# The Economic Basis of Social Class

# John H Goldthorpe Abigail McKnight

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#### **Editorial Note**

John Goldthorpe is an Emeritus Fellow at Nuffield College, Oxford. Abigail McKnight is the Toyota Research Fellow at the ESRC Research Centre for Analysis of Social Exclusion, London School of Economics.

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## **Abstract**

In this paper we adopt a theory of class positions based on employment relations to assess what implications individuals' class positions have for their economic life. In particular we consider economic security (the risk of unemployment), economic stability (the variability component in earnings) and economic prospects (lifetime earnings profiles). Our findings provide empirical support for the theory itself and little evidence for the currently fashionable claims of the decline, or even death, of class in today's society.

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Earnings, Employment Stability, Employment Security.

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### Introduction

This paper starts out from a theory of social class that has been presented more fully elsewhere (Goldthorpe, 2000b: ch. 10). The theory was developed together with a class schema for use in empirical research that has by now become quite widely adopted, especially in social mobility research, and is variously known as the Goldthorpe, Erikson-Goldthorpe-Portocarero or CASMIN schema. The new British National Statistics Socio-Economic Classification (NS-SEC), introduced in 2001, represents a further instantiation of the schema (Rose and O'Reilly, 1997, 1998; Rose and Pevalin, 2003). Table 1 shows the correspondence that exists between the classes of the original schema and those of the NS-SEC in its seven-class 'analytical' version. Both classifications will be applied in the course of the paper.

Under the theory in question, class positions are seen as deriving from social relations in economic life or, more specifically, from *employment relations*. It is, therefore, in economic life that the implications for individuals of the class positions that they hold should be most immediately apparent. The main purpose of the paper is to show that this is indeed the case, so far at least as contemporary British society is concerned, and, in particular, in regard to (i) economic security, (ii) economic stability and (iii) economic prospects.

In this way, empirical support can be provided for the theory itself and also further confirmation of the validity of the social classifications that are associated with it. At the same time, the findings reported serve to undermine currently fashionable arguments claiming the decline, or even death, of class in the context of the 'post-modern' societies of the 'global era' (see further Goldthorpe, 2000a).

Table 1: Correspondence of the Classes of the Goldthorpe Schema and of the NS-SEC Socio-Economic Classification and Common Descriptive Terms

Goldthorpe schema		NS	-SEC	Common descriptive term		
I	Professional, administrative and managerial employees, higher grade <sup>ab</sup>	1	Higher managerial and professional occupations <sup>ab</sup>			
II	Professional, administrative and managerial employees, lower grade; <sup>b</sup> technicians, higher grade	2	Lower managerial and professional occupations <sup>b</sup>	Salariat (or service class)		
IIIa	Routine nonmanual employees, higher grade	3	Intermediate occupations	Intermediate white- collar		
IV	Small employers and self- employed workers	4	Employers in small organisations, own account workers	Independents (or petty bourgeoisie)		
V	Supervisors of manual workers; technicians, lower grade	5	Lower supervisory and lower technical occupations	Intermediate blue- collar		
VI	Skilled manual workers	6	Semi-routine occupations			
IIIb	Routine nonmanual workers, lower grade	7	Routine occupations	Working class		
VII	Semi- and unskilled manual workers					

#### Notes

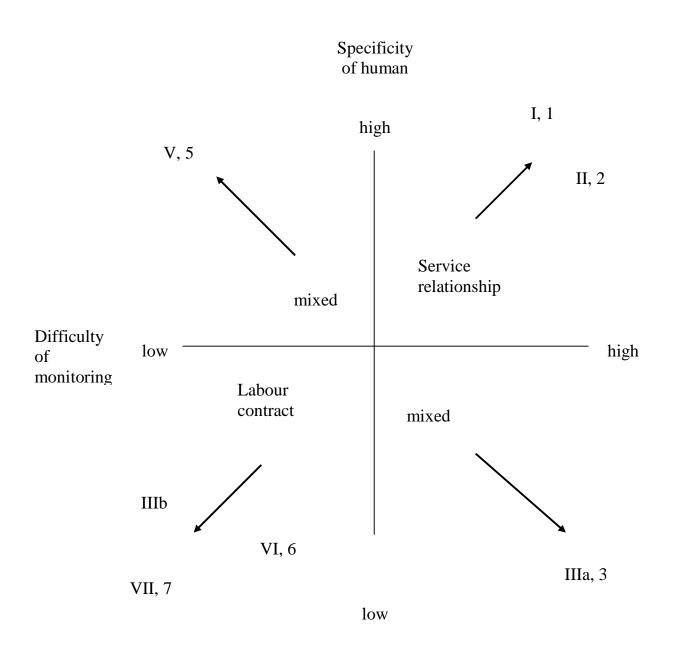
- a. Includes 'large' employers (see Goldthorpe, 1997).
- b. Includes independent professionals (see Goldthorpe, 1997)

# The theory and the schema

Since class positions are taken to derive from employment relations, the positions of employers, self-employed workers and employees represent an initial level of differentiation. However, in modern societies major importance will attach to the further differentiation that is obviously required *among* employees, who make up the large majority of the active population. This can be achieved, in a theoretically consistent way, by reference to *the mode of regulation of their employment* or, in other words, to the form of their employment contracts, due account being taken of both explicit and implicit features.<sup>2</sup>

Central to the theory in this respect is the following claim. Employers face contractual hazards in the labour market, ultimately on account of the essential 'incompleteness' of all employment contracts but, more immediately, on account of the two problems of *work monitoring* and of *human asset specificity*. In consequence, contracts of differing form are offered to employees who are engaged to carry out different kinds of work in which these problems arise to a greater or lesser extent. The situation thus envisaged can be represented schematically as in Figure 1 (adapted from Goldthorpe, 2000b: Fig. 10.2).

Figure 1: Dimensions of Work as Sources of Contractual Hazard, Forms of Employment Contract and Location of Classes



The detailed arguments underlying Figure 1 will not here be rehearsed, although they will be introduced, as relevant, in interpreting the empirical findings that are later reported. For the moment, it will be sufficient to note three salient points.

- (i) Those classes of the Goldthorpe schema and likewise of NS-SEC that fall in bottom-left quadrant of Figure 1 and that could together be taken as representing the working class (see Table 1) are associated with the regulation of employment via a 'labour contract': i.e. an approximation to a simple if recurrent spot contract for the purchase of a quantity of labour on a piece- or time-rate basis. This approximation will be closest in the case of non-skilled, entirely routine workers (Classes IIIb and VII/7), with modifications being most likely in the case of skilled manual and semi-routine workers (Classes VI/6).
- (ii) Those classes that fall into the upper-right quadrant of Figure 1 and that together represent the salariat (or service class)<sup>3</sup> of professional and managerial employees are associated with the regulation of employment via a 'service relationship': i.e. a contractual exchange of a relatively long-term and diffuse kind in which compensation for service to the employing organisation comprises a salary and various perquisites and also important *prospective* elements salary increments, expectations of continuity of employment (or at least of employability) and promotion and career opportunities. The service relationship will most fully realised with higher-level professionals and managers (Classes I/1), while modified forms will be most common with lower-level professionals and managers (Classes II/2).
- (iii) Those (employee) classes that fall into the two 'reverse' quadrants of Figure 1 and that are characterised as 'intermediate' between the working class and salariat (i.e. Classes IIIa and V/3 and 5) are associated with the regulation of employment via 'mixed' forms of contract in which elements of both the labour contract and service relationship will be found.<sup>4</sup>

In the next three sections of the paper, versions of either the class schema or the NS-SEC are used as the basis for examining, in turn, class differences in economic security, economic stability and economic prospects in Britain over the last twenty-five years or so. In some instances, already published research findings are adapted to present purposes; in others, original analyses are made of standard data-sets.

# **Economic security**

The most obvious way in which individuals' class positions are likely to influence their economic security is through the associated risks of job loss and unemployment. In order to investigate the extent and pattern of such risks, longitudinal data in the form of individuals' complete work histories, including information on any episodes of unemployment, are desirable. One major study based on such data is that by Gallie *et al.* (1998).

Using work histories from representative samples of both employed and unemployed individuals in Great Britain in 1992, Gallie and his colleagues document a general increase in job insecurity from the 1970s onwards – as might indeed be expected in view of the return of recessions in which rates of unemployment reached 'double-digit' levels. However, they also find that throughout the period in question the risks of unemployment remained clearly linked with class position and that no tendency for this association to weaken was apparent.

Thus, disparity ratios show (Gallie *et al.*, 1998: 143, Table 5.7) that for the year 1979 the risk of a nonskilled manual worker (Class VII) becoming unemployed rather than remaining in work was around three times greater, and that of a skilled manual worker (Class VI) around two-and-a-half times greater, than that of a professional or managerial employee (Classes I+II). For the years 1980-4 and 1985-9, these differential risks did narrow slightly but then for the years 1990-2 they returned to almost exactly the same pattern as for 1979. Furthermore, when various individual characteristics were introduced into the analysis, including that of level of educational attainment, the outcome was not radically changed: class position, taken as a structural factor, remained of 'critical' importance in vulnerability to unemployment.

For present purposes, these findings have two limitations. First, they extend only up to the early 1990s and, second, 'intermediate' classes are left out of account. Fortunately, more recent results are now available that, while not directly comparable to those produced by Gallie and his colleagues, do none the less provide valuable complementary evidence.

Elias and McKnight (2003) use the data-set of the British Household Panel Survey in order to carry out analyses of the relationship between class position and the risk of unemployment, in which class is determined according to NS-SEC and the experience of unemployment is measured in two different ways: first, according to whether an individual in the active labour force had or had not been unemployed *at any time* between September, 1991 and August, 1999;

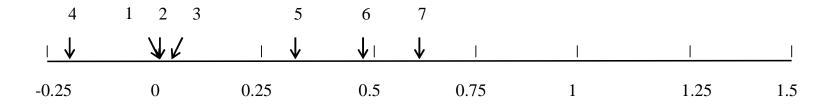
and second, according to whether over this same eight-year period an individual had or had not spent *a total of more than twelve months* in unemployment. Elias and McKnight carry out logistic regressions in which these two binary measures are the dependent variables and class is the explanatory variable of interest, but with age, sex, marital status and family composition also being included as control variables. Figure 2 graphs their main results.

As regards the experience of any episode of unemployment, the influence of class is readily apparent from Figure 2, although the main contrast to emerge is not so much one between the effects of being in the working class rather than in the salariat as between the effects of being a 'blue-collar' employee (Classes 5, 6 and 7) rather than a 'white-collar' employee (Classes 1, 2 and 3). Moreover, it is among independents or the petty bourgeoisie (Class 4) that there is the lowest risk of experiencing unemployment, although *under* employment does of course in their case represent another possible source of economic insecurity.

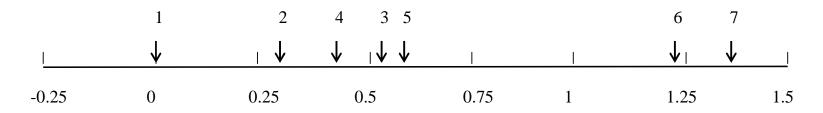
As regards the experience of recurrent or long-term unemployment, amounting to more than twelve months in total, the contrast that stands out is much closer to that shown up by Gallie *et al.*: i.e. between the effects of belonging to the working class, and especially its lower division, rather than to the salariat, and especially its higher division. In multiplicative terms, being a routine worker (Class 7) increases the odds of recurrent or long-term unemployment almost fourfold relative to the odds for a higher-level professional or managerial employee (Class 1). In addition, Figure 2 shows the independents now falling, along with the two intermediate employee classes, in-between the working class and the salariat, with extensive unemployment being here indicative, one would suppose, of some form of business failure.

Figure 2: Coefficients for Effects of Class on Risks (Log Odds) of Experiencing Unemployment 1991-1999 (Controlling for Age, Sex, Marital Status and Family Composition)

# A: Experience of any unemployment



# B: Experience of more than 12 months unemployment in total



Taking both graphs of Figure 2 together, one can then say that over the last decade of the twentieth century, just as previously, class position remained very clearly linked to the incidence and length of unemployment, and even with due account being taken of a range of individual factors. Thus, the argument made by Beck (2000: 153) that in the global era the risks of unemployment become less and less class-related is, for Britain at least, quite unfounded. And the claims of other globalisation theorists such as Castells (1996/2000: 290) or Gray (1998: 29, 71-2, 111) to the effect that, in consequence of a 'generalisation' of insecurity, the 'bourgeois' institution of the career is now being undermined have to be seen as, at all events, highly exaggerated. It is true that former members of the salariat now represent a growing proportion of those individuals who at any one time are found in unemployment. But this can be accounted for simply as the result of professional and managerial employees making up a growing proportion of the total work force, and says nothing about relative risks (cf Gallie et al., 1998: 142-3). Jobs are still far more likely to be lost than are careers to be disrupted.

Moreover, not only is the association between class position and the risk of unemployment a robust one; from the theoretical standpoint earlier outlined, class position is itself to be regarded as having causal significance. In particular, members of the working class, and nonskilled, routine workers in particular, must be seen as facing relatively high risks of job loss and unemployment *as a direct result of* the typical form that their employment contracts take. The crucial point here is that the basic labour contract approximates a spot contract for the purchase of a quantity of labour and thus, even if recurrent, tends to carry with it few expectations, explicit or implicit, of long-term continuity. Where problems of work monitoring or of human asset specificity are slight, there is in fact little incentive for employers to set up such expectations. Rather, they will aim to 'commodify' labour to the greatest degree possible, so that when they need less of this commodity they will have maximum freedom simply to stop buying it.

Most obviously, routine wage-workers tend to be employed on only short periods of notice, whether formally or by 'custom and practice'. As a result, not only is it generally easier for employers to dismiss or lay off such workers (cf. Gallie *et al.*, 1998: 139-41) but, further, if they do lose their jobs, for whatever reason, there is a relatively high probability that they will then become unemployed for some period simply because they will have only quite limited time in which to find alternative work. In contrast, salaried employees typically work to longer periods of notice – usually at least a month – and therefore have much better chances, even in the event of job loss, of avoiding unemployment. <sup>6</sup>

In addition, wage-workers are generally less well protected than are salaried staff against employment insecurity arising from ill-health, which has been shown to be an especially important factor in long-term unemployment (White, 1983). The superior fringe benefits that members of the salariat typically enjoy mean that they are better able to maintain continuity of employment on the basis of extended sick-leave or, in the case of older workers, to avoid entering unemployment by taking up early retirement pensions.

Although, then, vulnerability to job loss and unemployment is of course in various ways affected by individual as well as structural factors – as indeed by other structural factors apart from class – the persisting centrality of class in creating differentials in this respect is apparent enough.<sup>7</sup> In turn, there would seem little reason to modify White's view (1991:110) that a relatively high risk of unemployment, and thus of economic insecurity, is 'inherent to the condition' of those individuals holding working-class positions, as these positions are here understood.

# **Economic stability**

As well as being a major determinant of their longer-term economic security, the class positions that individuals hold can also be expected to influence their economic lives in the shorter-term – that is, from week to week and month to month – through the consequences that follow for the stability of earnings. In the nineteenth and earlier twentieth centuries, the problem of instability in earnings, especially among the working class, was widely recognised. Working-class families, even if they avoided the worst consequences of unemployment and managed to keep above the poverty line, could still meet with serious difficulties of housekeeping and budgeting through fluctuations in their breadwinners' earnings (cf. Johnson, 1985). Today, it may seem that such problems have largely disappeared as a result of general improvements in wages and conditions of employment and in state social security provision. However, even if this is true, it does not follow that the connection between class and fluctuation in earnings no longer exists, nor that such fluctuation is unimportant.

Earnings data that would allow the matter to be examined directly are not, unfortunately, available but one data-set, that of the New Earnings Survey, does provide information that is of relevance and that merits more attention than it has so far received. The NES data are obtained each year directly from employers' pay-rolls for a sample of employees randomly selected on the basis of their National Insurance numbers, and can thus claim higher quality than earnings data collected through individuals' responses in interviews or to

questionnaires.<sup>8</sup> Information is available that allows the 'make-up' of gross earnings in different occupations to be analysed according to four categories: i.e. three categories of variable pay – all forms of 'payment by results', overtime earnings, and shift and other premiums – and a fourth, residual category, 'all other pay'. This latter category cannot be entirely equated with fixed or 'basic' pay, chiefly, it appears, because it includes the pay of workers on time-rates that is variable in the sense that their contracts do not specify any normal or standard hours. None the less, it would seem possible to treat 'all other pay' as in general giving a good indication of basic pay, and it thus becomes possible to make comparisons of the relative importance of variable forms of pay in the total earnings of different groups of worker, even if the actual amount of variation that is produced at the individual level remains unknown.<sup>9</sup>

The occupational classifications used by the NES have changed over the years and none map readily into either the Goldthorpe class schema or NS-SEC. Furthermore, the occupational unit groups to which employees represented in the NES are coded are those of the KOS system rather than the OPCS/ONS Standard Occupational Classification (SOC). However, we have undertaken a recoding exercise in which the KOS unit groups have been allocated to the six employee classes of the 'analytic' version of NS-SEC, following as closely as possible the tables provided in regard to SOC2000 in the official manual (ONS, 2002).

This exercise provides the basis for Table 2 which indicates the relative importance of different components of gross weekly earnings in 1975 and 1998 for men in each of the six classes distinguished who were in full-time employment.

Table 2: Components of Average Gross Weekly Earnings, Men in Full-Time Employment, 1975 and 1998

		PBR <sup>a</sup>	% total earning overtime pay <sup>b</sup>	0	other	PBR <sup>a</sup>	% receiving overtime pay <sup>b</sup>	shift etc premiums <sup>c</sup>
<b>NS-SEC Class</b>			1 0	•				•
1 Higher managerial	1975	0.9	1.5	0.4	97.2	3.9	9.9	3.2
and professional	1998 <sup>d</sup>	4.3	1.8	0.4	92.5	12.2	11.3	3.2
2 Lower managerial	1975	1.8	2.3	0.5	95.3	6.9	14.6	5.1
and professional	1998 <sup>d</sup>	3.4	1.9	0.6	93.1	12.6	12.6	5.5
3 Intermediate	1975	3.4	6.6	0.8	89.1	9.7	35.5	7.4
	1998 <sup>d</sup>	2.7	5.7	0.8	89.7	11.9	32.5	6.0
5 Lower supervisory	1975	5.2	13.4	2.6	78.7	30.8	54.3	19.4
and technical	1998 <sup>d</sup>	3.0	13.9	3.3	78.5	20.5	54.6	20.1
6 Semi-routine	1975	9.9	13.7	4.2	72.3	38.3	53.2	28.4
	1998 <sup>d</sup>	3.9	13.1	4.3	77.7	26.9	49.2	28.9
7 Routine	1975	10.1	14.7	2.3	72.9	49.6	57.3	19.1
, 10000	1998 <sup>d</sup>	4.4	14.1	2.2	78.1	22.7	52.5	15.3

### **Notes:**

a. Includes piecework, bonuses and profit-related commissions and all other incentive payments not related to overtime.

b. Relates to all pay for overtime hours, not just to premium elements.

c. Includes pay for night or week-end work not treated as overtime.

d. Because of deficiencies in the current version of the 1998 NES data-set, percentages in left-hand panel of the table sum to 98-99 rather than to 100.

Two major points emerge. First, the relative importance of variable forms of pay clearly differs across classes. In particular, such pay accounts for, if not a negligible, still only a very slight proportion of the total earnings of men in the salariat – i.e. in Classes 1 and 2 – but for a far more significant proportion, upwards of 20 per cent, of the earnings of men in working-class positions – i.e. in Classes 6 and 7. It is, moreover, with men in these classes that variable pay is most likely to be underestimated through the inclusion in the 'other' category of the time-rate earnings of employees who have no standard hours of work.

Secondly, such class differences do not show any very dramatic alteration over the period covered. The most notable change is the decline in importance of payment by results (PBR) for men in Classes 6 and 7, reflecting, one may suppose, the decreasing use of piece-rates; and, chiefly on this account, the proportion of the total earnings of these workers that falls in the 'other' pay category increases. It is also the case that among men in Classes 1 and 2 some evidence of a reverse tendency is apparent. Indeed, if attention is focused on the proportion of men receiving *some part* of their earnings in the form of PBR, then a marked narrowing in differences between the working class and the salariat might be claimed. None the less, it is important not to lose sight of the fact that still in 1998 PBR accounted for under 5 per cent of the total earnings of men in Classes I and 2 and that the 'other' pay category – which in their case can be rather safely equated with basic pay – was little less dominant than in 1975. In other words, the salariat clearly remains the salariat.<sup>10</sup>

Comparable data to those of Table 2 can be produced for women but interpretation is more difficult in that the restriction of coverage to full-time employees is likely to be far more consequential than with men. In particular, this restriction would seem the most probable explanation for two findings that emerge: first, that, in all classes alike, variable forms of pay are less important than for men and second, that class differences are less marked overall. At the same time, though, the differences that do show up are on essentially the same pattern as those for men and, also as for men, changes over time are quite limited, with the declining importance of PBR for employees in Classes 6 and 7 again showing up most strongly.<sup>11</sup>

These findings on variable pay do then provide further grounds for scepticism over claims of the decline of class and, more specifically, of the erosion of distinctive features of the 'service relationship'. Several authors have argued (e.g. Brown, 1995; Savage, 2000: ch. 6) that, as a result of the intensified competition of the global economy, remuneration on the basis of fixed salaries has to be modified. Pay must to an increasing degree be linked to performance, and for professional and managerial staff no less than for rank-and-file employees. From this point of view, the service relationship is seen not as

expressing an employment contract with a rather sophisticated underlying rationale but simply as a conventional status distinction that could be sustained during the long boom of the post-war years but that is now being swept aside as a new individualistic and entrepreneurial culture undermines that of old bureaucratic hierarchies.

It is, however, surprising that, if such a development is in train, there are not more signs of it in the findings presented above. Although, as noted, PBR does increase in importance for men in Classes 1 and 2 as between 1975 and 1998, the change is more apparent in the numbers receiving some payment in this form than in the actual composition of their earnings. It can in fact be ascertained from the published results of the NES for 1998 (ONS 1998: Table D14) that within the salariat PBR amounted to more than 10 per cent of total earnings only among men in a few fairly specific occupational groups: that is, business professionals, such as brokers and investment analysts, and marketing and sales managers. Of course, if the data would allow a yet closer focus on, say, CEOs and others in very senior managerial positions, profit-related pay in particular could well take on much greater significance. But for professional and managerial employees at large, one must conclude that evidence to suggest that their mode of payment is now increasingly influenced by a new entrepreneurial ethos is scarcely compelling.

In sum, while class differences in the stability of earnings may not be quite so marked nor so grave in their effects as in the past, there are clear enough indications that they still persist. For most members of the salariat, variation in earnings on a relatively short-term basis is unlikely to be a matter of much importance: the monthly pay slip will be fairly predictable. In contrast, for most blue-collar workers and, one may suppose, for members of the working class especially, at least the potential instability of pay remains a feature of their economic lives. The possibility, if not the actuality, of week-to-week fluctuation in earnings, even if now more related to hours worked and in particular to overtime working than to piece-rate payment, is still widely present. Weekly income will depend in some significant part both on the readiness of individuals to do overtime and, of course, on its availability.

Finally, here, it should be kept in mind that the earnings of non-salaried workers are also liable to fluctuate in another way that the available data do not allow us to explore at all. That is, as a result of pay being *lost* through hours or days taken off on account of (at least uncertified) sickness, domestic or family problems etc. – a situation that would seem especially likely to arise in the case of women who work only part-time on account of their family responsibilities.

These differences in earnings stability – just as those in the risks of unemployment – can then be seen as stemming directly from the differences in employment relations in terms of which class is here defined. The basic labour contract, as an approximation to a spot contract for the purchase of a quantity of labour, requires that the work involved is such that it can be adequately measured and controlled – typically, that it entails physical rather than symbolic activity and that worker autonomy is low. If measurement is by output, piecerates with checks for quality are the obvious form of payment, while if measurement is by input, usually as indexed by time spent on the job, time-rates with checks for effort will apply. But, in either case, the underlying logic is that pay will indeed vary with the amount of work done.

In contrast, the service relationship, implying a less specific, more diffuse exchange than a simple 'money-for-effort' bargain, is well adapted to circumstances where work is not easily measured or otherwise monitored – typically, where it entails symbolic rather than physical activity and worker autonomy is high. The logic of the service relationship is that the commitment of employees to organisational goals is gained and appropriate incentives are created through payment by salary that is not subject to short-term fluctuation, but that can be expected steadily to increase in its level, conditional upon satisfactory appraisal of a relatively long-term kind, over most of the individual's working life.<sup>13</sup>

Finally, here, it should be noted that the foregoing relates entirely to earnings stability among members of employee classes, to whom the coverage of NES is restricted. There is in fact little information available on the stability of earnings of small employers or the self-employed. If, however, any supposition were to be made in this regard, it could only be that among such independents – as comprised by Class IV of the Goldthorpe schema or Class 4 of NS-SEC fluctuation in earnings will be significantly greater than among employees in general, and again as a direct consequence of the relations that characterise their class position (cf. Boden and Corden, 1994). Rather than receiving salaries or wages from an employer, independents generate their own earnings through their market transactions with customers or clients, and also with suppliers, creditors and their own employees, under economic conditions that are subject to a wide range of variation. Qualitative studies of small entrepreneurs, shopkeepers, self-employed artisans and the like have indicated that maintaining custom or 'the flow of work' is a frequent preoccupation, and that the uncertainty of earnings tends to create problems in both business planning and family budgeting (e.g. Scase and Goffee, 1980, 1982).

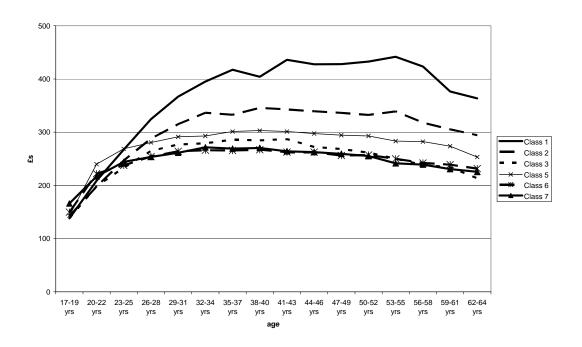
# **Economic prospects**

In considering the consequences of class for economic security and economic stability, the risks of unemployment and the likelihood of short-term fluctuation in earnings, respectively, have served as empirical referents. As regards economic prospects, these will be indexed by the relationship that exists between earnings and age.

Economists have for long recognised that earnings tend to follow a parabolic curve with age, first rising and then later levelling out and falling off somewhat. However, far less attention has been given (a notable exception is Phelps Brown, 1977: ch. 8) to the fact that the particular shapes of age-earnings curves vary across different groups of employees. What, for present purposes, is of chief interest is the extent and persistence of such variation as it occurs across classes. The NES data-set and the recoding exercise referred to in the previous section again allow relevant analyses to be made, and in this case a comparison is possible between 1975 and 1999.

Figure 3 graphs 1975 median gross weekly earnings for three-year age-groups of men in full time employment in each of the six employee classes of NS-SEC. As is indicated, these earnings are expressed in 1999 prices so that comparisons with that year can be made in real terms.<sup>14</sup>

Figure 3: Men in full time employment in 1975 – median gross weekly earnings in 1999 prices

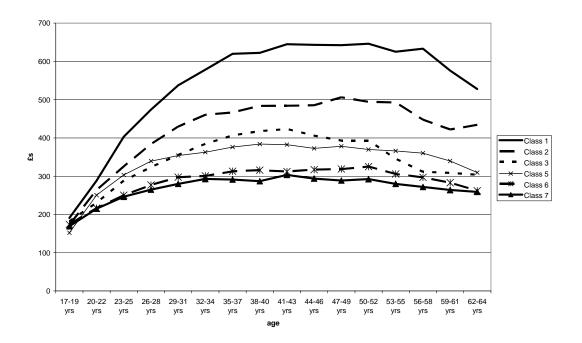


It is important that this and subsequent similar figures are carefully interpreted. The graphs derive from cross-sectional data. Thus, they should be understood as showing what in a certain year employees within a certain class and of a certain age were, on average, earning. Given our primary concern with the structural effects of class position, it is in fact this information that is of chief relevance. By the same token, the graphs should not be read as tracing out the lifetime earnings of particular individuals. Apart from anything else, mobility between classes does of course occur during working life, and any analysis of the course of lifetime earnings of individuals would have to take such mobility into account.<sup>15</sup>

Furthermore, at the same time as they show age-effects, the graphs will also reflect birth-cohort effects (which could be important if members of successive cohorts have experienced contrasting economic fortunes) and also, and especially towards their tails, various selection effects. Such complicating factors have always to be kept in mind, and attention should focus on the larger features of the different curves that are depicted.

From Figure 3 the following points most clearly emerge. First, up to around age 25 class differences in earnings are rather slight. Young professionals and managers earn little more than young wage-workers in routine jobs, and rates of increase in earnings are also similar. Secondly, though, from the mid-20s onwards the curves begin to diverge. Those for Classes 6 and 7 rise only up to around age 30 and then remain more or less flat before tending to slope downwards somewhat as men pass 50. However, the curves for both intermediate classes, Class 3 and Class 5, and also that for the lower-level salariat, Class 2, show a rise that continues well into the 30s before levelling out. And, in most marked contrast, the curve for the higher-level salariat, Class 1, rises quite sharply up the late 30s and then more slowly and irregularly into the 50s before declining after age 55. 16

Figure 4: Men in full time employment in 1999 – median gross weekly earnings in 1999 prices



In Figure 4 corresponding results to those of Figure 3 are shown for 1999. It is apparent (note the changed vertical scale) that real earnings have increased and also that class inequalities have at the same time widened – as one would expect to find in the light of other analyses of earnings over the period covered (e.g. Gosling, Machin and Meghir, 1994; Johnson and Makepeace, 1997). However, of chief concern here is what has happened to the shape of the class curves.

The curves for Classes 6 and 7, the two divisions of the working class, reveal rather little change. They rise for slightly longer than in 1975 – i.e. now up to the mid-30s – but then remain essentially flat until their eventual decline for older age-groups, essentially as before. Similarly, the curve for Class 1 is not greatly altered. It again shows a sharp rise up to the late 30s followed by a slower increase – possibly less sustained than in the earlier graph – before turning down from the mid-50s. Changes of greater consequence are in fact restricted to the curves lying between those for Classes 6 and 7 and that for Class 1. Thus, the curves for Classes 3 and 5 show somewhat longer periods of increase in 1999 than in 1975 – i.e. ones continuing up to around age 40 – and that for Class 3 does in fact rise above that for Class 5 between the ages of 30 and 50 while in 1975 it remained always below. However, it is the change in shape of the curve for Class 2 that is most significant. In 1999 this curve is much more similar to that for Class 1 than it was in 1975. It too now rises sharply into the 30s and then more slowly into the 50s. In other words, so far as

economic prospects are concerned, there is here evidence of some 'consolidation' of the salariat.

Figures 5 and 6 then present comparable graphs to those of Figures 3 and 4 for women in full-time employment. Two minor differences in format are that five-year rather than three-year age-groups are used, because of the smaller numbers involved, and that the age-range covered extends only to 52-6 because of the tendency of women to retire earlier than men.

If Figure 5 is compared, first of all, with Figure 3, it can be seen that in 1975 age-earnings curves for women were less differentiated by class than were those for men. The curves for women in Classes 3 and 5, as well as those for women in Classes 6 and 7, are essentially flat after a slight rise up to the mid-20s. And further the curves for women in Classes 1 and 2 are distinctive only in that earnings increase, and rather more sharply, up to around age 30.

Figure 5: Women in full time employment in 1975 – median gross weekly earnings in 1999 prices

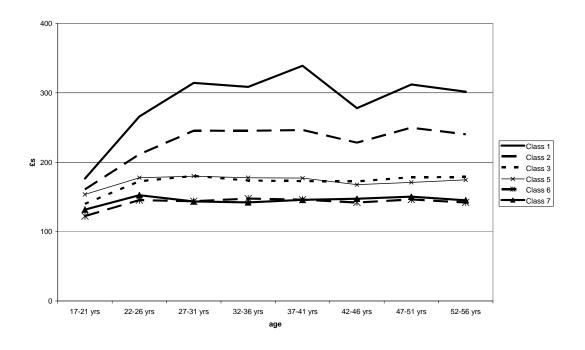
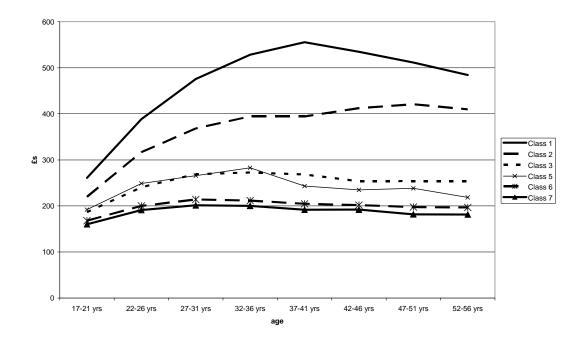


Figure 6: Women in full time employment in 1999 – median gross weekly earnings in 1999 prices



However, if Figure 5 is then compared with Figure 6, it is apparent that by 1999 not only had class inequalities in earnings widened among women, as among men, but that at the same time greater differences in the shapes of class curves had developed. And in turn the comparison of Figure 6 with Figure 4 then serves to show that this differentiation is for the most part on similar lines to that found among men. In particular, there is now the same marked contrast between the working class and the salariat: i.e. between, on the one hand, the curves for Classes 6 and 7 that remain largely flat after the 20s and, on the other, the curve for Class 1 that now rises steeply up to around age 40 and that for Class 2 that shows a slower though apparently more sustained rise.

The only gender difference of note occurs with Class 3, that of intermediate white-collar workers, in which a high proportion of women employees are of course found. For men, the Class 3 curve, as earlier observed, moved somewhat closer between 1975 and 1999 to that for Classes 1 and 2, at least in rising quite sharply up to age 40. But for women no such change is revealed: in 1999 as in 1975 the Class 3 curve essentially follows the Class 6 and 7, or working-class, trajectory. <sup>18</sup>

In sum, it can be shown that class differences in age-earnings curves exist and, further, that, in so far as changes have occurred over the last quarter of the twentieth century, these have tended to make such differences *more* rather than

less apparent. In 1975 the most marked contrast was that found, in the case of men, between earnings within the working class, which did not increase with age after the 20s, and earnings within the higher salariat, which increased until a quite late stage in working life. In 1999 this contrast remains and has also become evident among women as well as men. Furthermore, for men and women alike, the lower salariat is now clearly differentiated from the working class on much the same lines as the higher salariat.<sup>19</sup>

To repeat, what this means in terms of the economic prospects of particular individuals will depend in part on their chances of mobility. However, it is known that rates of worklife class mobility do fall off rather sharply for individuals in their 30s (Goldthorpe, 1987: ch. 6; Gershuny, 1993), and thus, for individuals who have reached this age, some fairly clear implications can be spelled out. In particular, for men who are still at this stage in their lives in working-class positions or for women in working-class or intermediate-class positions, their expectations of any further improvement in the level of their real earnings must be regarded as poor, apart from that which may result from general economic growth. In contrast, for those individuals who have achieved positions in the salariat – from which downward mobility in the course of working life is rather rare – there are good expectations that their real earnings will steadily increase at least up to some time in their 50s.

Once more, then, the empirical evidence produced is scarcely consistent with claims of declining class differences and, in particular, with the claim of the demise of the professional or managerial career. In this regard, particular comment must be made on Savage's attempt (2000: ch. 3) to use NES data as a basis for furthering his argument of the erosion of the service relationship – an attempt which is not in fact at all convincing.

Savage computes for 1976 and 1990 (using the published, not original data for these years) the extent to which men aged 40-49 earn more than the average for their occupational group (not class), and then takes this 'age premium' as an indicator of how far a service relationship, implying rising earnings over most of working life, is in operation. He finds that the age premium that professionals and managers enjoy over most manual workers is rather small and tending to fall over the period covered. However, calculating summary measures of this kind is a poor substitute for looking at age-earnings curves *per se*. And in any event Savage fails to provide a clear rationale for the particular measure that he adopts – various alternatives to which could be suggested. For example, it would seem more direct to calculate the ratio of the earnings of employees aged, say, 50-55 to the earnings of those aged 23-28. And if this is done for each NS-SEC class for the period 1975 to 1999, then conclusions generally in line with those set out above, and at variance with Savage's own, are indicated.<sup>20</sup>

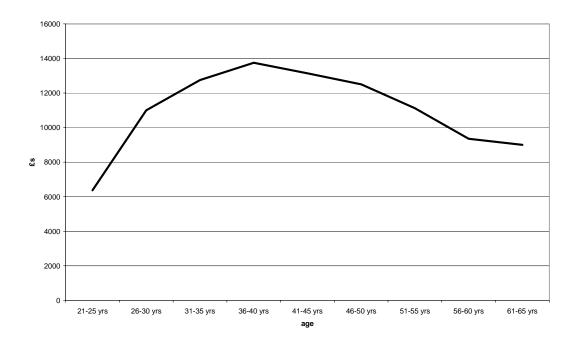
Rather than pointing to the erosion of the service relationship, the relevant curves of Figures 3 to 6 can in fact be taken as well illustrating the consequences for earnings that follow from its operation. As earlier argued, the service relationship can be understood as a response by employers to problems of work monitoring and human asset specificity, through which is created an expectation of continuity of employment and also appropriate incentives for employees to act consistently in the pursuit of organisational goals. An age-earnings curve that moves upwards over much of working life is an important element in the logic of this relationship. On the one hand, employees know that the better they perform, the quicker and further their promotion is likely to be into the better-paid levels of the hierarchy. On the other hand, because for most employees higher rewards will still lie ahead, 'hasty quits' are discouraged and also the threat of dismissal, as, say, for manifest under-performance or malfeasance, is made more potent.

In sum, for so long as the service relationship remains an effective response to problems that are most widely associated with the employment of professional and managerial staff, class differences in economic prospects, and ones especially marked as between the salariat and the body of wage-workers, can be expected to persist.

Finally, separate attention needs here again to be given to small employers and the self-employed whose economic prospects, as indexed through age-earnings curves, cannot be treated on the basis of the NES. Some relevant social survey data are in this case available, although independents are known to be reluctant to respond to questions on their incomes (in part, it seems, because they are often not themselves well-informed on the matter). Probably the best present-day source – there is no good basis for over-time comparisons – is the British Household Panel Study (cf. Meager, Court and Moralee, 1996), which achieves a response rate for the earnings of independents of around 50 per cent.

Drawing on the BHPS data-set, it is possible to show, as in Figure, 7, the median reported annual 'labour incomes' (1999-2000) for five-year age-groups of men falling into Goldthorpe Class IV (similar analyses for women could not usefully be undertaken because of inadequate numbers). Since it is annual rather than weekly earnings that are here plotted, the curve with age appears more pronounced than in the figures previously presented. But if derived weekly earnings were to be shown on Figure 4 above – i.e. that for male employees in 1999 – the curve would in fact rather closely follow those for Classes 6 and 7 over the age-range 32-49, although falling below for both the earlier and later ranges.

Figure 7: Men in Class IV – median reported annual labour income – 1999-2000



That the earnings of members of Class IV would thus appear as being, at best, only at the same level as those of primarily manual wage-workers suggests some significant degree of under-reporting, as indeed has been found in studies that have focused on this issue (cf. Meager and Bates, 2001); and any reasonable correction made in the light of these studies would in fact lead to Class IV earnings being placed somewhere in-between those for Class 5 and Class 6 for all except the youngest and oldest age groups.<sup>22</sup> However, for present purposes, it is the general shape of the curve of Figure 7 that is of chief significance. While this shows a rate of increase over younger age-groups similar to that for intermediate white-collar employees or even the lower salariat, it is more distinctive in the rate and extent of its subsequent decline. Selection effects are very likely to be involved here. The probability of selfemployment in relation to age has been shown to be non-linear, first rising then falling in later life (Rees and Shah, 1986), and self-employed craftsmen in particular would seem inclined to opt for wage work as middle age approaches (Scase and Goffee, 1982: ch. 4). But what is more generally reflected, one may suppose, is a tendency for older independents, whether out of choice or constraint, to take on less business and to work shorter hours than they did when of prime age: that is to say, either because they can afford to enjoy more leisure or because of diminishing powers. In this respect, both the advantages and disadvantages of the economic position of independents are well brought out.

### **Conclusions**

It has been shown that if class positions are defined by reference to employment relations, then the experience of individuals in terms of economic security, stability and prospects will typically differ with the class positions that they hold. At least with some of the more marked contrasts that in this way arise, individuals in different class positions could in fact be seen as living in quite different economic worlds, not just as regards their levels of material welfare but, further, as regards the whole range of economic life-chances – of risks and opportunities – that they face.

From a methodological standpoint, the findings presented above thus provide additional confirmation of the validity and utility of conceptualising class in the way in question (cf. also Rose and Pevalin, 2003). More substantively, they throw further doubt on claims of the decline or death of class in modern – or, supposedly, 'post-modern' – societies such as that of contemporary Britain. What is rather indicated is the general persistence, and in some respects even the heightening, of inequalities that can be shown to derive directly from the incumbency of different class positions: that is, not from the attributes of individuals *per se* but from their location within the social relations of labour markets and productions units that form the class structure as here understood.

Finally, then, and from the standpoint of the present volume in particular, the value of taking a class structural context for the study of economic and social mobility may be underlined. A clear distinction can in this way be established between 'positions' and 'persons': class positions represent the 'empty places' (cf. Sørensen, 1991) among which the mobility of individuals (or families) occurs. But further, as well as thus providing a framework within which rates and patterns of mobility can be observed and measured, a class structural perspective also provides a natural starting point for the explanation of these rates and patterns. In so far as individuals in different classes do inhabit different economic worlds, as characterised by security, stability and prospects, then not only can their class positions be seen as constraining their life-chances in regard to mobility – as in a range of other respects – but, further, as shaping the *life-choices* that they make *within* such constraints, as, for example, their educational and occupational choices.

What has of late become increasingly apparent is that where fairly systematic class differences in patterns of such choice are empirically demonstrable, it is possible to provide causally adequate accounts in terms of individuals' rationally adaptive responses to features of the class situations that they typically face – or, more specifically, in terms of their attitudes to risk, their propensity to discount the future, their sense of personal adequacy and so on

(Goldthorpe, 2000: chs. 8, 9, 11; Jonsson and Erikson, 2000; Breen, 2001; Bowles and Gintis, 2002).

Explanations on these lines often help in understanding why class-linked patterns of choice should persist over time and, in turn, the marked selfmaintaining properties that inequalities of opportunity and social mobility regimes often appear to possess. Such explanations can, moreover, claim to be ones given at a more fundamental level than those that rely merely on the invocation of class cultures or subcultures. Explanations of this latter kind often struggle to avoid tautology - that is, through inferring cultural values and derived social norms from the very patterns of action to which they are addressed; and in any event they leave unanswered the question of just why individuals should tend to act in accordance with such values and norms rather than deviating from them. In contrast, explanations that are able to show at least the subjective rationality of individuals' actions, given their class situations, come closer to what Boudon (2003) has called 'final' explanations or 'explanations without black boxes'. They offer accounts both of typical patterns of action and at the same time – by revealing their adaptive qualities – of the particular values and norms by which such action would appear to be informed.

#### **Notes**

- It may be noted that corresponding classes of the Goldthorpe schema and of the NS-SEC in this version carry the same number, roman in the former case, arabic in the latter. This distinction will serve to make it clear in the text which classification is at any point being used. At the five-class level, to which the common descriptive terms are applied, the class allocation of individuals shows almost 90 per cent continuity between the two systems.
- The implicit provisions of employment contracts can be defined as informal but shared understandings between employers and employees, usually concerning how each will respond to contingencies, that are backed not by law but rather by the parties' reputations.
- Although in earlier work the term 'service class' (a direct translation, attributable to Ralf Dahrendorf, of the German Dienstklasse) has been generally used, 'salariat' may be preferable in order to avoid any confusion with the service sector or workers in services.
- As can be seen from Figure 1, the class of intermediate white-collar workers (III or 3) is located, somewhat speculatively, in the lower-right quadrant, where work monitoring problems dominate over asset specificity problems, while the class of intermediate blue-collar occupations (V or 5) is located in the upper-left quadrant where the reverse applies. The former situation could be expected to lead to a form of contract in which some departure from the exchange of discrete amounts of money and effort, characteristic of the basic labour contract, would be more apparent than features directed towards furthering a long-term relationship, while the latter situation would be expected to lead to a still fairly specific money-for-effort bargain but combined with understandings, if only implicit, about the desirability of continuity (see further Goldthorpe, 2000: 221-3).
- The lower risks of unemployment of intermediate white-collar employees as compared with intermediate blue-collar employees might appear to go contrary to the expectation indicated in the previous note that the latter would be the more likely to have contracts in which understandings on continuity of employment would figure. However, from analyses undertaken by Gallie et al. in the study previously referred to, which did take in Classes III and V but which were not published, different results emerged (for sight of which we are indebted to Mark Tomlinson). Although the relative risks of becoming unemployed for members of these classes fluctuated a good deal over the period covered while always falling in-between those for the working class and the salariat the risks for Class III were on the whole higher. Further investigation of this issue is required.
- Data from the British Labour Force survey collected in the course of research aimed at the validation of NS-SEC are revealing in this regard. The proportion of individuals working to one month's notice or more falls steadily across the employee classes as follows: Class 1, 89%; Class 2, 78%; Class 3, 69%; Class 5, 38%; Class 6, 29% and Class 7, 17% (Rose and O'Reilly, 1997).
- For example, level of qualification may be regarded as affecting the risk of unemployment largely via its influence on the type of employment, and thus the class

positions, to which individuals gain access; and structural factors such as industry or organisational size would appear chiefly of significance in determining the incidence of unemployment within classes. A further set of variables that would need to be taken into account in a comparative perspective would be those relating to nationally-specific institutional arrangements as these bear on labour market regulation, education and training, social security provision etc. It is, however, a mistake to see it as a weakness of class theory – as apparently does Esping-Andersen (1993: 8) – that it does not itself attempt to incorporate such institutional influences but remains 'nested in an institutionally "naked" world'. Class theory, at least as here understood, is concerned with the basic logic of the differentiation of employment contracts; and in order then to be able to investigate empirically how far – and with what consequences – this logic may be modified by institutional variation, it is essential that the latter should be kept conceptually separate. From this point of view, highly relevant British-Italian and British-German studies are Bernadi et al. (2000) and McGinnity and Helmert (2002).

- Some problems of sampling and employer non-compliance in the NES have been noted (Micklewright and Trinder, 1981; Atkinson, Micklewright and Stern, 1988; Elias and Gregory, 1994) but would not seem serious at least in regard to the use of the data that is here made.
- 9 The only other variable element included in total gross earnings would appear to be that of 'tips and gratuities', in so far as these are shown in employers' pay records.
- 10 It should be noted that the results here reported from the NES and likewise those reported in the next section of the paper do of course refer only to employees and thus do not cover the small numbers of employers and self-employed professionals who, as indicated in Table 1, are also included in Classes 1 and 2.
- These findings for women are available on request. It should be added that although NES does collect information on part-time employees, male and female, that could in principle be analysed, it is in the case of part-time, and lower-paid part-time, workers especially that doubts about the representativeness of NES data appear most serious (Elias and Gregory, 1994).
- Michael White has suggested (personal communication) that that the tendency for PBR to be increasingly used for professionals and managers, though only in a very marginal way, can best be seen a 'token' response by many organisations to passing fashion among management consultants and business gurus. It is further important to note here that some changes that are claimed in the employment relations of professional and managerial staff (cf. Savage, 2000: 140-1), such as a shift from more or less automatic progress along incremental salary scales to regular individual appraisals as a basis for salary setting, together with 'fast-tracking' and widening pay differentials between grades, are not at all incompatible with the logic of service relationship the key idea in which is that effective service to the employing organisation should be rewarded by career advancement. It is in fact likely that there has always been a good deal of variation among employing organisations in the ways in which such advancement, whether via salary increments or promotion, is determined.
- See further Goldthorpe (2000b: ch. 10). The issues that arise here have been extensively discussed in the literature of the 'new' institutional and managerial economics under the rubric of 'principal-agent' problems (see e.g. Eggertsson, 1990;

Holmström and Milgrom, 1991; Milgrom and Roberts, 1992; and Gibbons, 1997). Had those sociologists claiming the erosion of the service relationship attended more to this literature, they might have better appreciated that with professional and managerial employees not only will PBR systems often be difficult to operate but may in fact have unintended adverse consequences. In particular, if the limited number of performance indicators that such systems can comprise does not cover the complete range of work tasks and roles that employees are expected to fulfil, then not just the level of their effort but also its distribution will be affected – and in ways that need not be optimal from the employer's point of view. Employers may 'get what they pay for' in an all-too-literal sense.

- Data are also available on gross hourly earnings. For our present purposes, we have opted for weekly earnings since hours of work reported are contractual rather than actual hours, and the fact that for professionals and managers the latter may much exceed the former might be thought to lead to some exaggeration of class differences. However, we have in fact repeated the analyses reported in the text using hourly earnings, and no major differences in the pattern of results emerge.
- We hope to move on to this kind of analysis in future work. Data linkage procedures do in principle allow the earnings and employment histories of individuals covered by the NES to be constructed. Preliminary investigations by Elias and Gregory (1994) point to various technical problems but also suggest, interestingly, that the main features of cross-sectional analyses tend in fact to be replicated by longitudinal analyses.
- It should be recognised that the very small class differences in earnings in the youngest age-groups will be subject to selection effects in regard to education and that selection effects in relation to early retirement may also play a part where curves turn down for older age-groups. The latter tendency could also illustrate birth cohort effects: i.e. where members of a particular class and cohort 'carry with them' a certain historic level of earnings that, in a context of, say, generally rising earnings, individuals in similar class positions in following cohorts will exceed.
- In the case of the curve for Class 3, which in 1999 declines rather more sharply from around age 40 than in 1975, one may suspect the rather strong operation of selection effects associated with worklife mobility. For men, the intermediate white-collar positions comprised by this class are known to have relatively low 'holding power' (Erikson and Goldthorpe, 1992: ch. 6), often in fact serving as stepping-stones for upward mobility into managerial positions in Classes 1 and 2. In turn, men who are found in Class 3 in later life would seem likely to be holding relatively inferior positions in terms of pay (perhaps ones to which they were promoted after spending most of their lives in manual wage-earning jobs) and/or to have themselves rather low earning potential.
- In contrast to the situation for men as described in the previous note, in the case of women Class 3 positions appear to have quite high 'holding-power'.
- For all the graphs presented we have calculated 95% confidence intervals which turn out to be generally very narrow. We have also examined in the case of the salariat whether differences in age-wage curves show up as between professional and managerial groupings, since some authors (e.g. Savage et al., 1992) have argued that professionals and managers typically dispose of different kinds of 'assets' in labour markets and should therefore be regarded as holding different class positions. It

- emerges that with Classes I and 2 alike the curves for the two groupings follow each other very closely although while in 1975 those for professionals tend at most ages to be slightly above those for managers, the reverse holds in 1999. (All results referred to in this note are available from the authors on request.)
- For example, it turns out that for men in Class 1 these ratios are little changed over the period covered: the earnings of men age 50-55 were 148 per cent of those of men aged 23-28 in 1975 and 145 per cent in 1999. For men in Class 2 the ratio actually increases over time, consistently with the suggestion made in the text concerning the consolidation of the salariat, from 126 per cent in 1975 to 139 per cent in 1999. It is true that an increase does also occur with men in Classes 6+7, from 102 per cent in 1975 to 116 per cent in 1999. But what is being picked up here as also in Savage's measure is the tendency apparent from Figures 3 and 4, and commented on in the text, for the earnings of manual wage workers to rise for slightly longer in 1999 than in 1975: i.e. up to around 30+ rather than 25+, which, though of some interest in itself, does not of course provide any evidence of the erosion of the service relationship. The results for women are similarly in line with the main conclusions drawn in the text from the curves of Figures 5 and 6.
- Tak Wing Chan provided generous assistance in extracting the data on which Figure 7 is based.
- In the light of existing research, Meager and Bates (2001) suggest that the extent of under-reporting lies between a third and a sixth. It should also be noted that there is general agreement that the earnings of the self-employed show greater dispersion than those of employees (see e.g. Meager, Court and Moralee, 1996), although this dispersion will be heightened if, as in the work of Meager and his colleagues, self-employed professionals are considered together with the small employers and self-employed workers who constitute Class IV.

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