institutional mobilisation processes just described are evident in, among other things, citizens' perceptions of the power and scope of governance, their confidence in political institutions, their sense of political efficacy, their feelings of party identification or party attachment and their sense of civic duty. Needless to remark, any weakening in long-term processes of institutional mobilisation has the effect of eroding these various forms of long-term individual-level political mobilisation. Such political mobilisation in turn has an independent effect on the propensity to vote (arrow 4). That is, individuals with high levels of prior political mobilisation are likely to turn out to vote almost irrespective of the degree of short-term institutional mobilisation (see next paragraph) that may characterise any given electoral contest.

Institutional processes leading to short-term mobilisation consist mainly of the campaigning efforts of political parties and the campaign-related activities of other political groups. It is important to note that these processes depend on the level of individual facilitation, in particular on the cognitive capacities with which individuals approach politics and political participation. This interaction between processes of institutional mobilisation and states of individual facilitation is illustrated in Figure 5 by the broken lines passing through the individual facilitation box (note that the interaction applies as much to long-term institutional mobilisation as to short-term institutional mobilisation).

Conclusion

This paper has presented an analytical framework for the study of electoral participation/abstention based on the distinction between facilitating participation and

mobilising participation and on the recognition that both these processes operate at an institutional and at an individual level. The framework is designed to respond to a variety of research questions, to incorporate the wide range of findings produced by empirical research, and to enable policy recommendations to be developed, assessed and prioritised. The framework is currently being applied in a number of on-going research projects in the course of which its utility will be evaluated by reference to the three design objectives just mentioned.

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Figure 1: Turnout in first and most recent national election in 15 states currently members of the EU

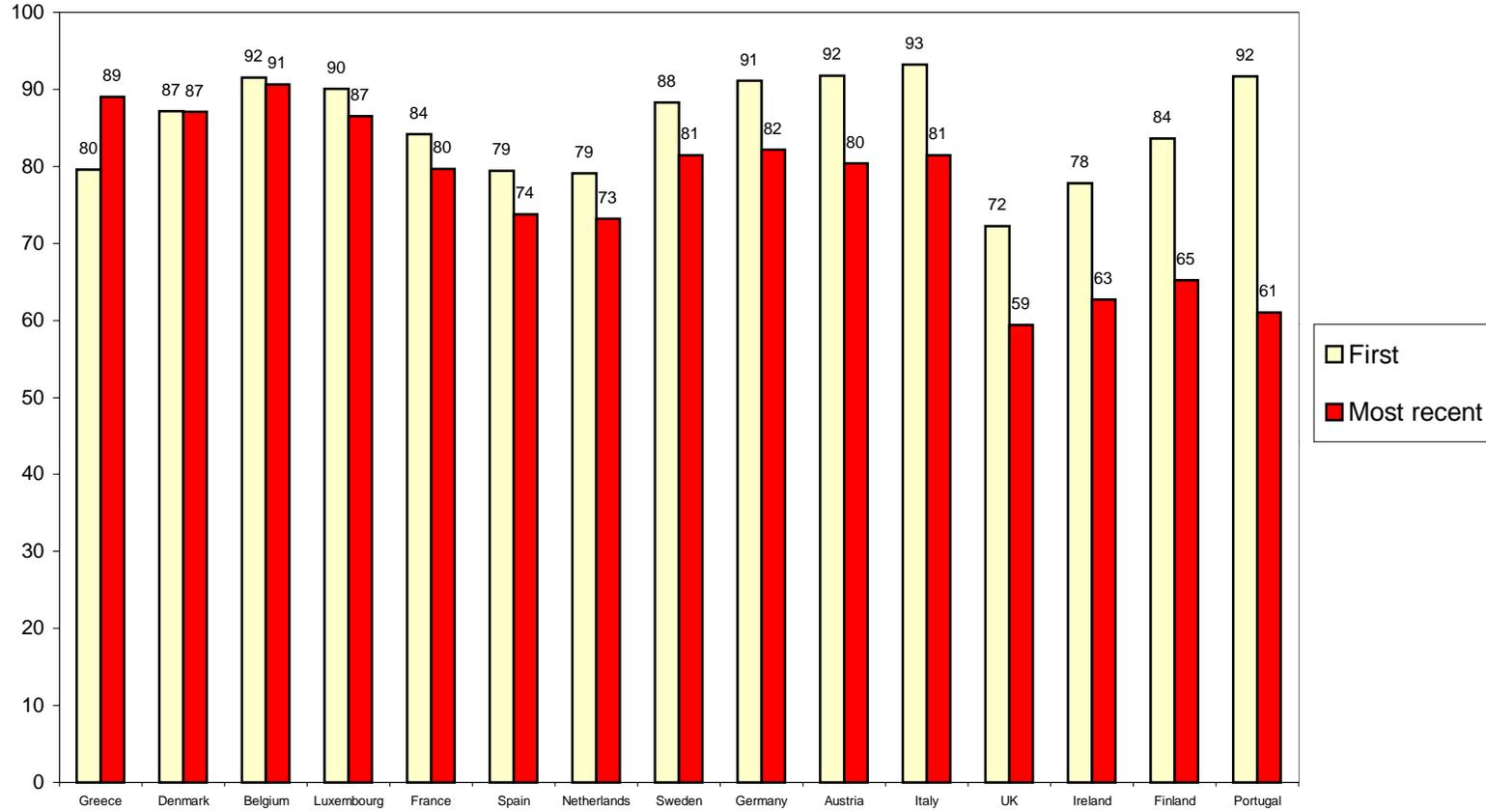


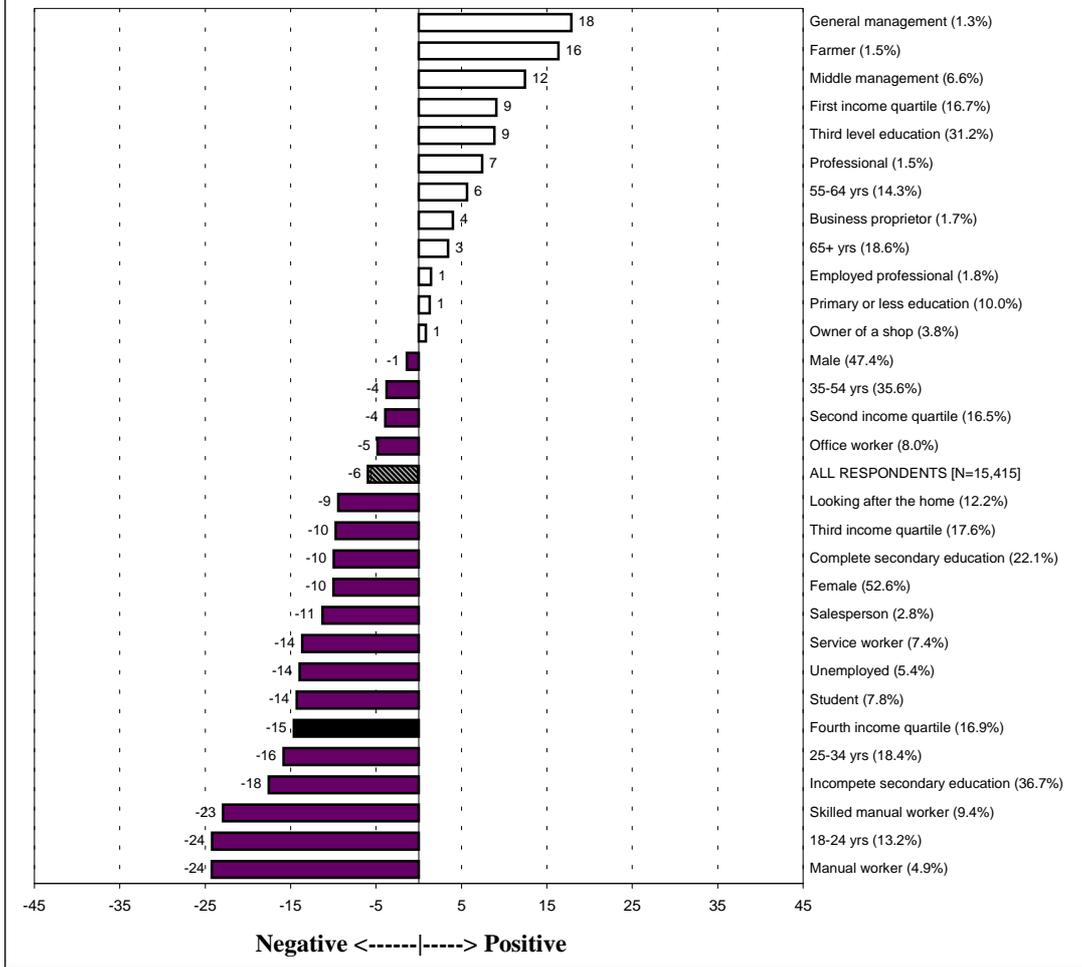
Table 1 Turnout in five European Parliament elections, 1979-99

Country	European elections					Mean turnout 1979-99
	1979	1984	1989	1994	1999	
Belgium	91.4	92.2	90.7	90.7	90.0	91.0
Luxembourg	88.9*	88.8*	87.4*	88.5*	85.8*	87.9
Italy	84.9	83.4	81.0	74.8	70.8	79.0
Greece	n.a.	77.2	79.9*	71.7	70.2	74.8
Spain	n.a.	n.a.	54.6	59.1	64.4*	59.4
Germany	65.7	56.8	62.3	60.0	45.2	58.0
Ireland	63.6*	47.6	68.3*	44.0	51.0*	54.9
France	60.7	56.7	48.7	52.7	47.0	53.2
Denmark	47.8	52.3	46.2	52.9	50.4	49.9
Austria	n.a.	n.a.	n.a.	n.a.	49.0	49.0
Netherlands	57.8	50.6	47.2	35.6	29.9	44.2
Portugal	n.a.	n.a.	51.2	35.5	40.4	42.4
Sweden	n.a.	n.a.	n.a.	n.a.	38.3	38.3
U.K.	32.3	32.6	36.2	36.4	24.0	32.3
Finland	n.a.	n.a.	n.a.	n.a.	30.1	30.1
Mean – all member states	65.9	63.8	62.8	58.5	52.4	56.3
Mean – states without compulsory voting or concurrent nationwide elections	52.9	49.4	49.5	47.0	39.4	47.6

* European Parliament elections with concurrent nationwide elections (local, regional or national)

Source: *European Parliament Election Results*. Strasbourg: The European Parliament, 1999.

Figure 2 Net propensity to vote in an EP election by age, sex, income, education & occupation (percentage points)



Source: EB57.1 (spring 2002)

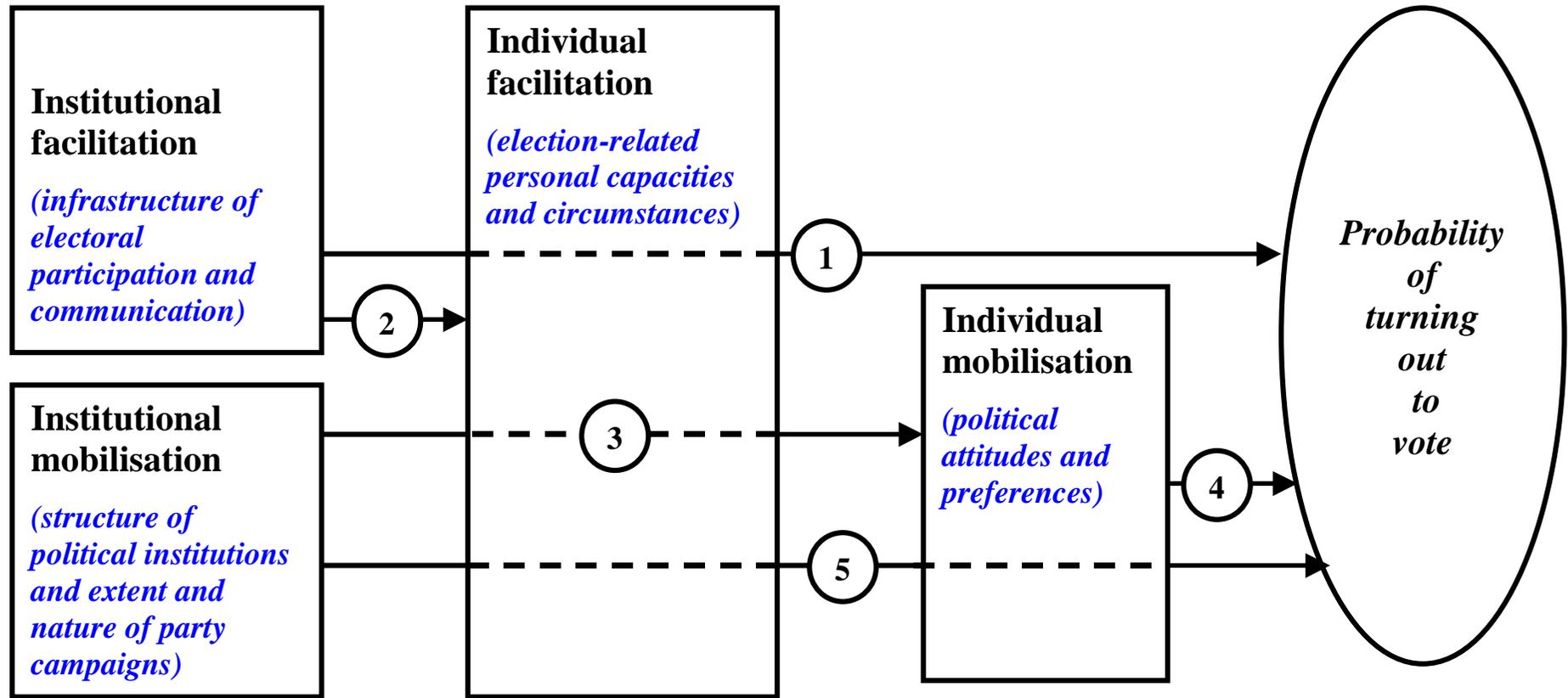
Figure 3 A typology of the variables affecting voter turnout

<i>Nature of the effect</i>	<i>Location of the variable</i>	
	<u>Institutional</u>	<u>Individual</u>
<u>Facilitation</u>	<p>Institutional facilitation</p> <ul style="list-style-type: none"> ➤ Features of the regulation of elections and features of prevailing political communication processes that make voting easier <p>(infrastructure of political participation and political communication)</p>	<p>Individual facilitation</p> <ul style="list-style-type: none"> ➤ Characteristics of individual electors that make voting easier <p>(election-related capacities and personal circumstances)</p>
<u>Mobilisation</u>	<p>Institutional mobilisation</p> <ul style="list-style-type: none"> ➤ Features of the political system and of the political process that provide incentives for voting <p>(political institutions and party campaigns)</p>	<p>Individual mobilisation</p> <ul style="list-style-type: none"> ➤ Features of individual electors' political outlook that provide incentives for voting <p>(political attitudes and preferences)</p>

Figure 4 A typology of the variables affecting voter turnout - the detail

<i>Nature of the effect</i>	<i>Location of the variable</i>	
	<u>Institutional</u>	<u>Individual</u>
<u>Facilitation</u>	<p>Institutional facilitation</p> <ul style="list-style-type: none"> • Ease of voter registration • Month of voting • Day of voting • Hours of polling • Density of polling stations • Ease of postal voting • Funding of campaigns • Extent of media coverage of politics and elections • Referendums as opportunity for political learning • The educational system • Civic education in schools • Televised leader debates • Publicity related to election 	<p>Individual facilitation</p> <ul style="list-style-type: none"> • Occupation as time constraint • Occupation as resource • Age as proxy for residential stability • Age as proxy for political learning (civics) • Income as resource • Level of education • Social integration as communication network • Interest in politics • Media consumption • Campaign exposure • Political knowledge • Political efficacy (internal) • Proximity and accessibility of polling station
<u>Mobilisation</u>	<p>Institutional mobilisation</p> <ul style="list-style-type: none"> • Concentration of power • Scope of governance • Electoral system effects • Electoral cycle effects • Referendums as isolation of issues from party system • Party manifestos • Party campaigns • Candidate campaigns • Group campaigns • Partisan media coverage • Non-partisan campaigns urging higher turnout 	<p>Individual mobilisation</p> <ul style="list-style-type: none"> • Perceptions of power • Perceptions of scope • Age as proxy for political learning (partisan) • Age as generational demobilisation • Occupation as stake in election • Sense of civic duty • Trust in institutions • Social integration as mobilisation • Party attachment • Issue salience/preference • Party differentials • Candidate differentials • Dissatisfaction with national government • Political efficacy (external)

Figure 5 The causal connections between the four types of variables and participation/abstention



Causal connections (numbered arrows):

- 1 = institutional factors affecting the act of voting -- effects mediated by individual facilitation variables (e.g. effect of day of voting varies with occupation)
- 2 = institutional factors affecting individual facilitation (e.g. civic education generates politically relevant skills)
- 3 = institutional factors leading to long-term individual mobilization -- effects mediated by individual facilitation (e.g. a parliamentary system mobilizes individuals depending on their level of civic knowledge)
- 4 = long-term individual mobilization factors leading to voting (e.g. party attachment leads to voting)
- 5 = short-term institutional mobilization activities (campaigning) leading to voting - effects mediated by individual facilitation and individual mobilization variables (e.g. effect of party advertising varies with individual's level of media consumption and party differential)