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# Social Mobility in the 1970s and 1980s: A Study of Men and Women in England and Sweden

# JAN O. JONSSON AND COLIN MILLS

ABSTRACT Theories about change in social mobility regimes have been difficult to test because of a lack of genuinely comparable data for multiple time-points. This problem is overcome for two European nations, Sweden and England, by making use of eleven different data-sets with closely matched social class-codings, covering the period between the late 1960s and the late 1980s. Data on both men and women are used to investigate whether these two societies have become more open over the decades considered. A 'generic' hybrid linear-by-linear/topological log-linear model is introduced. It corroborates earlier findings that fluidity is higher in Sweden. When change in mobility parameters is tested for, some evidence of increased fluidity is detected, particularly for Swedish women in the late 1970s. There are also signs of increased fluidity characterizing the mobility regime of English men in the mid-1980s.

#### INTRODUCTION

Relative rates of social class mobility are one of the most important indicators of social inequalities. Variation in such rates, or the degree of social fluidity as it is sometimes known, may be thought of as a summary indicator of the consequences of social class differences in both access to, and motivation to use, the scarce resources by means of which parents influence the future life chances of their offspring. These resources include differences in wealth, income, 'social and cultural capital', and various other dimensions of the standard of living.

One of the uses of indices of social fluidity is for testing hypotheses about changes in inequality of opportunity. Ideally this requires data from several time-points together with comparable codings of class of origin and destination. Though there are some studies which employ this design (Featherman and Hauser, 1978; Hope, 1981; Macdonald and Ridge, 1988) conclusions about changes in social

fluidity have most typically been inferred from analyses of quasi-cohorts from a single survey or from studies of two or more surveys of doubtful comparability. In this article we use data-sets that allow us to partly, though not entirely, overcome these problems and to address the following questions:

- 1. Do recent data on social fluidity in England and Sweden support the hypothesis of increasing openness in post-industrial society? Or is the hypothesis that fluidity is more or less constant over time and across nations more consonant with the evidence?
- 2. Have general social and economic developments in Mrs Thatcher's England and in the more equality-oriented Sweden been reflected in their mobility regimes?

### **HYPOTHESES**

Theories of 'industrialism' commonly include an assumption that equality of opportunity increases over time. More 'universalistic' value orientations are supposed to replace 'particularistic' orientations, thereby promoting the chances of occupational promotion for those from disadvantaged social backgrounds (Parsons, 1951; Blau and Duncan, 1967). Other factors, such as expansion of educational provision, increased geographical mobility, and weakened ties to kin are also said to favour increased social fluidity (cf. Treiman, 1970). Some writers have argued that such tendencies will accelerate when societies proceed into the 'post-industrial' era (Bell, 1973; Featherman and Hauser, 1978).

Set against the (liberal) assumption of increasing fluidity is a hypothesis of 'no change' in social fluidity, complemented by one of 'no difference between nations' (Featherman et al., 1975). In this view, rates of social fluidity are basically similar in nations with a nuclear family structure and market economies. Although it is not spelled out why this should be the case, the hypothesis has withstood testing in a number of nations (Erikson and Goldthorpe, 1992a; but see Ganzeboom et al., 1991). With regard to change over time, Goldthorpe concludes that in England 'the net association between the class position of individuals in the present-day population and their class origins remains essentially the same in its extent and pattern as that which existed in the inter-war period and even, it seems likely, as that which would have been found at the start of the century' (Goldthorpe 1980/1987: 327). The conventional wisdom of trendless fluctuation around a set of essentially persistent class barriers to mobility in England is reinforced by results pertaining to a more recent time-period, namely 1972-83 (Goldthorpe and Payne, 1986).

Although the hypothesis of a general increase in social fluidity has so far received little support from empirical analyses of class mobility, it may still be that fluidity is not held constant solely by the family and market structure. Furthermore it may be that in so far as there is variation in the rate of fluidity, it may be explained by macro-social, political and economic factors. For instance, governments may pursue policies—such as educational reforms—leading to more equal opportunities (cf. Parkin, 1971). In fact, this is a conclusion reached by Erikson and Goldthorpe (1992a) in their comparative analyses

of social fluidity in fifteen industrialized nations. Especially interesting is the fact that their results suggest that Sweden is a deviant case among the Western nations studied—social fluidity is somewhat higher than in other nations and seems to have increased over time (the latter conclusion is supported by other studies as well; see Erikson, 1983; Jonsson, 1993a). Perhaps it is the case that Sweden's long-standing social democratic government has fostered the equalization in living conditions that is often assumed to be necessary for an equalization in opportunities (cf. Tawney, 1931/1964).

Our concern in this paper is to study social fluidity over the period 1968–87 in Sweden and 1972–87 in England and Wales.<sup>2</sup> The existing evidence, summarized above, should lead us to expect the following results:

- 1. a slight increase in social fluidity in Sweden as older cohorts, with a relatively low level of fluidity, are 'replaced' by younger ones.
- 2. either constancy or trendless fluctuation in England.

However, we should also consider whether any exogenously determined period effects may have influenced rates of fluidity in the 1970s and 1980s.

The historical context is in some respects rather similar in both nations. Neither nation experienced marked economic growth during the period taken as a whole, especially in comparison with the preceding decades.<sup>3</sup> Both nations took further steps towards the 'service economy', or 'post-industrial society' with an increasing share of the employed in service occupations and an expansion in the nonmanual classes at the expense of unskilled labour.4 Nevertheless, progress along these lines was very different in three respects. First, in Sweden, the service expansion took place primarily in the public sector, where one could reasonably argue that universalistic criteria for hiring and promotion were most pronounced. Second, female labour-market participation in Sweden increased to a much higher level than in Britain. Third, unemployment was kept low (1-3 per cent) in Sweden. In stark contrast, Britain witnessed a dramatic increase in unemployment (up to at least 10 per cent)—

perhaps the single most important social change in the 1970s and 1980s.

There were also rather obvious differences in political climate. In Sweden the trade unions and the Social Democratic Party managed to maintain a strong position.<sup>5</sup> In England the fortunes of the trade unions declined and since 1979 the Labour Party has not only been out of government but for at least some of the time internally divided. It is possible that the divergent political situation in England and Sweden has been reflected in changes in social class inequality in living conditions. In Sweden such inequality decreased substantially between 1968 and 1981 (Erikson and Åberg, 1987), and remained more or less the same during the 1980s.<sup>6</sup> In England, at least some of the evidence points in the opposite direction (cf. Halsey. 1987). For example, the distribution of income in England changed little from 1949 to 1977, but income inequality increased from 1979 to 1987 (Atkinson, 1991).

What might it be plausible to expect on the basis of these observations? If one believes that economic growth is necessary for creating mobility opportunities, then we may not expect to find much increase in fluidity. If one believes that inequality of opportunity covaries with inequality of condition, then Sweden should show a comparatively high level of fluidity and an increased divergence from the English pattern during the 1980s. The same sort of predictions could be made if we think that left-wing governments and strong working-class organizations either directly or indirectly promote fluidity and that conservative governments pursue policies that tend to favour class reproduction.

These then are the motivating ideas of the paper. However before we describe our data and discuss variable definitions there is one issue we should deal with; the inclusion of women in the analysis. Throughout the paper we look separately at the mobility regimes of both sexes. Men are compared with men over time and women with women. Moreover, we examine only one possible way of operationalizing the notion of women's class position; the women's own occupational title and employment-status combination. We feel justified in doing this in

so far as all of the mechanisms of change that we have outlined can be seen as impacting equally on both sexes. Moreover, we are most likely to see evidence of their impact by looking at labour-market outcomes unconfounded by marriage-market outcomes. We do not see this in itself as predisposing us towards any particular view as to the best way of measuring women's class position.

However, we have some reasons for being cautious in our interpretations. First, female labour-market participation is at much higher levels in Sweden than in England and consequently the English women will be a more highly selected group than their Swedish counterparts. Secondly, the dramatic flow of women into the Swedish labour market in the 1960s and 1970s may in itself have had a noticeable effect on the mobility regime of both sexes.

# DATA, VARIABLES, AND STRATEGY OF ANALYSIS

The Swedish data are taken from the three Level of Living Surveys (Levnadsnivåundersökningarna; LNU) conducted in 1968, 1974, and 1981 (Erikson and Åberg, 1987), and from the 1976, 1979, 1986, and 1987 surveys on living conditions (Undersökning om levnadsförhållanden; ULF) conducted yearly since 1974 by Statistics Sweden (Vogel et al., 1988; the sample used here is described in Jonsson, 1993b). The 1986 and 1987 surveys are merged and will be referred to as the '1987' survey. The classification of social classes in the LNU and ULF data-sets are similar, but not fully comparable with each other. LNU is coded into the 'EGP' class schema, presented in Table 1, whereas ULF is coded into the similar SEI schema (Statistics Sweden, 1982).7 In the presentation below we will always keep these two data-sources separate.

The English data are from the 1972 Oxford Social Mobility Survey (OMS) (which contains only men) and the 1974 October, 1979, 1983, and 1987 British Election Surveys (which contain men and women). The occupational and employment status data from the OMS and BES defining class background and class 'destination' have been recoded to the 'EGP class schema'.8

TABLE 1	The class schema
I/II	The Service Class: higher and lower-grade professionals, administrators, and officials; managers in industrial establishments; large proprietors; supervisors of non-manual employees
III	Routine Non-manual Employees in administration and commerce; sales personnel; lower-grade service workers
IV <i>ab</i>	Petite Bourgeoisie: employers with less than 25/20 employees (England/Sweden respectively); non-professional self-employed
IV <i>cd</i>	Farmers, smallholders, and self-employed fishermen
V/VI	Skilled Working Class: lower-grade technicians; supervisors of manual workers
VII	Unskilled Working Class: semi- and unskilled manual workers, farm labourers.

The population of interest in both nations consists of men and women aged 25-64 in the employment status classification; class origin refers to father's class or mother's where father's was not available.

The empirical analysis will proceed in three steps:

- 1. we carry out a global test of changes in the overall association between origin and destination, using a model of uniform difference.
- 2. We will present a log-linear model of the mobility process, which combines one linear-by-linear measure of resources in the family of origin/desirability of the destination classes, and four levels matrices representing reproduction, inheritance, and affinity mechanisms. On the basis of this model we compare the mobility regimes in England and Sweden.
- 3. The generic pattern of the mobility process is our point of departure for the third step in which we study change over time in the mobility regimes in a cross-national perspective.

OVERALL CHANGE IN THE ASSOCIATION BETWEEN CLASS ORIGIN AND CLASS DESTINATION

We begin by testing the overall change in the association between class origin and class destination. This we do by fitting the log-linear model of uniform difference, suggested by Erikson and Goldthorpe (1992a; 86–95). First, the model

$$\operatorname{Ln}(F_{ijk}) = \theta + \lambda^{P}_{i} + \lambda^{O}_{j} + \lambda^{PO}_{ij} + \lambda^{PO}_{ij} + \lambda^{PD}_{ik} + \lambda^{OD}_{jk}$$

$$\tag{1}$$

is fitted to the data. In this model,  $F_{ijk}$  is the expected frequency in cell ijk;  $\theta$  is the grand mean;  $\lambda^P$  represents period (survey year);  $\lambda^O$ denotes class of origin; and  $\lambda^D$  destination class (both having six classes). This model assumes that origin and destination distributions change over time and likewise that there is an association between origin and destination. It also states that this association is the same throughout the years which we consider (the three-way interaction between period, origin, and destination—  $\lambda^{POD}$ —is left out): This model Erikson and Goldthorpe refer to as the Constant Social Fluidity (CSF) model. The last interaction term in the CSF model ( $\lambda^{OD}$ ) reflects the general pattern of the association between origin and destination, i.e. the pattern that is common to our points in time. Since we are interested in how this pattern differs between the different years, we can fit the model

$$\operatorname{Ln}(F_{ijk}) = \theta + \lambda^{P}_{i} + \lambda^{O}_{j} + \lambda^{PO}_{ij} + \lambda^{PO}_{ik} + \beta_{i}X_{jk}$$

$$(2)$$

where  $X_{jk}$  represents the general pattern of association and  $\beta_i$  the relative strength of this association in 1981 as compared to 1968. Taking the  $\beta$  for the first time-period as a point of departure (setting it to zero) increasing fluidity would show up as negative  $\beta$  estimates

TABLE 2 The result of fitting the uniform difference model to data for men and women in Sweden and England. The upper panel shows estimates of change parameters, and the lower panel shows model fit statistics

Change	e paramet	ers	Sw	eden				Eng	gland		
		]	Men	W	omen			Men	W	omen '	
LNU	1968 1974 1981 1976 1979	0 -0.09 -0.08 0 0.05	(0.08) (0.08) (0.09)	0 -0.02 -0.25	(0.13) (0.12)	1972 1974 1979 1983 1987	0 0.01 0.14 - 0.05 - 0.21	(0.09) (0.10) (0.07) (0.08)		(0.24) (0.21) (0.21)	
1987 Model fit		-0.04	(0.08) Swa	-0.20	(0.10)		England				
		I	Men	W	omen		1	Men	W	omen	
LNU	G <sup>2</sup> Df DI Prob Δ(2)	31.7 48 2.2 0.96 1.41		2 2 0	34.3 48 2.1 0.93 5.96	G <sup>2</sup> Df DI Prob Δ(4/3)	9 1 0	30.2 96 .7 0.88 0.14	50.9 72 4.4 0.97 3.28		
ULF	$\begin{array}{ccc} N & 5432 \\ G^2 & 38.2 \\ Df & 48 \\ DI & 2.3 \\ Prob & 0.84 \\ \Delta(2) & 1.22 \\ N & 6941 \\ \end{array}$		3553 29.7 48 2.3 0.98 5.12		N	10381		3.28 1895			

Notes:  $G^2$  = Test statistic

Df = Degrees of freedom

DI = Proportion misclassified by the model

Prob. = Probability level

 $\Delta(n)$  = Improvement in fit for (n) df when adding change parameters.

for later time-periods. This would mean that all expected odds ratios have moved uniformly closer to 1 (though not necessarily by the same amount).

The results are shown in Table 2. In the lower panel, the fit for each of the four CSF models is shown, and we can see that they all fit very well. In the upper panel, the  $\beta$  estimates are displayed.

In general, there is little difference in the period parameters representing the overall association between origin and destination. Studying the improvement in fit generated by the inclusion of the change parameters—shown in the lower panel—tells the same story. This

can be seen as preliminary support for the 'no change' hypothesis. For Swedish men, there is no significant change over time, neither in the period 1968–81, nor 1976–87. The same is true for English women; for them, we find quite strong negative parameter estimates for 1979, 1983, and 1987, but these are poorly determined.

For Swedish women, however, we find increasing fluidity. It appears between 1974 and 1981 in the LNU data-set, and between 1976 and 1979 in the ULF data-set. Thus, it seems as if women in Sweden experienced an equalization in occupational opportunities in the late 1970s. The association between origin and destination

also declined for English men, in their case between 1983 and 1987.

While the uniform-change model gives us a readily comprehensible overview of changes in the mobility regime, we should note that it may not reveal changes towards increased fluidity in one region of the origin-by-destination table if there is an off setting change in another region. For this reason in the next section we introduce a model that provides a more detailed account of changes in social fluidity. In addition this model is more suited to the study of international differences.

# A MODEL OF SOCIAL REPRODUCTION—THE GENERIC PATTERN

Much effort has been devoted to modelling the pattern of association between class origin and destination. The basic idea is to parameterize the association between the rows and columns of a mobility matrix in terms of a limited number of theoretically derived characteristics of the social structure. The most important contributors have used 'topological' models (Hauser, 1978; Hout, 1983; Erikson and Goldthorpe, 1987), models based on scaled association parameters (Goodman, 1979; Hauser, 1984), or a combination of both (e.g. Hout, 1989).

The most intuitively reasonable dimension of social fluidity is clearly variation due to hierarchy, i.e. some sort of vertical stratification. Students of class mobility typically conceptualize hierarchy by scaling social classes according to prestige, socio-economic status, or the like (Hout, 1984; Yamaguchi, 1987). It is supposed that this dimension captures the amount of resources in the family of origin, and that it indicates the degree of attraction of the class of destination (Goldthorpe, 1980/1987). A relevant and available measure of resources and attractiveness is income. Hence, we have chosen to indicate hierarchy by the mean income of each social class. 10 This was converted to an index of relative income by fixing the score for the service class at 100 and expressing all other class incomes as a proportion of this. The values are displayed in Table 3.11

The second most common dimension of social fluidity is one which is usually referred to as

inheritance. In the mobility table this is identified with the top-left to bottom-right main diagonal and describes the high propensity for people to end up in their class of origin. This is sometimes also called "immobility", but neither of these expressions is really adequate. We prefer to call the general effect reproduction, thus indicating the process behind it.

Inheritance we think is a more appropriate expression for the effects specific to farmers and the petite bourgeoisie. In our model, we use three levels of reproduction or inheritance. RPR—the general reproduction effect—fits a single term to all of the cells on the main diagonal. INH1 gives an additional level of 'inheritance' to all class stable IVab and IVcd pairs. This represents a hypothesized special tendency for the self-employed to pass on their businesses and farms to their offspring. INH2 gives a further level of 'inheritance' to IVcd, recognizing a special 'tie to the land' amongst the children of farmers. (Note that each inheritance effect is incremental.) The RPR, INH1, and INH2 terms are shown in Table 3.

A third dimension of social reproduction is the notion of barriers to fluidity. We fit one term that represents the manual-non-manual (or manual-mental/intellectual) division of labour. This effect (MAN in Table 3) is supposed to work over and above the hierarchical effect and capture socio-cultural as well as economic barriers. The term groups together the traditional white-collar classes—I/II and III—and the classes for which manual labour is typical. namely farmers (IVcd) and workers (VI/VII). It is between these two groups that we expect the barrier to exist, whereas the urban petite bourgeoisie (IVab) are 'left out' because their work contains elements of both 'intellectual' and 'manual' labour.

A fourth dimension of the association between origin and destination is affinities and disaffinities between particular pairs of origin-destination classes. These dimensions often seem ad hoc, and one might come up with numerous more or less well-grounded arguments for assuming relatively high or low associations between particular pairs of classes. Thus, we think affinity parameters should be a last resort, unless there are unusually strong theoretical

Table 3 The class reproduction model: Values of Hierarchy (HI); Definition of Reproduction (RPR), Inheritance (INHI and INH2), Manual-non-manual Barrier (MAN), and Affinity (AFF)

						Hierarch					у (ні)							
					Sweden			Sweden			England							
						(origin)			(destination)			(origin and destination)					1)	
I/II	Service class					100.0			100.0				100.0	)				
III	N	on-m	anual	routin	e	66.5	5			66	.5			62.0	)			
IVab	Pe	etite	bourge	oisie		62.5	5			62	.5			79.0	)			
IV <i>cd</i>	Fa	irme	rs			30.7	7			42	.5			69.0	)			
V/VI	Sk	illed	worke	ers		64.5	5			64	.5			62.0	)			
VII	Unskilled workers				55.0	)			55	.0			53.0	)				
		R	Reprodu	uction	(RPR)			Inhe	eritano	e 1 (1	NH1)			Inh	erita	nce 2 (1	NH2)	
Class	I/II	III	IVab	IV <i>cd</i>	V/VI	VII	I/II	III	IVab	IVca	V/VI	VII	I/II	III	ΙV	ab IVca	l V/VI	VII
destinatio	n																	
Class orig	gin																	
I/II	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
III	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
IV <i>ab</i>	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1
IV <i>cd</i>	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	2	1	1
V/VI	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
VII	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
		Ma	n–non-	manua	al (MAN	1)			Affini	ty (Al	FF)							
Class	I/II	III	IV <i>ab</i>	IV <i>cd</i>	V/VI	VII	I/II	III	IVab	IVca	V/VI	VII						
destinatio	n																	
Class orig	in																	
I/II	2	2	1	1	1	1	1	1	1	1	1	1						
III	2	2	1	1	1	1	1	1	1	1	1	1						
IV <i>ab</i>	1	1	1	1	1	1	1	1	1	1	1	1						
IV <i>cd</i>	1	1	1	2	2	2	1	1	1	1	1	2						
V/VI	1	1	1	2	2	2	1	1	1	1	1	1						
VII	1	1	1	2	2	2	1	1	1	1	1	1						

Note: The hierarchy scales have been set to service class = 100.

arguments for incorporating them into the model. In order to make our model fit the data we found it necessary to include one such effect (AFF in Table 3), identifying a special affinity between farm background and unskilled manual destinations.<sup>12</sup> This term was required principally to get an acceptable fit to the Swedish LNU and the English OMS data.<sup>13</sup>

Our resulting 'hybrid' model—containing one linear-by-linear term for hierarchy and five additional 'levels' parameters representing reproduction/inheritance, barriers, and affinity—uses only 6 degrees of freedom for the 36-cell tables. The next step is to fit this parsimonious model to our data. First, we fit the model to each survey year, and within years, for men and women separately.

In short, the model performs quite well considering the rather large sample sizes involved. With the exception of the 1981 Swedish table, the fit of the model to the men's data is acceptable.14 Inspection of the standardized cell residuals reveals no consistent pattern across the tables that would suggest we have neglected some systematic mobility or immobility propensity. Thus improvements in fit could only come from fitting ad-hoc survey-specific terms with no obvious theoretical derivation. For women, the fit to the English data is very good. 15 However, this is less true for the Swedish data. 16 In this case, inspection of the residuals reveals some patterns that are common to three or more surveys. The model tends to underestimate the association between service class

and farm positions. It also underestimates the propensity of Swedish women to move from skilled working-class origins to clerical positions, while it overestimates their likelihood of moving from unskilled working-class origins to service-class positions. The first two and the last residual appear in cells which contain very few cases, and all in all we do not think the relevant parameters will be too much affected by the lack of overall fit.

In summary, the model has an acceptable fit to the men's data in both nations, while it performs less well in Sweden for women. However, in the latter case the fit is not so poor that we are tempted to add *ad-hoc* affinity terms, judging that in a comparative inquiry we should try to fit similar models in both nations and to both sexes.

Having constructed a model of the generic pattern of social fluidity, we can obtain the most robust estimates of its parameters by pooling each nation's data separately for men and women. This we do by fitting the model

$$\begin{split} \operatorname{Ln}(F_{ijk}) &= \theta + \lambda^{P}_{i} + \lambda^{O}_{j} + \lambda^{D}_{k} + \lambda^{PO}_{ij} + \lambda^{PD}_{ik} + \\ \lambda^{\operatorname{HI}} &+ \lambda^{\operatorname{RPR}} + \lambda^{\operatorname{INH1}} + \lambda^{\operatorname{INH2}} + \lambda^{\operatorname{MAN}} + \lambda^{\operatorname{AFF}} \end{split}$$

(3)

where the O, E, and P parameters are as described

above, and the HI, RPR, INH1, INH2, AFF, and MAN parameters represent the  $\lambda^{OD}_{jk}$  effect in Model 1.

This model—which assumes no change over time in social fluidity—is fitted separately for men and women in each nation (keeping the Swedish LNU and ULF surveys apart). In Table 4, the results are shown.

The fit of the model is, as indicated above, reasonably good, although it is only for English women that the model fits according to conventional standards. We are unlikely, however, to find an easy way of improving the fit to the other tables. Some of the lack of fit is, of course, produced by changes over time in the pattern of fluidity, to which we will return in the next section.

We now turn our attention to the substantive implications of the parameter values in Table 4. First, we can note that all but one of the parameters are significant for men, and all but five for women. Second, there are some differences between men and women, but overall the association between origin and destination is quite similar. The most consistent sex-difference concerns the inheritance terms—it seems as if there is still a predominantly patrilineal transmission of land amongst the rural petite bourgeoisie (in both nations) and also of business or capital amongst the urban section of this class (in Sweden).

Table 4 The generic pattern of social fluidity for men and women in Sweden and England according to the Reproduction Model. The upper panel shows parameter estimates (standard errors in brackets) and the lower model fit

INH2		Women										
	Swede	n LNU	Swede	n ULF	Eng	land	Swede	n LNU	Swede	n ULF	Eng	gland
ні	0.44	(0.06)	0.33	(0.05)	0.49	(0.05)	0.32	(0.07)	0.22	(0.05)	0.65	(0.10)
RPR	0.27	(0.05)	0.21	(0.04)	0.23	(0.03)	0.30	(0.07)	0.26	(0.05)	0.00	(0.09)
INHI	0.72	(0.13)	0.74	(0.12)	1.17	(0.09)	0.36	(0.25)	0.32	(0.18)	1.06	(0.35)
INH2	1.16	(0.20)	1.84	(0.21)	3.09	(0.20)	0.92	(0.39)	1.12	(0.26)	2.16	(0.96)
MAN	-0.43	(0.06)	-0.35	(0.04)	-0.57	(0.04)	-0.41	(0.06)	-0.41	(0.05)	-0.60	(0.08)
AFF	0.34	(0.08)	0.07	(0.08)	0.47	(0.14)	0.46	(0.10)	0.16	(0.09)		(0.30)
$G^2$	106		97		178		138		171		101	
Df.	(	69	69		119		69		69		94	
DI	4.5		4.4		3.4		6.8		6.3		6.3	
Prob.	0.00		0.01		0.00		0.00		0.00		0.29	
N	5432		69	941	10	381	3553		5776		1895	

Third, there are some differences between nations. The parameters are, with two exceptions, stronger for England. Both the hierarchical dimension and the manual-non-manual barrier seem to be more important there than in Sweden. <sup>17</sup> The major difference between the nations, however, is that the two inheritance terms are substantially higher in England. <sup>18</sup> Thus much of the inter-nation difference is due, *ceteris paribus*, to stronger associations between *petit bourgeois* origins and destinations. All in all, the results support our hypothesis, and the extant view, that social fluidity is somewhat higher in Sweden.

# CHANGE IN SOCIAL REPRODUCTION AND INHERITANCE

We are now in a position to turn again to the question of whether the mobility regime in Sweden or England changed during the 1970s

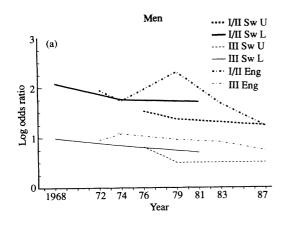
and 1980s. Next, we test the interactions between survey year and the HI, RPR, IN1, IN2, MAN, and AFF parameters, respectively. This we do by fitting the model

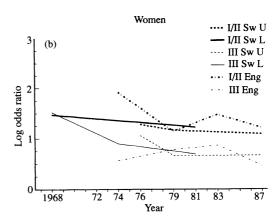
$$\operatorname{Ln}(F_{ijk}) = \theta + \lambda^{P}_{i} + \lambda^{O}_{j} + \lambda^{D}_{k} + \lambda^{PO}_{ij} + \lambda^{PD}_{ik} + \lambda^{P*HI} + \lambda^{P*RPR} + \lambda^{P*INH1} + \lambda^{P*INH2} + \lambda^{P*MAN} + \lambda^{P*AFF}$$
(4)

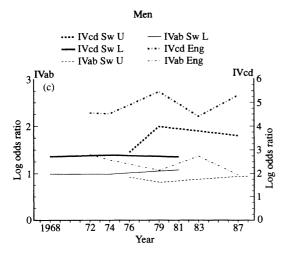
In general, the interaction between period and the mobility parameters does not improve the fit of our models. When we successively eliminate non-significant interactions, we arrive at a set of parsimonious models revealing a few noteworthy changes over time in social fluidity. These are shown in Table 5. All significant changes are towards increased social fluidity. In Sweden, it is the manual–non-manual border that has become easier to cross. The change

Table 5 Changes over time in social fluidity: Significant interaction effects between survey year (P) and different mobility parameters

		Swede	n	England					
		Men	Women	Men	Women				
Interaction		P*MAN	P*MAN	P*HI					
LNU									
$\Delta G^2$			4.4	18.3					
$\Delta Df$			2	4					
	1968		0	1972 0					
	1974		0.14 (0.14)	1974 - 0.15 (0.15)					
	1981		0.27 (0.13)	1979 0.25 (0.19)					
				1983 - 0.18 (0.12)					
				1987 -0.46 (0.12)					
Main effect			-0.58 (0.12)	0.55 (0.06)					
ULF									
$\Delta G^2$		4.4	6.8						
$\Delta Df$		2	2						
	1976	0	0						
	1979	0.09 (0.10)	0.22 (0.11)						
	1987	0.17 (0.08)	0.23 (0.09)						
Main effect		-0.46 (0.07)	-0.59 (0.08)						







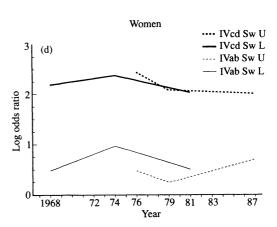
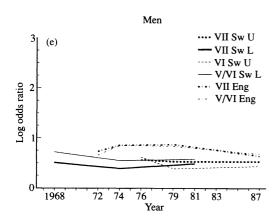
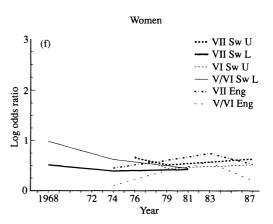
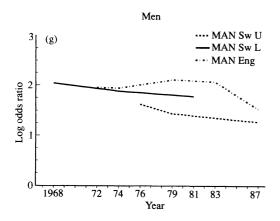
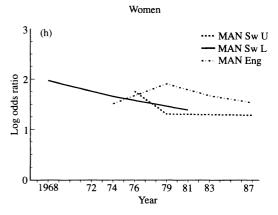


FIGURE 1 Changes in social reproduction in Sweden and England for classes I/II and III (graph 1a for men, 1b for women); IVab and IV cd (1c, 1d [Sweden only]); VI and VII (1e, 1f). Changes in the manual-non-manual split parameter (1g, 1h)









between 1983 and 1987 for English men pertains to the general hierarchy parameter.

The main part of our story is now told. We have modelled the fluidity process, found that the Swedish class structure is more open than the English, and detected some changes towards increased openness which we interpreted in terms of manual-non-manual barrier and hierarchy. Before we draw our conclusions and discuss the results, we should summarize the results in a readily comprehensible fashion. We do this by showing a number of graphs illustrating how the propensity of sons and daughters to end up in the same class as their parents has changed in the 1970s and 1980s.

Our strategy is this: first, we fit the generic model (eqn. 3) for each survey. Then, we use the fitted values returned as the basis for calculating log-odds ratios for a small number of relevant cells in the mobility table. We concentrate on the reproduction-cum-inheritance effects, because effects pertaining to the main diagonal constitute the bulk of the association between origin and destination.<sup>19</sup>

Reproduction in the service class is calculated as the odds of someone from a class origin I/II him/herself entering that class rather than any other class destination, divided by the corresponding odds for someone from any other class origin (we then calculate the natural logarithm of that odds ratio). This is then repeated for each of our six-class categories. Finally, we add one manual-non-manual split as a more general measure. As in the MAN parameter above, we let the white-collar classes 'compete' with farmers and the working classes. (The way the log-odds ratios are calculated is shown in the Appendix.)

The results of the operation just described are shown in a series of graphs (Figure 1a-1h). Each graph shows the change over time in the logodds ratios for English and Swedish men (left column) and women (right column). Starting with the top two graphs—Figure 1a (men) and 1b (women)—they show the association between service-class (I/II) origin and destination (upper curves), and the corresponding association for the class of non-manual routine workers (III) (lower curves). As expected, social reproduction in the service class is preponderant, particularly

for men—to preview our findings, it is stronger than for any other class but the farmers. As we would by now expect, the associations for men are stronger in England.

Is there any evidence of changes over time? Yes, there do indeed seem to be some changes that give the impression of decreasing reproduction among the white-collar classes. Beginning with English men from the service class (I-II), there is some tendency towards a decrease, though the outlying value in 1979 disturbs the picture somewhat. For Swedish men, we have to be a little bit cautious when interpreting the transition from the LNU data to the ULF data (broken lines). Since supervisors of manual workers are coded into classes II and III in the ULF data (instead of into the skilled working class as in the LNU and the English data), the level of reproduction in the ULF data-set is probably somewhat underestimated. This creates an optical illusion that there is a strong decrease, when in reality we see a decrease between 1968 and 1981, and then, another one between 1976 and 1987. Nevertheless, the curves suggest a weakening of reproduction in the Swedish service class. For the lower rung of the whitecollar bloc (Class III), both English and Swedish men seem to have experienced a slightly weakening association between origin and destination.

Turning to women in the service class, we note that the Swedish LNU and ULF curves match each other much better than for men; this is most likely because there are very few female supervisors. The results for the overlapping years are also reassuring, both with regard to the service class and the class of non-manual routine workers. Thus, there is considerable consistency for the period 1968 to 1981: reproduction declined among Swedish women from a white-collar background. During the 1980s, the same holds true for women from the service class, but not from the lower rung of the white-collar bloc. For English women, where the estimates are somewhat less reliable due to small sample sizes, we cannot detect any clear monotonic trends.

Graphs c and d show the reproduction, or inheritance, among the self-employed classes. We have excluded the curves for English women

because of the very small numbers involved. For men, we had to operate with two different scales because inheritance among farmers is extremely strong. Thus, the curves for class IVcd relate to the right y-axis, whereas the left one shows the log-odds for the petite bourgeoisie (even so, the curves for the farmers are the upper three).

Two things are immediately obvious. First, as already mentioned, inheritance is strongest for farmers. Second, for men inheritance is stronger in England than in Sweden, especially for the agricultural class. Although we are not able to make the corresponding comparison for women (i.e. for each survey year), we can conclude with some confidence from the results for the merged samples in Table 4 that the same situation prevails for them. We cannot trace in Figure 1c-d any changes that would lead us to conclude that inheritance among the self-employed either systematically increased or decreased.

In graphs e and f the changing reproduction of the skilled and unskilled sections of the working class is displayed. Again, we find slightly stronger associations between origin and destination for English as opposed to Swedish men, though there are only small differences between the two working classes within each nation. Interestingly, the absolute level of reproduction is relatively low for the working classes taken separately, especially when compared to the service class. At the same time as it is reasonable to analyse the skilled and unskilled working classes separately, they no doubt form a working-class bloc. Workers, whether or not in skilled occupations, are likely to have similar political interests, and in Sweden they are organized in the same trade unions. It is therefore also desirable to take into account the fact that this 'working class hemisphere' may contain quite extensive fluidity between the two sections. If so, the working class as a whole may have a high level of reproduction. To study this, we have conducted analyses in which we merge the two working classes.

The results of this exercise lead to the following interesting conclusions (the graphs are not shown): in England, the degree of reproduction is much higher for the merged working class than for each section taken separately;

in Sweden, there is little difference between the merged and distinct classes.<sup>20</sup> This indicates that there is considerable exchange between the skilled and unskilled English working class over generations, whereas in Sweden, working-class children stand higher relative chances of entering into other classes. The differences between England and Sweden in working-class reproduction is thus amplified. We should note, however, that even when referring to this higher level of working-class reproduction in England, it is weaker than service-class reproduction. Privilege, it seems, is more easily transmitted across generations than disadvantage is 'inherited' (cf. Heath, 1981, ch. 5); and this is especially true in Sweden.

Does working-class reproduction change over time? The main impression from graphs e and f is of no change, and the few changes that do appear, namely for Swedish women, disappear in the analysis of the merged working class.

Finally, in graphs g and h, we show the overall summary measure, the manual-non-manual split. Not surprisingly, given the results above, this barrier is more important in England than in Sweden, especially for men. With regard to changes over time, the pattern is straightforward for Sweden: for both men and women we find a decreasing association between origin and destination. This increase in social fluidity is by no means negligible. For England there are no trends. The barrier between the manual and non-manual classes—as we have defined it seems to have become more severe during the late 1970s, but we can note that there is a substantial drop between 1983 and 1987 for men, and a slow decrease for women between 1979 and 1987.

# CONCLUSIONS AND DISCUSSION

In this article, we have described the pattern of social fluidity in England and Sweden during the 1970s and 1980s, how it differs between the two nations; between men and women; and how it has changed over time.

Our main conclusions are:

1. Social fluidity is greater in Sweden than in England. This corroborates previous findings, and supports the notion of 'Swedish particularism' (cf. Erikson and Goldthorpe, 1992a; Ganzeboom et al., 1991). Our results must be considered unusually robust since they are based on a sequence of comparable surveys. Without exception for men, and generally for women, estimates of reproduction and inheritance parameters are higher in England than in Sweden, and the manual-non-manual barrier is more difficult to cross.

- 2. In general, social fluidity is higher for women than for men (using the 'individual' approach). This is also in line with previous results (on England, see Goldthorpe, 1980/1987, ch. 10; on Sweden, see Portocarero, 1987; Erikson and Pöntinen, 1985). More specifically, we find that hierarchy and inheritance effects are stronger for men. It must be noted that at the same time as women's mobility opportunities are slightly more equal than men's, the labourmarket opportunities of women are much poorer.
- 3. Our third set of conclusions concerns change over time. Social fluidity increased for Swedish women from the late 1960s to the early 1980s. Inspection of the outflow percentages adds substance to this finding. For example, while the propensity of women from serviceclass backgrounds to enter the service class themselves has fluctuated rather trendlessly around the 45 per cent level up until 1981, that of women from working-class backgrounds, particularly skilled manual backgrounds, doubled between 1968 and 1981 (10-20 per cent). At the same time the propensity of working-class daughters to enter clerical and unskilled manual occupations declined, while it remained about the same for women born into the service class.

In addition, reproduction among Swedish men born into the white-collar classes seems to have decreased somewhat between 1968 and 1987; using a more general measure, we also find that the barrier between the manual and the non-manual classes became easier to cross between generations. Since there are also some countervailing tendencies for Swedish men, we cannot conclude as unambiguously as for the women that social fluidity increased.

Apart from these findings, no reliable and noteworthy trends are apparent from our analyses. There is however one change of interest: that of increasing fluidity for English

men between 1983 and 1987. This change is statistically significant and of some magnitude. Inspection of the outflow percentages for the two years appears to tell an interesting story. First, outflows from service-class origin to other class destinations increased by about 10 percentage points between 1983 and 1987. The largest gaining destination was the *petite bourgeoisie*, but there was also an increased flow to the skilled working class. Turning to outflows from the working classes taken as a whole, there was little change in the proportion observed in the service class in 1987. However, this overall figure masks a decline in the percentage from the unskilled working class making this transition (27.1–23.3 per cent) and a slight increase in the chances of the skilled working class (29.5-32.5 per cent). The increase in the propensity to enter the petite bourgeoisie, observed for sons in the service class, is also observed for the working classes, though the percentage differences are not nearly as marked.

Clearly we should be cautious in interpreting the results from a single survey as evidence of a decisively altered mobility regime. Even though it is unlikely that the observed change between 1983 and 1987 is purely the result of sampling error, the direction in which it takes place does not lead us to herald a new age of openness. The reduction in the growth-rate of state-sector employment as well as of employment in the manufacturing sector in general may simply have forced some, from both service and working-class origins, who would have pursued a bureaucratic career, to become self-employed. Others have been less lucky. A larger proportion of men born into the service class have found themselves in the ranks of the working class, and those from the unskilled working class had more difficulty entering professional and managerial

How do the hypotheses presented at the outset of this paper fare, then, when confronted with our empirical results? Although the mobility regime can be characterized along the same dimensions in England and Sweden, important differences exist. And although the pattern of social reproduction prevailing in the late 1980s was generally similar to that of the early 1970s, changes—some quite substantial—did take place.

Thus, the general conclusion of 'no change' in social fluidity and of 'no difference' between nations is not an entirely satisfactory descriptions of our results.

That Sweden is a more socially fluid society than England is in line with the idea that equality of opportunity increases with equality in living conditions. Greater equality of income, full employment, and comprehensive welfare provision may promote mobility chances for children of manual and routine non-manual workers.<sup>21</sup> Education, as the main vehicle for class reproduction and mobility, is a strong candidate for explaining inter-nation differences in service-class reproduction and in the propensities to cross the manual-non-manual barrier. However, class differences in access to academic secondary and tertiary education are very similar in Sweden and England (Jonsson and Mills, 1993). But it may be the case that the reformed Swedish school system provides better occupational opportunities than the English, for those who choose a vocational rather than an academic branch of study.

At the same time as social fluidity varies across nations and over time, we found no support for monotonic trends, as would have been expected had increased openness been positively correlated with the growth of service occupations, or 'post-industrialism'. The changes in fluidity also seem to be difficult to relate to other macro-level variables such as economic growth, changes in inequality of condition or the like, especially since we expect such mechanisms to affect men and women alike. This deserves further investigation.<sup>22</sup>

Can we then ascribe our evidence of increased fluidity to politics? We would suggest as a working hypothesis that the increasing social fluidity of both Swedish women in the 1970s and English men in the mid-1980s might have been triggered off by political measures, albeit of a very different nature. For Swedish women from less advantaged backgrounds, labour-market and family policies, especially in the 1960s and 1970s, may have provided opportunities to compete on more equal terms with service-class women. Such policies have facilitated, for instance, the long-term connection to the labour-market that is essential for an occupational

career, a connection that may earlier have been more difficult to uphold for women from more modest circumstances.<sup>23</sup>

In England, the monetary and fiscal policies pursued in the 1980s by the radical right are often said to have promoted the growth of selfemployment (e.g. Hakim, 1988). At the same time employment opportunities, particularly in manufacturing and the public sector, became more restricted. It is possible that by creating an 'entrepreneurial atmosphere' Mrs Thatcher's Conservative administration may have opened up some paths to social mobility, and at the same time curtailed opportunities for some social groups. However, in at least some cases, increased social mobility means increased risk of social descent. Moreover, increased entry into the *petite bourgeoisie*, given the apparent frailty of self-employment as a way of earning a living, may not represent a decisive and permanent change in the class-mobility regime.<sup>24</sup>

To conclude, although the higher level of fluidity in Sweden may be consistent with Sweden's perhaps slightly more 'post-industrialist' character and somewhat higher overall standard of living, we would take our results as further support for the idea that strong working-class organizations and long-standing egalitarian policies are likely to promote, and are perhaps necessary for promoting, equality of opportunity. Two caveats are needed. First, such policies are not in any way sufficient for achieving an 'open' class structure; Sweden is well described by the same hierarchy, reproduction, and inheritance terms as England, though at a somewhat lower level (cf. Erikson and Goldthorpe, 1987). Second, right-wing politics might also promote changes in the mobility regime, although these changes are not ones that might readily be interpreted in terms of increased social equality.

### NOTES

 We are aware that there are both advantages and disadvantages to both approaches. Cohort comparisons within a single survey eliminate the possibility that change in the mobility regime will be confounded with changes in the survey instrument. However they confound life-cycle and cohort effects. The use of multiple surveys rather than cohorts is strong on the latter but weak on the former. The most pernicious effects of using multiple surveys are likely to be minimized where each survey in the series is carried out by the same survey organization and where there is continuity of purpose. Both of these conditions are met by the Swedish data used here and the latter is largely true of the English data.

- Hereafter we will refer to England and Wales as England.
- 3. Growth in GNP per capita was 2.8% in Sweden in the 1950s, 3.5% in the period 1960-73, 1.5% 1973-79, and 1.9% 1979-88. The corresponding figures for the UK were 2.7%, 2.6%, 1.6%, and 2.0% (Korpi 1990, based on calculations using OECD data).
- Employment in services as a percentage of civilian employment increased in Britain from 51.3% in 1968 to 66.6% in 1986, and in Sweden from 49.8% to 65.6% (OECD, 1988, Table 2.12).
- 5. From 1968 to 1976 the Social Democrats formed the government. Between 1976 and 1982 Sweden experienced a number of governments founded on the basis of the Conservative Party, the Liberals, and the Agrarian Party; however, this interregnum did not cause any noteworthy changes in the labour-market, the welfare state, or tax policies. From 1982 and during the rest of our period (up to 1987), it was again the Social Democrats that formed the government.
- 6. The standard of living became slightly more equal overall during the first half of the 1980s (Vogel et al., 1988), but income inequality increased somewhat between 1981 and 1987 (Fritzell, 1993).
- 7. The essential difference is that EGP class V—technicians and manual supervisors—has no equivalent in the ULF data. Cases which would have appeared in this class in EGP are coded in SEI to the equivalents of EGP II and EGP III. Also, a few unqualified nonmanual occupations—like shop assistants—are classified in EGP III but in SEI VII.
- This was done using an algorithm provided by Anthony Heath.
- 9. In fitting the model,  $X_{jk}$  is first set to the values of  $\lambda^{OD}_{jk}$ , derived from the CSF model, and then estimated through an iterative procedure until a satisfactory fit has been achieved (see Erikson and Goldthorpe, 1992a; 91–2 for a description of the fitting procedure).
- 10. Besides the income scale we have tried three prestigestatus scales, namely the Hope-Goldthorpe scale (Goldthorpe and Hope 1972; Goldthorpe and Hope 1974), the Treiman scale (1977), and the Duncan (1961) scale. Except for the Hope-Goldthorpe scale, which did not fit the Swedish data, the status scales all fitted fairly well. Using either of the Treiman or Duncan scales would have produced the same results as those we report below.
- 11. For England, we assigned the mean income of men according to the 1972 Oxford Mobility Survey to different classes, with identical values for origins and destinations. (Ideally, we would of course have wanted to have information on the 'true' income of fathers at the time the respondent grew up, and the corresponding information about current class, but such

- measures are almost impossible to construct; but see Breen and Whelan, 1991.) For Sweden we have used the mean income of men, averaging over the 1968 and 1981 level of living surveys. It should be noted that we also use an asymmetrical scale value for Swedish farmers. This class has undergone a rapid change during this century. Its composition has changed from one predominantly made up of smallholders to one dominated by farmers—the quantity of land, forest, and livestock has increased, and the standard of machinery has improved. Since it is possible to separate smallholders from farmers in the Swedish level of living surveys, we choose to assign the income level of smallholders to farm origin, while farm destination is measured by the income of farmers. (The scale values are shown in Table 3.)
- 12. This affinity term is similar to AF4 in Erikson and Goldthorpe (1992b), which fits the data for men in seven nations.
- 13. We will not pretend that any theoretical considerations preceded the inclusion of this affinity term. We can suggest, however, in a post-hoc fashion, at least two reasonable explanations for its occurrence (cf. also arguments put forward by Erikson and Goldthorpe (1992a; 130). First, in Sweden, farmers' offspring born at least up until the 1950s tended to have the least education of all classes (see Jonsson and Mills, forthcoming), which probably precluded opportunities to move into the skilled working class, let alone into non-manual occupations. Second, there might be a regional effect involved: farmers typically live in areas where skilled manual labour is not in demand. This is of course all the more important since a certain proportion of the unskilled work is in agriculture orin the case of Sweden—forestry.
- 14. The model fits the Swedish 1968, 1974, 1976, and 1987 surveys according to conventional standards (G² lies between 21 and 27 with 19 degrees of freedom (df), and the proportion misclassified (DI) is 3.2-4.2). For the 1979 and 1981 surveys the model returns G²s of 36 and 46, respectively (DIs are 5.0% and 4.7%). The model fits the English 1974, 1979, 1983, and 1987 surveys very well (G²=18-26 for 19 df, and DI = 3.6-5.0%). The model generates a G² of 61 with a DI of 2.4% for the English 1972 survey, which must be regarded as a very good fit for such a large survey.
- 15. The model fits all samples of English women according to conventional standards (with G²s between 16 and 30 for 19 df). If anything, the model is overparameterized and could be simplified. We want, however, to keep the same model across all our subsamples defined by nation, sex, and survey year in order to facilitate comparisons of the effect parameters.
- 16. The model gives an acceptable fit to the 1968, 1976, 1979, and 1981 data (with G²s between 34 and 38 for 19 df). The fit to the 1974 and 1987 data is worse: G² is 57 and 82, and DI is 7.0% and 6.0%, respectively. It should be noted that the sample sizes are bigger than for English women (900-1,400 respondents in

- the 1968-81 samples as compared with 333-626); and that the Swedish 1987 data-set contains no less than 3,000 respondents.
- 17. The general reproduction parameter is stronger for Swedish women, though for English women this effect is zero. This may seem peculiar. We must remember, however, that the reproduction and hierarchy dimensions are probably correlated, and whereas English women have a low score on the former this is 'compensated for' by a comparatively high value on the latter.
- 18. The finding that inheritance is weak in Sweden in a comparative perspective is supported by results reported in Erikson and Goldthorpe (1987).
- 19. As we shall see, this strategy furthers in some respects our understanding of changes in social reproduction and inheritance and gives an overview of changes over time and differences between nations. We regard it as a good complement to the more rigorous model-testing we have performed earlier in the paper. Using simple log-odds ratios instead of the explicit parameters of the model also gives more stable results: First, since the parameters of the model are correlated, different parameters in different surveys sometimes pick up variation which we would want to look at *in toto*. Secondly, it is possible for the parameters of indicators to move in quite diverging directions making it difficult to reach an overall conclusion as to whether social fluidity is increasing or decreasing.
- 20. The log-odds ratios for the merged working class are around 1.5 for English men and around 1.3 for women. For Swedish men and women, they are in fact lower than 0.7.
- 21. The lower inheritance among employers and selfemployed (Class IVab) in Sweden is not due to a compositional effect, such as a greater proportion of self-employed in Sweden (rather, the opposite is true). Perhaps the high inheritance taxation in Sweden has led to a comparatively weak inheritance effect. Also, for employers, the solidaristic wage policy has since the 1960s led to the elimination of less profitable firms, which may have removed the incentives or opportunities for children to take over non-successful businesses. The lower degree of inheritance among farmers in Sweden might be explained by a structural change—the contraction of the agricultural class is a rather recent phenomena compared with England, a fact which is clearly reflected in our father-son class distributions. Statistically, the odds ratio is, of course, insensitive to marginal distributions, but we are dealing here with a class which is characterized by an extremely low inflow from other classes. And if the inflow figure is trivial for both nations, a large outflow figure for Sweden necessarily leads to a weaker association as measured by the odds ratio.
- 22. There are few macro-sociological studies that test directly the effect of industrialization and other macro-variables on 'equality of opportunity'. Treiman and Yip (1989), analysing a sample of 21 nations, do not find much evidence of any positive effect on social mobility, and the effect they find is questioned by

- Müller and Karle (1993) who argue that it is largely dependent on outliers. Erikson and Goldthorpe (1992a) do not find any effect at all of degree of industrialization on social fluidity in a sample of fifteen industrialized nations.
- 23. We must note here that the increasing fluidity among women in Sweden is in line with the finding that class inequality in educational attainment has decreased in Sweden, especially for women (Jonsson, 1993b). Jonsson's explanation for this does not, however, focus on (educational) policies, but rather on decreasing sex discrimination in working-class and farmer's families, and on changes in the labourmarket.
- 24. Support for this is given by Bögenhold and Staber (1991), who conclude from their analysis of eight OECD countries (including Sweden and the UK) that self-employment tends to increase in times of high unemployment and slow economic growth, thus reflecting rather than solving labour-market deficiencies. They suggest that a high proportion becomes self-employed in marginal areas of the economy, waiting for better employment opportunities in the corporate sector.

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## APPENDIX

IVcd VI-VII

Calculation of log-odds ratios for Reproduction, Inheritance, and for the Manual-non-manual split

I-II	I-II	III–IV <i>a–d</i> VI–VII	III	III	I–II IV <i>a–d</i> VI–VII
I–II			III		
III IVa-d VI-VII			I-II IVa-d VI-VII		
IVab	IVab	I–II–III IV <i>cd</i> VI–VII	IVcd	IV <i>cd</i>	I–II–III IV <i>ab</i> VI–VII
IVab			IV <i>cd</i>		
I-II-III IVcd VI-VII			I-II-III IVab VI-VII		
			· ·		
VI	VI	I-II-III IV <i>a-d</i> VII	VII	VII	I-II-III IVa-d VI
VI			VII		
I-II-III IVa-d VII			I-II-III IVa-d VI		
'			L		
MAN	I-II-III	IV <i>cd</i> VI–VII			
I–II–III					