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INEQUALITIES IN ENTRY TO HIGHER EDUCATION: A COMPARISON OVER TIME BETWEEN SCOTLAND AND ENGLAND AND WALES

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ABSTRACT

This paper uses data from the Scottish School Leavers Surveys and the England and Wales Youth Cohort Study to analyse changes over time in gender and social class inequalities in the opportunities of young people to participate in Higher Education (HE) in Scotland, England and Wales. The results show that in Great Britain in the period from the end of the 1980s to 2001-2002 HE expansion has benefited more women than men and in the most recent time points has led to a reduction in social inequalities. However, gender and social class differences persist at degree level and in the choice of subject studied. The results also show that higher proportions of working class students enter HE in Scotland than in England and Wales but that social inequalities are more marked in Scotland. The larger availability of vocational routes in Scotland, at both sub-degree and degree level, may explain country differences in HE participation rate of working class students.

INTRODUCTION

Expansion of participation in Higher Education (HE) and widening access are among the main issues of current policy (see the White Paper *The Future of Higher Education* and *Widening Participation in Higher Education* published in 2003). The UK Labour government announced in 2002 its plan to expand HE and to achieve a target of 50% of young people participating in HE up to the age 30 by 2010. At the same time it introduced various measures aimed at achieving fairness of access, such as a funding premium for those universities which

recruit students from under-represented geo-demographic areas or the request to all HE institutions to write a strategy document on widening access.

The official statistics show that in the last decade Great Britain has witnessed a remarkable increase in the participation rates of young people in HE. The Age Participation Index (which measures the number of initial entrants to full-time undergraduate courses among young people under 21) rose from 19% in 1990/91 to 35% in 2001/02 (DfES, 2004). Women are doing particularly well. They have outnumbered men and now constitute almost 60% of the full-time student population in HE.

Despite this remarkable expansion social class differences in access to HE remain. Thus, in Great Britain a considerably lower percentage of people from lower social class backgrounds enter HE than from the highest social classes: in 2000 18% of people from manual social classes (classes IIIm, IV and V of the Registrar General classification) entered HE while the corresponding figure for non-manual social classes (classes I, II and IIInm) was 48% (*Widening Participation in Higher Education*, 2003, p.7). More importantly, according to the Widening Participation document, the social class gap in the proportions of people participating in HE, instead of declining, seems to have increased over time.[1]

Raftery and Hout's work (1993) on Ireland illustrates clearly that educational expansion and the equalisation process in the chances of reaching higher levels of education among pupils from different social classes may not go together. In the Irish experience they found that the egalitarian reforms of the late 1960s brought about a general increase in participation rates in secondary schools. This led to a significant reduction in class inequalities at lower levels of education (due to the fact that they are almost universally attended). However, class inequalities continue to exist at the higher educational levels. The authors coined the expression "Maximally Maintained Inequality" to indicate that social class inequalities persist over time unless participation rates at one level are saturated (in the sense that they are 100%) for the most advantaged social classes. It is in this case that a further expansion of education is associated with a real decline in the effect of social origins on equality of opportunities.

It is clear from this study that expanding the capacity of educational institutions to gather people from different social backgrounds does not automatically lead to an equalisation of educational opportunities. This is because children from middle class families continue to be substantially advantaged in the chances of going on in education when compared to children from other social classes (Raftery and Hout, 1993; Heath, 2000). There are various explanations for why this occurs.

Children from lower social classes lack cultural, social and economic resources (Bourdieu and Passeron, 1977; Coleman, 1988), have lower aspirations (Haller and Portes, 1973; Sewell and Hauser, 1980) and tend to have poorer school results than their more advantaged peers. Breen and Goldthorpe (1997) explain class-specific educational choices as the result of a rational evaluation of the costs and benefits which each social class attaches to various educational outcomes. According to the authors children from both the lower social classes

[1] This commentary on changes over time in inequalities reported in this document refers to the absolute difference in the proportions of people from manual and non-manual social classes participating in HE in 1960 and in 2000. This measurement, however, does not take into account the much higher growth in participation that students from manual classes have experienced when compared to pupils from non-manual classes. In fact, looking at the relative differences between social classes (for example through the use of odds ratios), instead of the absolute differences, the same data would have led to different conclusions, that is to a decline in social inequalities in participation in HE between 1960 and 2000.

and the higher social classes aim to gain a class position which is at least as advantageous as the one from which they originate and want to avoid downward mobility. From this point of view, more advantaged social classes will have a stronger interest in reaching higher educational levels than less advantaged social classes, in order to preserve their social position. Moreover, due to their higher economic resources, the costs associated with a long educational career are lower for them than for other pupils. In contrast, people from less advantaged social classes are less likely to continue their studies and to make more ambitious educational choices because of their lower educational and occupational expectations as well as their lower economic resources.

The focus of this paper is the study of changes over time in gender and social class inequalities in young people's chances of entering HE in England, Wales and Scotland. Inequalities are analysed over time (since the end of the 1980s), across the three countries of Great Britain, and within the different elements of the HE system (i.e. types of qualification and subject areas). This latter analysis, which focuses on the differences existing within the system, is very important because gender and social class inequalities are reproduced not only vertically, in the transition from school or college to HE, but also horizontally, in the chances of entering universities or non-universities, of attending degree courses versus sub-degree courses and of studying more or less selective subjects (Forsyth and Furlong, 2000). Young people from lower social classes (but also women) often enter sub-degree courses or non-university tertiary institutions or study subjects leading to less remunerative jobs, so perpetuating their initial social disadvantage. One of the main reasons why fewer working class than middle class young people enter degree courses and go to university is that working class students continue to have poorer educational results prior to HE entry (Archer *et al.*, 2003). This paper does not tackle this issue. The data presented here describe trends in gender and social class inequalities in HE entry but we do not deal with the processes leading to these inequalities.

The comparison between Scotland on the one hand and England and Wales on the other is also particularly interesting because Scotland has had a fair degree of educational autonomy since 1870 (McPherson and Raab, 1988). This has meant that educational policy in Scotland has been distinctive in important relevant respects throughout most of the twentieth century; in particular since the 1970s it has had a more pervasive comprehensive public secondary system (McPherson and Raab, 1988; Kerckhoff *et al.*, 1996; Raffe *et al.* 1999) and a less diversified curriculum to age 16 than England. Moreover, educational participation has been generally higher in Scotland (Paterson, 1997; Tinklin, 2000; Croxford, 2001) than in the rest of Great Britain. The Garrick report (1997) also claimed that HE in "Scotland has had more success than the rest of the UK at attracting students from social classes IIIm, IV and V" (chapter 2, 2.8). This "less socially unequal" student participation was seen as the result of cultural factors, i.e. the stronger belief in the value of education in Scotland, and of the larger role played by the further education (FE) sector in providing HE qualifications in Scotland than in the rest of the UK. Compared with universities, FE colleges offer more vocationally-oriented programmes and provide a different range of educational qualifications (mainly professional qualifications, such as HND/HNC). Their entry requirements are less stringent than those of the universities and they gather students from lower social and economic backgrounds. Thus, these institutions tend to suit better than universities the needs of the new

categories of tertiary entrants (mainly less socially and less academically advantaged students) (Raab, 1998).

Osborne (1999) contested the claim of a fairer HE system in Scotland saying that the Garrick report did not provide enough empirical evidence to support this claim. He analysed data from the Higher Education Statistics Agency and did not find evidence that the Scottish HE institutions were more equitable than the HE institutions in the rest of UK. However, his analyses did not include HE provisions in FE colleges. Thus, his conclusions were constrained by the limitations of the data used.

Using data from the Scottish School Leavers Surveys (SSLS) and the Youth Cohort Studies (YCS) in England and Wales, this paper analyses:

(1) trends in gender and social class inequalities in HE entry and

(2) the role of horizontal differences within the HE system in the stratification process.

Moreover, in relation to country differences the paper tries to provide some empirical evidence to the Garrick/Osborne dispute on the wider accessibility of the Scottish HE system. Thus we will try to answer the following questions:

- Given the higher rates of participation in HE in Scotland, is there a lower degree of social and gender differences in this country than in England and Wales? Is the Scottish HE system more inclusive than the English or Welsh one?
- Do the higher provision of HNC/HND courses and the larger role of FE colleges in Scotland offer a higher chance of entering HE to young people (usually from disadvantaged social backgrounds) who, in England and Wales, would be more likely to enter the labour market?

Data, definitions and methodology

The data used in this study are drawn from time-series data derived from the Scottish School Leavers Surveys (SSLS) and the England and Wales Youth Cohort Study (YCS) and constructed within the ESRC-funded research project *Education and Youth Transitions in England, Wales and Scotland 1984-2002*. These are nationally representative surveys of young people attending all categories of schools except special schools[2] (for further details see Croxford, 2004a). The data used in this paper refer to the follow-up surveys (approximately two years after leaving compulsory schooling) of the Scottish and English and Welsh surveys.

There are 6 time points for Scotland and 8 time points for England and Wales which cover entry into HE during the period between the end of the 1980s and the beginning of 2000. There is a big gap in the 1990s Scottish data owing to one omitted youth cohort (1992) which could not be used for the purposes of this paper due to a significant mistake in the formulation of the question on courses started after leaving school. Furthermore, the coding of social class in the first time point of the YCS data (correspondent to YCS1) was different from, and cruder than, that used in the later surveys and for this reason no data on social class

[2] YCS1 data (in our data the year 1987) also do not cover independent schools.

inequalities are presented in England and Wales for the year 1987 (table A.1 in Appendix presents the main sample characteristics at each time point and in each country).

HE entrants are defined as those young people who, after leaving school, directly entered full-time HE (aged approximately 18), aiming to acquire a degree or a sub-degree qualification. This means that among our HE entrants, not included are those young people who decided to enrol in HE at a later stage for many possible reasons (e.g. earning money, retaking exams, taking a recreational gap year) and those who enrolled in part-time education. Despite this limitation of the data, the results reported here are still of great interest since around three-quarters of first-degree graduates in UK started as young entrants, that is at 18-19 years (HEFCE, 2005, p.14). Moreover, young entrants are more likely to be influenced by family of origin in their choice of participating in HE than adult entrants.

The data presented in this paper are aggregated for England and Wales. The main reason for presenting these data combined is that we do not have enough cases for Wales to be analysed separately. However, in relation to HE entrance we can expect that the results would not differ much between England and Wales. Wales is more similar to England than to Scotland in both participation rates in HE and in the relatively modest importance that FE institutions have in the provision of HE courses (HEFCE, 2005, p. 23).[3]

The next section presents trends in young people's participation in education and HE expansion in Scotland, England and Wales.[4] We look at changes over time in gender and social class inequalities in the chances of entering HE and country differences in these trends. Social class of origin is measured by the higher of the occupational statuses of mother and father or, when one parent was unemployed or economically inactive, by the status of the employed parent. Three social classes have been distinguished: managerial and professional class, intermediate class and working class. These classes have been constructed based on the National Statistics Socio-Economic Classification (NS-SEC) (for details about the harmonised construction of this variable in the YCS and SSLS data see Croxford, 2004b).

In the second part of the paper, gender and social class stratification within the HE system is analysed, looking at the distinction between degree and sub-degree courses and subjects taken.[5]

Participation in full-time education

The general trends on young people's destinations approximately two years after leaving compulsory school show that over time the percentages of those who were still in education increased while the percentage of people in employment declined (Figures 1 and 2). This is not surprising and it confirms the results of other studies in the UK and other European

[3] Also in our data, participation rates in HE were very close in England and Wales.

[4] The descriptive statistics and figures presented in this paper are based on weighted data. Weights are used to compensate for non-response bias.

[5] We have analysed the information contained in the SSLS and YCS data on institutions entered by young people in HE (whether FE colleges or universities). We do not present the results here because they mirror the results of the analyses on degree/sub-degree courses taken. The numbers of young people studying in FE colleges in England and Wales were also too small to be analysed. Another interesting analysis, which we were unable to conduct because of data limitation in the YCS, relates to the distinction between old and new universities. Unfortunately, this information, available in the SSLS data, was not available from YCS5 onwards, that is from the time in which polytechnics acquired the status of universities.

countries which show a common tendency for young people to stay on in education after age 16.

[FIGURES 1 AND 2 ABOUT HERE]

Figures 3 and 4 show the percentages of people in full-time education by level of studies. From the data, two main country differences emerge: (1) across time there were always much higher proportions of people studying for a degree or a sub-degree in Scotland than in England and Wales; and (2) at 18-19 a large proportion of English and Welsh students were still studying for a non-advanced qualification.

[FIGURES 3 AND 4 ABOUT HERE]

In Scotland the percentages of young people entering degree-level courses grew from 12% in 1987 to 29% in 2001 and in England and Wales they grew from 8% in 1987 to 22% in 2002. The percentages of those entering sub-degree courses in Scotland grew from 3% in 1987 to 9% in 1999 and slightly declined in the last time point to 8%. In England and Wales these percentages were always around 1-2% but they grew in the last two time points and reached 3-4%. The gap between Scotland and England and Wales in the overall rates of HE entry (i.e. entry to both degree and sub-degree level courses) widened over time (from 5 to 12 percentage points). However, the rate of growth in young people's chances of entering HE which occurred between 1987 and 2001-2002 was similar in the three countries: these chances were 2.3 times higher in Scotland in 2001 than in 1987 and 2.5 times higher in England and Wales in 2002.

The other striking difference between Scotland and England and Wales relates to the percentage of young people who are still studying for non-advanced qualifications at the age of 18-19. This percentage is particularly high in England and Wales and very low in Scotland. This is partly due to the younger age at which Scottish students may enter HE. In Scotland students may sit Highers (broadly correspondent to the English A-levels) and enter HE after only one year of post-compulsory schooling. This means that at 17-18 years Scottish young people may be qualified to enter HE while at a similar age many English and Welsh counterparts are still studying at school for A-levels. This is confirmed by our data: in the 1990s surveys, around 5-6% of respondents were still studying to acquire an A-level qualification in England and Wales (the corresponding figure for Scotland is around 1%). Nevertheless, counting this 5-6% of young people among possible delayed HE entrants in England and Wales would reduce the difference in HE entry rates between Scotland and England and Wales but it would not level out the existing gap in these rates between the countries.

Gender and social class inequalities

General trends

Both men and women have significantly increased over time their rates of participation in HE (Figure 5). Women, however, have increased their chances of entering HE more than men. Thus, in the 1990s women in HE began to outnumber men in the three countries. This trend started earlier in Scotland (since the beginning of the 1990s) than in England and Wales (from 1996 onwards). Despite this time lag, in the three countries the HE expansion of the 1990s seems to have particularly benefited women.

[FIGURE 5 ABOUT HERE]

There are clear social class differences in the percentages of young people entering HE both in Scotland and England and Wales (Figures 6 and 7). However, larger proportions of each class entered HE in Scotland than in England and Wales. The social class gap appears to be larger in Scotland than in England and Wales. This suggests that there are more working class students entering HE in Scotland[6] but this is due more to the overall high levels of participation rates than to lower social class inequalities in the chances of entering HE.

[FIGURES 6 AND 7 ABOUT HERE]

Finally in the three countries, 1993 is the year where the gap between students from professional classes and students from working class backgrounds widens (in England and Wales in 1989, social class inequalities are particularly high also). Table 1 presents the odds ratios of entering HE of young people from professional classes compared to young people from intermediate and working classes. In Scotland the odds of entering HE for students from a middle class background compared to working class students were 7.1:1 in 1987, they sharply increased to 8.8:1 in 1993, and then reduced to 5.6:1 in 2001. In England and Wales they were 6.8:1 in 1989, 6.8:1 in 1993, and 5.2:1 in 2000 (and 3.7:1 in 2002).[7]

[TABLE 1 ABOUT HERE]

We ran a binomial logistic regression of the chances of entering HE *versus* being in any other status to test whether changes in social class differences in HE entry, as measured by the odds ratios presented above, were significant (table not shown). We found that in Scotland social class differences were significantly smaller in 1991, in 1999 and 2001 than in 1993.

[6] Their percentages are close to the percentages of students from intermediate classes in England and Wales. Moreover, the percentages of HE entrants among the intermediate class in Scotland are also close to the percentages of professional and managerial classes.

[7] The data showing a further drop in social inequalities in England and Wales among the HE entrants of 2002 have to be read with caution. The survey organisation administering the YCS at this time point was different from the survey organisation of the earlier YCS data collections. This may have affected the comparability of the data collected to record social class.

According to our data the largest expansion in HE entry occurred in 1993 in Scotland and this may confirm the thesis that inequalities may widen as children from more advantaged social backgrounds tend to take immediate and full advantage of any new opportunities offered by the system (for similar findings see Galindo-Rueda, Marcenaro-Gutierrez and Vignoles, 2004). In the last time points, social class inequalities significantly decline, which may testify that the other social classes also start to take advantage of the opening up of HE. The results were less clear in England and Wales. Social class differences did not significantly change between the end of the 1980s and the first half of the 1990s but they started to decline significantly from 1998 onwards.

Country differences

At the beginning of this paper we asked whether the higher rates of participation in HE in Scotland meant a lower degree of gender and social class differences. The descriptive statistics presented in Figures 5-7 suggest that in the 1990s gender differences first disappeared and then reversed in favour of women. However, this pattern started earlier in Scotland than in England and Wales. Social class differences appear to be more marked in Scotland than in England and Wales. We tested for the significance of the country differences presented above and our analyses confirmed what is described in the descriptive statistics (table not shown). Young people's chances of entering HE were always significantly higher in Scotland than in England and Wales. Moreover, in comparison with men, on average women in England and Wales were less likely to enter HE while women in Scotland had chances more similar to those of men. Finally, social class differences were significantly stronger in Scotland than in England and Wales. This leads us to conclude that the higher possibilities of entering HE in Scotland have not brought about lower social inequalities. This is because young people from professional and managerial social class of origin have benefited from the expansion of the system as well as (or in certain time points, more than) young people from a working class background.

However, despite the higher social class differences in Scotland, in absolute terms working class students are better-off in Scotland than the rest of Great Britain. In fact, they have higher chances of entering HE in Scotland than their English and Welsh peers from the same social background (Figures 6 and 7). It is also noteworthy that the odds ratio in 2001-2 for Scotland (5.6) is the same of the odds ratio in England and Wales in 1991 and 1996 when participation of working class students was much lower (respectively only one third and 60% as much as participation by working class students in Scotland in 2001-2).

The role of horizontal differences

Degree versus sub-degree courses

Scotland has higher rates of HE entry in both degree and sub-degree level courses (Figures 3 and 4). Moreover, the HE expansion has involved both degree and sub-degree level (participation rates increased respectively from 12% in 1987 to 29% in 2002 and from 3% to 8% in the same years) while in England and Wales it has mostly concerned degree-level courses (participation rates increased from 8% to 22%). Similarly the growth in women's participation in HE occurred at both degree and sub-degree level in Scotland while it occurred mostly at the degree level in England and Wales (table not shown). Thus in the year

2001, 31% of young women in Scotland were studying for a degree versus 27% of young men, another 10% of women were enrolled in a sub-degree course versus 6% of men. In England and Wales the comparable figures were 23% of women and 20% of men in degree courses and 4% of women and 3% of men in sub-degree courses.

There are large social class differences in the percentages of young people studying for a degree qualification in the three countries (Figures 8 and 9).

[FIGURES 8 AND 9 ABOUT HERE]

At degree level, social class inequalities appear to be larger in Scotland than in England and Wales. Thus, at the end of the 1980s, the odds of studying for a degree for middle class students were eight times higher than for working class students in Scotland and seven times higher in England and Wales (Table 2). At the end of the period under examination (ie the end of the 1990s) the same odds had only slightly declined in the three countries. Interestingly, in Scotland in 1993, as noted above, the year of the largest HE expansion, the gap between students from professional classes and students from working class background widened.[8]

[TABLE 2 ABOUT HERE]

Much smaller social class differences (at the advantage of middle class students) exist in relation to the uptake of sub-degree courses (Table 2). These differences disappear in the last time points. Thus, in England, Wales and Scotland nowadays children from working class backgrounds have the same chances of studying for a sub-degree qualification as children from professional social classes.

Country differences

Our second country specific research question was: Does the higher provision of HNC/HND courses in Scotland offer a higher chance of entering HE to young people (usually from disadvantaged social background) who, in England and Wales, would be more likely to enter the labour market? To answer this question we have run a multinomial logistic regression in which the chances of entering a degree or sub-degree course have been compared to the chances of dropping-out from education (Table 3). We have pooled together the data from the three countries and analysed the interaction effects of country and the other independent variables.

[TABLE 3 ABOUT HERE]

[8] We have tested for the significance of these changes and we found that, indeed, in Scotland social class differences in the chances of attending a degree course were lower in the years before and after 1993. In England and Wales, significant changes in social inequalities occurred from 1996 onwards and in the direction of reducing the gap between children of professional and working class backgrounds.

The results show that working class children, the reference category in the model, have significantly higher chances of entering both a degree and a sub-degree course in Scotland than in England and Wales (coefficients for working class in Scotland are positive and equal to 0.34 for degree and 1.38 for sub-degrees). This country difference is more marked at sub-degree level. Moreover, women in Scotland are more likely to enter a sub-degree course than in England and Wales (coefficient for Scotland*female in the sub-degree column equal to 0.33). These results confirm the expectation that the higher availability of sub-degree courses in Scotland has allowed a significantly larger proportion of working class children and women to enter HE (instead of leaving education) in that country. A similar conclusion, but to a much lesser extent, can be drawn for the chances of working class children in entering a degree course. This seems to testify that, apart from the important role played by the larger provision of HNC/D qualifications in Scotland (which has allowed a higher degree of inclusiveness of female students and students from less advantaged backgrounds), also degree courses are more likely to be attended by working class children in Scotland than in England and Wales. It may be that working class children are more likely to enter degree programmes which have a more vocational and practical orientation in Scotland than in England and Wales (see next section) and this may explain their higher participation at degree as well as sub-degree level.

The results of the multinomial estimation also confirm what have already been pointed out: if in absolute terms working class children have benefited from the overall higher participation rates in HE in Scotland, in relative terms social class inequalities appear to be higher in Scotland than in England and Wales. The interaction effects between Scotland and intermediate and professional and managerial occupations in Table 3 are positive and significant meaning that the gap between students with working class background and the other students with more advantaged backgrounds in the chances of studying for a degree or a sub-degree is larger in Scotland than in the rest of Great Britain (coefficients equal to 0.33 and 0.49 for degrees and 0.27 and 0.31 for sub-degrees).

The choice of different subjects

The choice of the subject studied in HE is another element which may contribute to reproducing gender and social inequalities. Despite the great improvement in women's educational achievement, concerns remain in relation to gender differences in subject choices and its consequences for occupational and economic inequalities between men and women. Indeed, the strong association between educational segregation and occupational segregation by gender has been widely documented (Borghans and Groot, 1999; Erikson and Jonsson, 1998). Many young women continue to choose traditional "female" courses (such as education, arts and humanities) which may lead to lower-level, less well paid occupations with restricted chances of career promotion. A similar issue arises in relation to young people from different social backgrounds. Some studies have indicated that young people from higher social classes are more likely to access prestigious subject areas within tertiary education (Davies and Guppy, 1997; Van de Werfhorst *et al.*, 2000). Other studies have pointed out that working class students tend to study in less prestigious institutions and to choose more vocational subjects (Forsyth and Furlong, 2000).

The YCS and SSLS data allowed us to distinguish between different types of subject studied by young people in HE. The overall number of students in each discipline was too small to be

analysed, so we had to confine our analyses to five groups of subjects (sciences, social sciences, business/administration, arts/humanities/languages, engineering/architecture) and to collapse our time points into three main periods, 1987-89, 1991-96 and 1998-2002. We also concentrated only on subjects studied at degree level. The numbers of people studying in a sub-degree course is too small to be disaggregated by different subjects (as well as by gender and social class).

Our findings confirm that in the three countries of Great Britain arts and humanities are female dominated subjects while engineering and architecture are male dominated ones (Table 4). In the subjects of social sciences and business/administration women and men are more equally represented. According to our data there are two interesting country differences. The first relates to sciences: between the end of the 1980s and the first half of the 1990s in the three countries they were attended more by men than women; however, in the most recent period (1998-2002), in Scotland (only) the percentage of women entering sciences has grown and equated the percentage of men. The second country difference relates to the different subjects in which the expansion of women's participation occurred. In England and Wales there has been an expansion of women studying humanities and business/administration (also men's participation has increased in this latter subject) while in Scotland this has occurred in sciences.

[TABLE 4 ABOUT HERE]

Table 5 presents the percentages of young people from different social classes studying in different subjects. The only clear pattern emerging from these data is that over time working class children have increasingly chosen to enter business/administration subjects: from 9% in England and Wales and 14% in Scotland at the end of the 1980s to 17% and 23% at the end of the 1990s. This seems to give support to the idea that the new entrants from working class children tend to choose more vocationally oriented subjects. Moreover, in Scotland participation rates of working class students in more vocationally oriented degree programmes were greater than in England and Wales: thus, their participation rate was higher (and it also grew over time) in the larger grouping of sciences, business/administration and engineering/architecture while it was lower in social sciences and arts/humanities/languages. In these latter subjects the three countries of Great Britain had very similar proportions of working class students attending them in the period 1987-89 (23% and 24%) but since then these proportions increased in England and Wales (up to 33% in 1998-2002) while they slightly declined in Scotland (down to 22% in the same time period). These findings suggest that in Scotland the process of expansion in HE participation of working class people at degree level (as well as at sub-degree level) is linked to their higher participation in vocationally oriented courses. Finally, the subjects of engineering/architecture have witnessed a decline in popularity in all social classes and in all parts of Great Britain. An even sharper decline in the attendance of engineering/architecture has occurred among working class students in England and Wales: their percentages fell from 16% in 1987-89 to 5% in 1998-2002.

[TABLE 5 ABOUT HERE]

Conclusions

This paper has analysed trends in HE entry and changes in gender and social class composition of HE entrants in the three countries of Great Britain. Consistent with the results of other studies we have found that gender inequalities have disappeared in the 1990s and then reversed in favour of women. On the contrary, social class inequalities have persisted over time, which means that middle class students continue to have higher chances of entering HE than working class students. There is a large sociological literature which shows that children from less advantaged social classes lack cultural, social and economic resources, have lower aspirations and tend to have poorer school results than their more advantaged peers. Clearly, these are all very important factors which explain why fewer working class than middle class young people enter HE (and choose degree courses and more ambitious subjects). As pointed out in the introduction, we have not here tried to investigate these factors. The study of the causes of the persistence of these inequalities is beyond the scope of this paper. This paper has described changes in these inequalities over time and across the three countries of Great Britain. Our results show that the patterns of social inequalities have changed over time in Scotland, England and Wales. In Scotland the largest expansion in HE entry, which occurred in 1993, has brought about an increase in the gap between middle class and working class students. This period has been followed by a declining of the social class gap from 1999 onwards. A decline in social class inequalities has also been found in England and Wales from 1998 onwards, however expansion has been more gradual in these two countries and social class inequalities more stable than in Scotland.

In relation to horizontal differences we have found a certain degree of stratification within the HE system which pointed towards a higher level of inequalities at degree level than at sub-degree level and towards gender and class differentiated choices in the type of subject studied. Moreover, social class differences in the odds of entering a degree course have only slightly declined in the period under examination while they have disappeared at sub-degree level. At degree level women continue to outnumber men in arts/humanities/languages while men outnumber women in engineering/architecture. However, their participation in business/administration studies has grown over time (especially in England and Wales). Country differences emerge in relation to the proportions of women entering sciences (higher in Scotland) and arts/humanities/languages (higher in England and Wales). The impossibility of making a finer distinction among different subjects has precluded us from finding strong social class differences in choice of subjects. However, we found that in the three countries of Great Britain part of the expansion in the attendance of degree courses by working class students has occurred in business/administration subjects. Moreover, in Scotland greater proportions of working class students enter more vocationally oriented degree courses, i.e. sciences, business/administration and engineering/architecture, and lower proportions enter arts/humanities/languages or social sciences, than in England and Wales.

One of the main aims of this paper has been to investigate whether the HE system in Scotland is more inclusive than in England and Wales (as maintained by the Garrick report). Our data have shown that in absolute terms it is more inclusive, in the sense that higher proportions of working class students enter HE in Scotland than in England and Wales. However, this is due to the general higher participation rates in HE. In fact, in relative terms, as measured by the social class gap in the chances of entering HE, social inequalities are more marked in Scotland than in England and Wales. The higher availability of places in the HE system is a

very important factor influencing the choice of applying for a place in HE (Paterson, 1992) and this may have contributed to creating country differences in this respect. The stronger presence of FE colleges providing HE qualifications (ie HNC/Ds) in Scotland has also facilitated the inclusion of larger numbers of working class students. However, Scottish young people from a working class background have also higher chances of entering degree courses than their English counterparts. As already pointed out, in Scotland higher proportions of working class students enter more vocationally oriented degree programmes than in England and Wales. The larger availability of vocational routes within the HE system in Scotland, at both sub-degree and degree level, may explain country differences in HE participation rate of working class students.

There are two final comments we would like to make which have relevant policy implications. The Scottish education system has been found to be more inclusive and egalitarian at compulsory level than the English system. This has usually been attributed to the more thoroughly comprehensive reorganisation of the Scottish secondary education system (McPherson and Willms, 1987; Gamoran, 1996; Croxford, 2001). Since the higher social class inequalities in HE entry found in this paper, a further investigation should look at the upper-secondary level, i.e. at the post-16 stage, to see whether, compared to England and Wales, social class inequalities in Scotland widen at this educational level or at tertiary level.

The second comment relates to the importance of distinguishing between absolute and relative position of working class children. Inequalities are usually measured as relative advantages or disadvantages associated to various social classes. However, looking at the position of working class children relative to the position of middle class children gives us only a partial picture of the general situation. Thus, the fact that working class children in Scotland are more likely to enter HE than in England and Wales (even though inequalities between them and the other social classes are higher in Scotland) can be considered as a positive outcome. In the larger UK and European contexts the higher chances of Scottish young people from working class origin of acquiring HE credentials give them a competitive advantage over the English and Welsh young people from similar origins when entering the labour market (Paterson and Iannelli, 2005). Moreover, if we look at education (and in this case participation in HE) not only as an instrumental good but as an intrinsic good, we may conclude that the Scottish HE system allows more working class children to foster their personal individual achievement.

In the long run, expansion can also lead to an equalisation process. Our data, indeed, show a decline in social inequalities in the last time points in the three countries of Great Britain. A policy problem, however, remains in relation to the internal stratification of the HE system. The difference in prestige of HE institutions, the selectivity of different courses and other more or less visible distinctions within the system are playing and will continue to play a major role in reproducing social class inequalities in education and in the labour market.

References

Archer, L., Hutchings, M. and Ross, A. (2003) *Higher Education and Social Class: Issues of Exclusion and Inclusions*, London: RoutledgeFalmer.

Borghans, L. and Groot, L. (1999) "Educational presorting and occupational segregation", *Labour Economics*, 6: 375-395.

Bourdieu, P. and Passeron, J.-C. (1977) *Reproduction: In Education, Society and Culture*, London. Sage.

Breen, R. and Goldthorpe, J. H. (1997) "Explaining Educational Differentials: towards a Formal Rational Action Theory", *Rationality and Society*, 3: 275-305.

Coleman, J. (1988) 'Social Capital in the Creation of Human Capital', *American Journal of Sociology*, 94: s95-s120.

Croxford, L. (2000) *Inequality in Attainment at Age 16: A "Home International" Comparison*. CES Briefing No. 19, Edinburgh: Centre for Educational Sociology, University of Edinburgh.

Croxford, L. (2001) "School Differences and Social Segregation: comparison between England, Wales and Scotland", *Education Review*, 15: 68-73.

Croxford, L. (2004a) *The Youth Cohort Survey Data*. EYT Working paper No. 5, Edinburgh: Centre for Educational Sociology, University of Edinburgh.

Croxford, L. (2004b) *Construction of Social Class Variables*. EYT Working paper No. 4, Edinburgh: Centre for Educational Sociology, University of Edinburgh.

Davies, S. and Guppy, N. (1997) "Fields of study, college selectivity and student inequalities in higher education", *Social Forces*, 75: 1417-1438.

Department for Education and Skills White Paper (2003) *The Future of Higher Education*, London: DfES.

www.dfes.gov.uk/hegateway/hereform/whitepaperconsultation/index.cfm

Department for Education and Skills (2003) *Widening Participation in Higher Education*, London: DfES.

www.dfes.gov.uk/hegateway/hereform/whitepaperconsultation/index.cfm

Department for Education and Skills (2004) *Post-16 learning: Participation in Higher Education*, London: DfES. www.dfes.gov.uk/trends

Erikson R. and Jonsson, J. O. (1998) "Qualifications and the allocation process of young men and women in the Swedish labour market", in Y. Shavit and W. Müller (eds.), *From School to Work*, Oxford: Clarendon Press, pp. 369-406.

Forsyth, A. and Furlong, A. (2000) *Socioeconomic Disadvantage and Access to Higher Education*, Bristol: The Policy Press in association with the Joseph Rowntree Foundation.

Galindo-Rueda, F., Marcenaro-Gutierrez, O. and Vignoles, A. (2004) "The Widening Socio-Economic Gap in Higher Education", *National Institute Economic Review*, 190(1): 75-88.

Gamoran, A. (1996) "Curriculum Standardization and Equality of Opportunity in Scottish Secondary Education:1984-90", *Sociology of Education*, 69: 1-21.

Garrick Report (1997) *Report of the Scottish Committee, Higher Education in the Learning Society*, London: HMSO. http://www.ncl.ac.uk/ncihe/index.htm

Haller, A. and Porter, A. (1973) "Status Attainment Processes", *Sociology of Education*, 46: 51-99.

Higher Education Funding Council for England (HEFCE) (2005) *Young Participation in Higher Education*, www.hefce.ac.uk/pubs/hefce/2005/05_03

Heath, A. (2000) "The Political Arithmetic Tradition in the Sociology of Education", *Oxford Review of Education*, 26(3-4): 313-331.

Kerckhoff, A., Fogelman, K., Crook, D. and Reeder, D. (1996) *Going Comprehensive in England and Wales: A Study of Uneven Change*, London: The Woburn Press.

McPherson, A. and J. D.Willms (1987) "Equalisation and Improvement: Some Effects of Comprehensive Reorganisation in Scotland", *Sociology*, 21: 509-539.

McPherson, A. and Raab, C .D. (1988) *Governing Education: A Sociology of Policy since 1945*, Edinburgh: Edinburgh University Press.

Osborne, R. D. (1999) "Wider Access in Scotland?", *Scottish Affairs*, 26: 36-46.

Paterson, L. (1992) "The Influence of Opportunity on Aspirations among Prospective University Entrants from Scottish Schools, 1970-88", *Journal of the Royal Statistical Society. Series A (Statistics in Society*), 155(1): 37-60.

Paterson, L. (1997) "Trends in Higher Education Participation in Scotland", *Higher Education Quarterly*, 51(1): 29-48.

Paterson, L. and Iannelli, C. (2005) *Social Class and Educational Attainment: A Comparative Study of England, Wales and Scotland*, Edinburgh: Centre for Educational Sociology, University of Edinburgh.

www.ces.ed.ac.uk/SocMobility/mobility.htm#papers

Raab G. (1998) *Participation in Higher Education in Scotland*, Edinburgh: Scottish Higher Education Funding Council.

Raffe, D., K. Brannen, L. Croxford and C. Martin (1999) "Comparing, England, Scotland, Wales and Northern Ireland; The Case for "Home Internationals in Comparative Research", *Comparative Education*, 35: 9-25.

Raftery, A. E. and Hout, M. (1993). Maximally Maintained Inequality: Expansion, Reform, and Opportunity in Irish Education, 1921-75, *Sociology of Education*, 66: 41-62.

Sewell, W. H. and Hauser, R. M. (1980) "The Wisconsin Longitudinal Study of Social and Psychological Factors in Aspirations and Achievements", *Research in Sociology of Education and Socialization*, 1: 59-99.

Tinklin, T. (2000) "The Influence of Social Background on Application and Entry to Higher Education in Scotland: A Multilevel Analysis", *Higher Education Quarterly*, 54: 367-385.

Van de Werfhorst, H.G., Kraaykamp, G. and De Graaf, N.D. (2000) "Intergenerational transmission of educational field resources", *The Netherlands' Journal of Social Sciences*, 36: 188-210.

Table 1: Odds ratios of entering HE

	1987	1989	1991	1993	1996	1998	1999/ 2000	2001/ 2002
England/Wales								
Professional *versus* intermediate	-	2.9	2.9	2.5	2.1	2.4	2.2	2.0
Professional *versus* working class	-	6.8	5.6	6.8	5.4	5.0	5.2	3.7
Scotland								
Professional *versus* intermediate	2.0	1.9	2.3	2.9	-	-	2.3	2.6
Professional *versus* working class	7.1	7.6	6.8	8.8	-	-	6.4	5.6

Table 2: Odds ratios of entering degree and sub-degree courses (professional and managerial class *versus* working class)

	1987	1989	1991	1993	1996	1998	1999/ 2000	2001/ 2002
England/Wales								
Degree	-	7.5	6.0	7.6	6.0	5.5	5.9	4.4
Sub-degree	-	2.7	2.5	1.9	1.4	1.3	1.3	1.1
Scotland								
Degree	8.3	8.1	7.7	11.0	-	-	8.4	7.3
Sub-degree	2.4	3.7	2.3	2.0	-	-	1.2	1.1

Table 3: Multinomial logit estimation of enrolling in a degree and sub-degree level course testing for country differences in the effect of gender and social class (estimates and, in parentheses, standard errors)

	Degree *versus* not in HE	Sub-degree *versus* not in HE
Constant	-2.04***	-3.84***
	(0.03)	(0.10)
Country (ref. England and Wales)		
Scotland	0.34***	1.38***
	(0.07)	(0.13)
Female (reference men)	-0.01	-0.07
	(0.02)	(0.05)
Social class of origin (ref. working class occupations)		
Intermediate occupations	0.75***	0.34***
	(0.03)	(0.07)
Professional and managerial occupations	1.49***	0.58***
	(0.03)	(0.07)
Missing[(1)]	0.13*	-0.15
	(0.05)	(0.12)
Country interaction effects		
Scotland*female	0.04	0.33***
	(0.03)	(0.07)
Scotland*Intermediate occupations	0.33***	0.27**
	(0.06)	(0.10)
Scotland*Professional and managerial occupations	0.49***	0.31***
	(0.05)	(0.10)
Scotland*Missing	-0.04	0.11
	(0.09)	(0.17)
No. of cases	*83112*	
-2 Log likelihood	*1610.712*	

* significant at 0.05 level; ** significant at 0.01 level; *** significant at 0.001 level

Note: the model controls for the effect of time (years of the follow-up surveys) and the interaction effect of country by time.

(1) To avoid an excessive reduction in the number of cases we included in the analyses also those cases which had missing information on parental social background.

Table 4: Percentages of young people studying for a degree qualification in selected subjects by gender (base of the percentages is all students studying for a degree course)

	1987-89		1991-96		1998-2002	
	M	**W**	**M**	**W**	**M**	**W**
England/Wales						
Sciences	35.8	28.1	29.6	26	34.7	27.3
Social sciences	11.9	13.5	12.6	14	12.7	15.3
Business and Administration	8.2	8.2	10.1	10.8	14.4	14
Arts, Humanities and Languages	8.2	21.4	12	19.1	15.1	24.6
Engineering and Architecture	20.7	3.6	17.6	3.2	11.5	2.6
Total no. of cases (unweighted)	*995*	*858*	*2157*	*2791*	*3053*	*4501*
Scotland						
Sciences	34.5	28.4	27.4	27.8	36	36
Social sciences	14.6	16.7	12.8	16.4	8.9	12.1
Business and Administration	12.1	16.1	13.8	18.2	17.6	18.7
Arts, Humanities and Languages	8.3	18.7	12.2	17.9	8.5	17.4
Engineering and Architecture	25.4	6.1	25.6	4.7	21.2	4
Total no. of cases (unweighted)	*746*	*787*	*827*	*1047*	*1171*	*1581*

Note 1: Sciences include medicine and allied subjects, biological sciences, physical sciences, mathematical sciences and informatics.

Note 2: The columns do not sum up to 100% because some respondents have studied other subjects not included in the table.

Table 5: Percentages of young people studying for a degree qualification in selected subjects by social class (base of the percentages is all students studying for a degree course)

	1987-89			1991-96			1998-2002		
England/Wales	P	I	W	P	I	W	P	I	W
Sciences	31.6	34.5	32.1	28.7	26.1	25.5	31.3	29.5	28.1
Social sciences	13	12.9	9.6	13.3	13.2	13.4	14.6	13.7	13.5
Business and Administration	8.4	7	8.9	9.5	12.3	12.8	12.4	16.2	17.5
Arts, Humanities and Languages	14	14.5	13.4	17.2	13	12.3	21.8	17.6	19.7
Engineering and Architecture	13.3	11.8	16.4	9.8	10.7	12.9	6.6	7.4	5.5
Total no. of cases (unweighted)	*1124*	*422*	*227*	*3075*	*1168*	*493*	*4605*	*1865*	*758*
Scotland									
Sciences	30.4	31.9	35.3	27.2	27.3	29.7	37.7	31.9	34.8
Social sciences	17.4	14.7	10.5	16.2	12.9	11	11.5	8.1	11.1
Business and Administration	13.9	13.6	13.8	15.1	15.2	22.7	15.5	21.6	22.6
Arts, Humanities and Languages	13.4	14	13.7	17	13	10.3	14.1	12	11
Engineering and Architecture	16.3	14.7	16.3	14.1	15.9	15.5	12.5	13.6	10.6
Total no. of cases (unweighted)	*854*	*419*	*221*	*1154*	*454*	*225*	*1760*	*586*	*278*

P=Professional and managerial classes
I=Intermediate
W=Working class
Note 1: Sciences include medicine and allied subjects, biological sciences, physical sciences, mathematical sciences and informatics.
Note 2: The columns do not sum up to 100% because some respondents have studied other subjects not included in the table.

Figure 1: Main activity of young people 32-33 months after the end of compulsory schooling - England and Wales

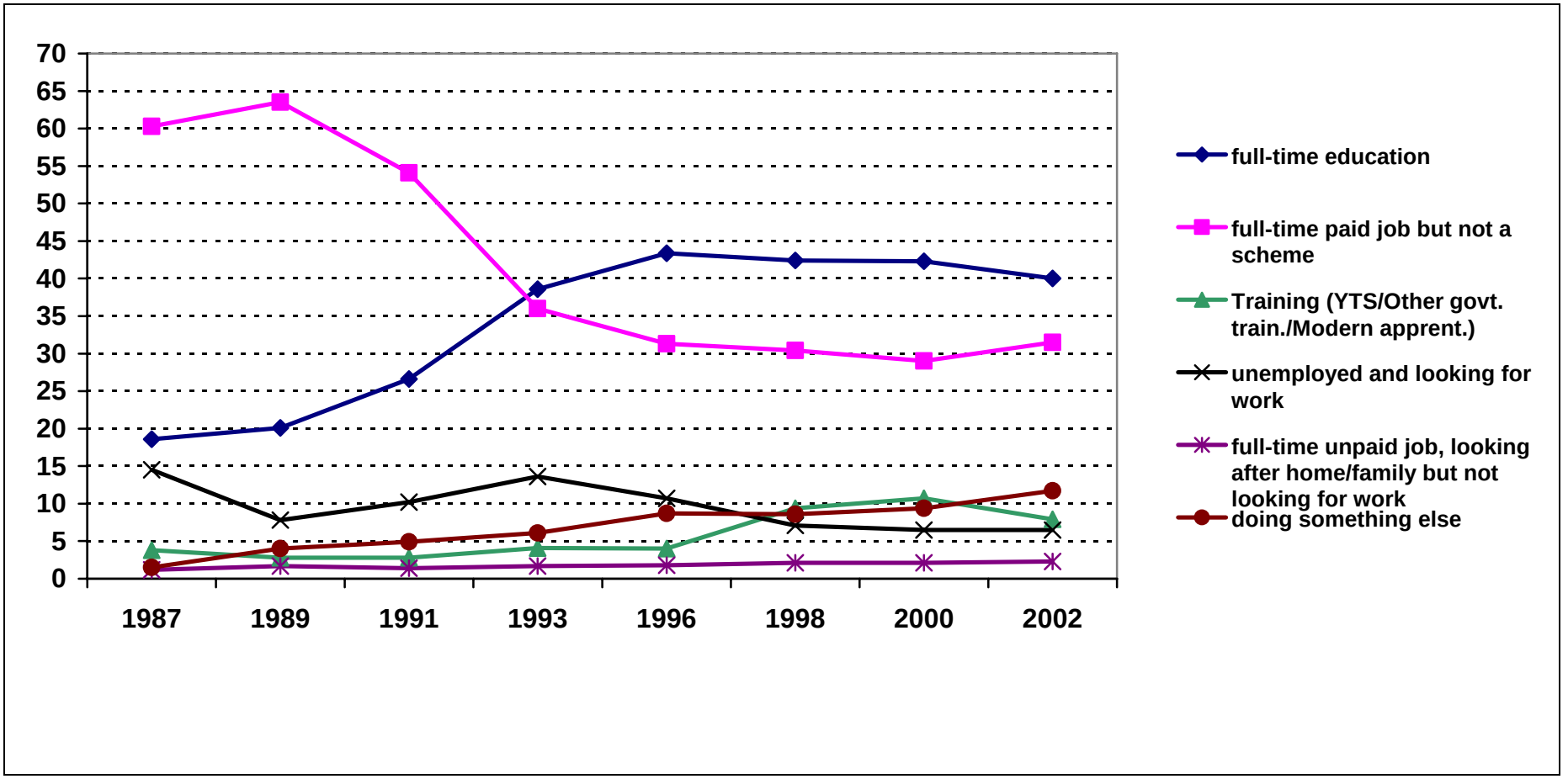


Figure 2: Main activity of young people 32-33 months after the end of compulsory schooling – Scotland

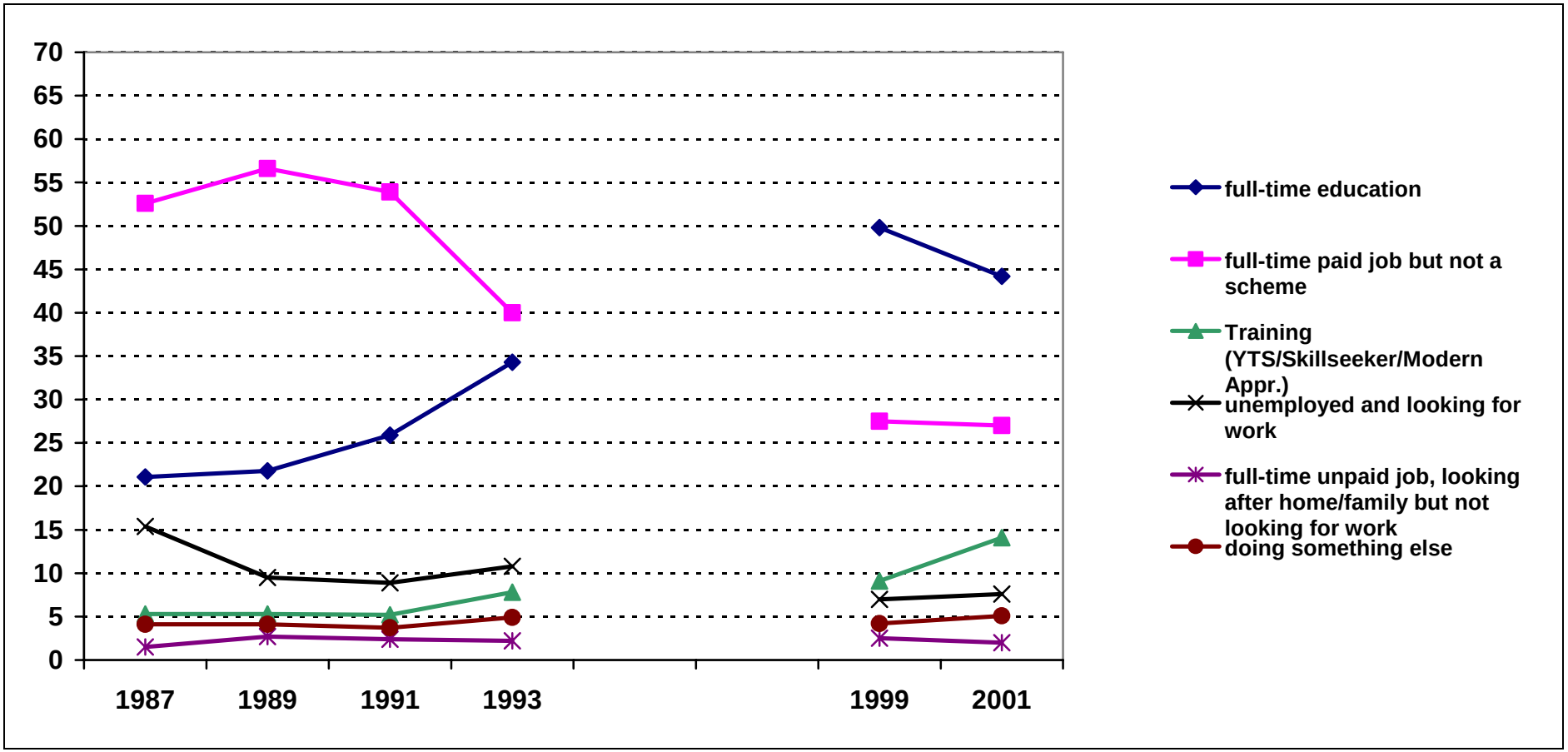


Figure 3: Percentages of young people in full-time education by level of studies - England and Wales

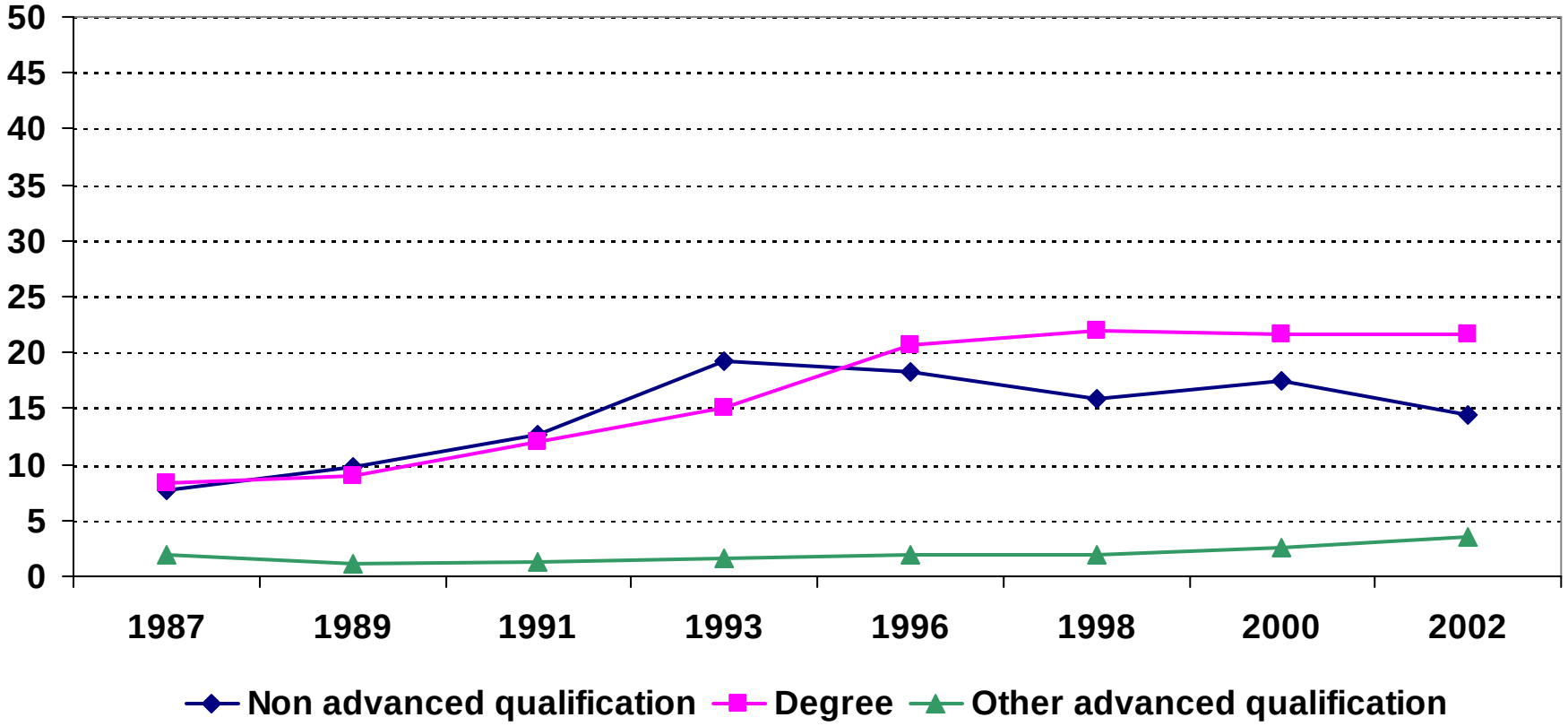


Figure 4: Percentages of young people in full-time education by level of studies – Scotland

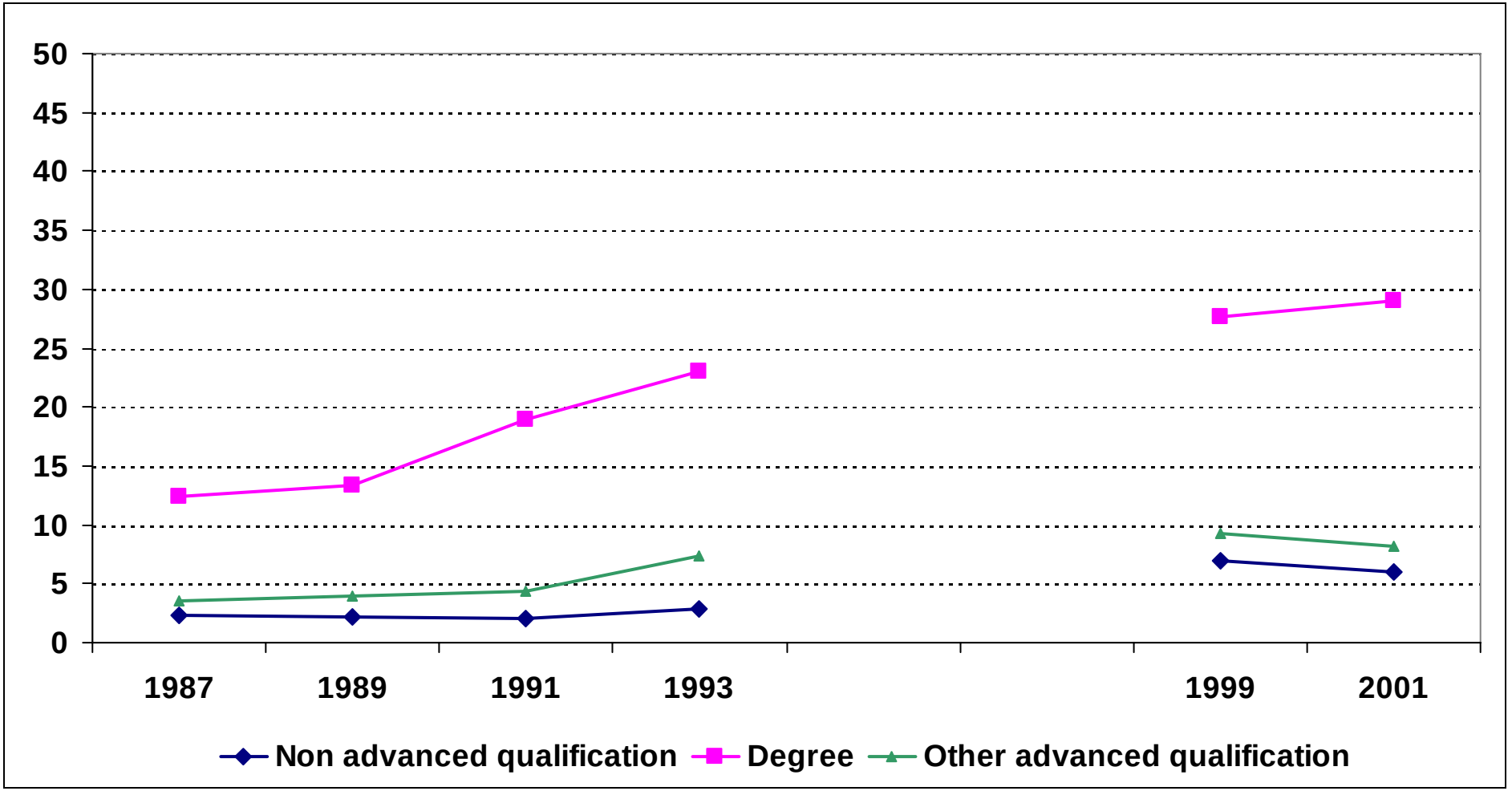


Figure 5: Percentages of young men and women attending HE - England, Wales and Scotland

Figure 6: Percentages of young people attending HE by social class - England and Wales

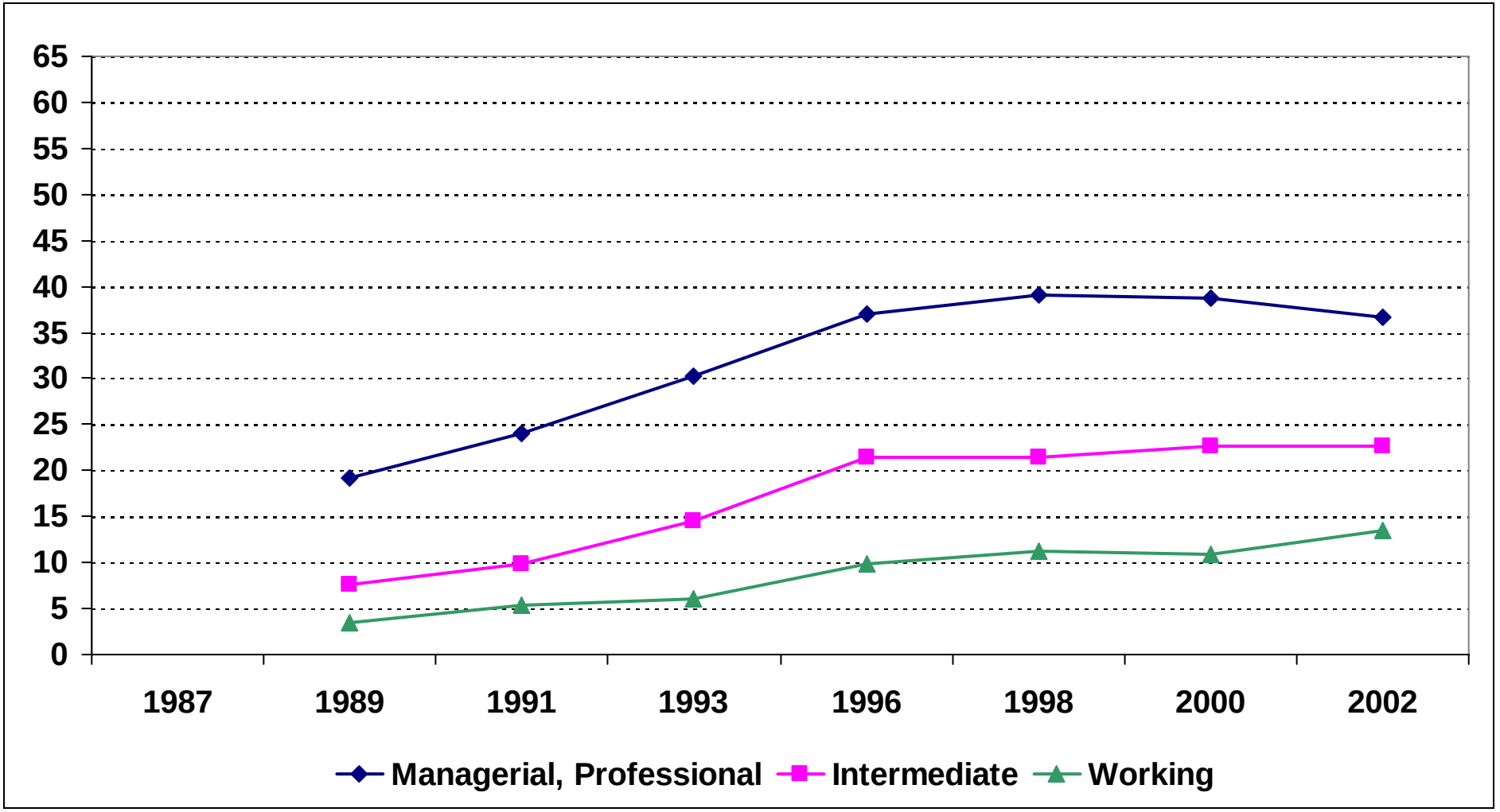


Figure 7: Percentages of young people attending HE by social class – Scotland

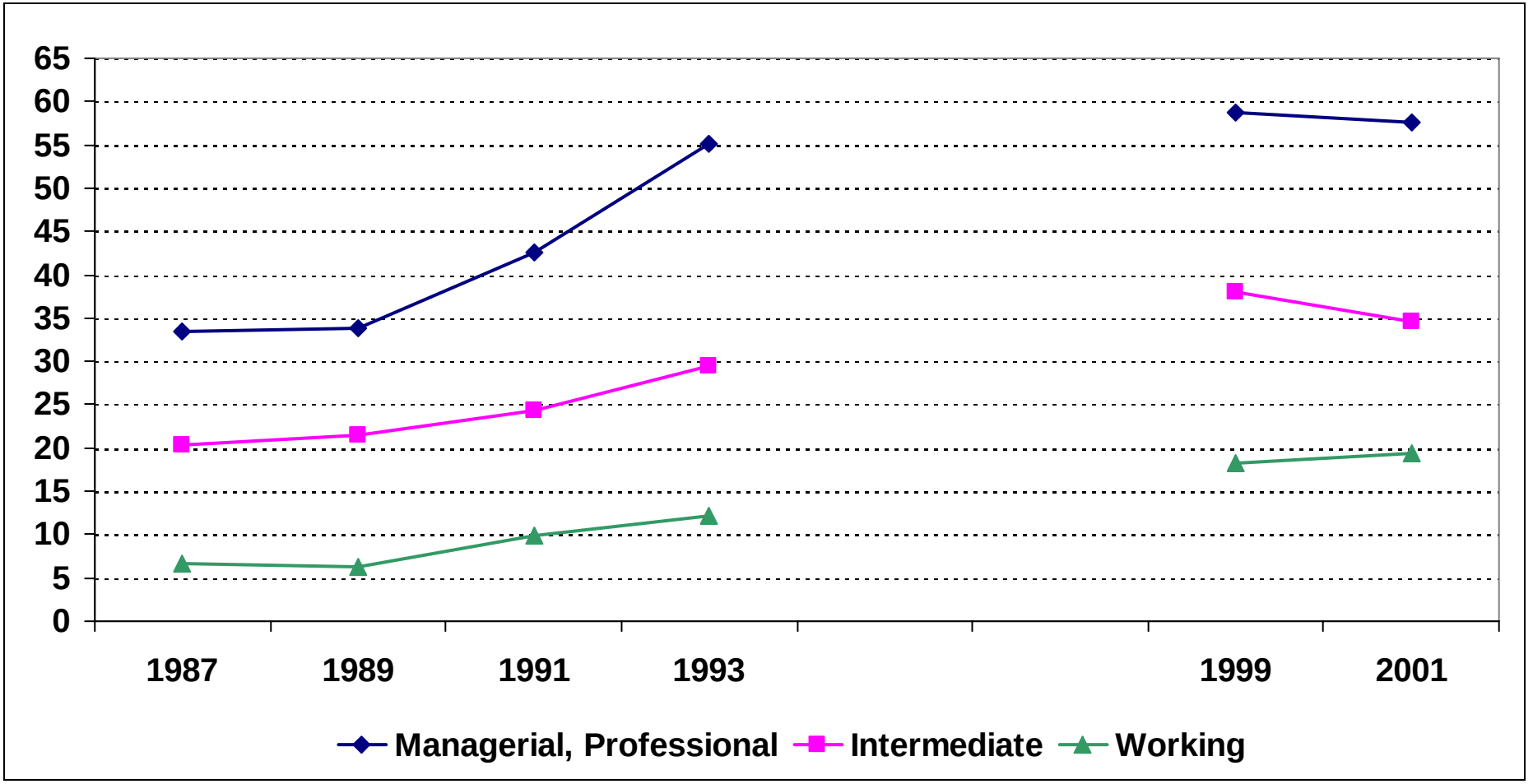


Figure 8: Percentages of different young people studying for a degree or a sub-degree qualification by social class - England and Wales

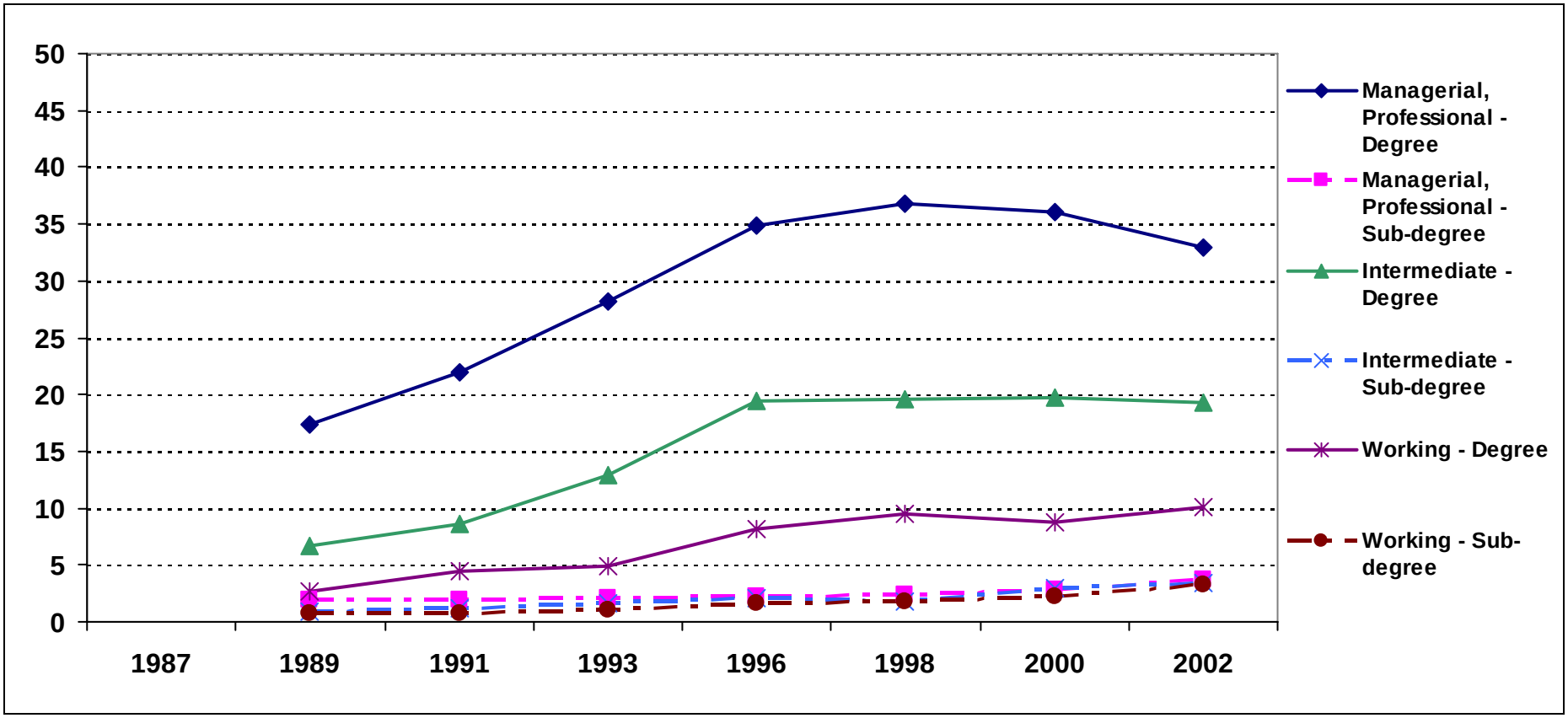
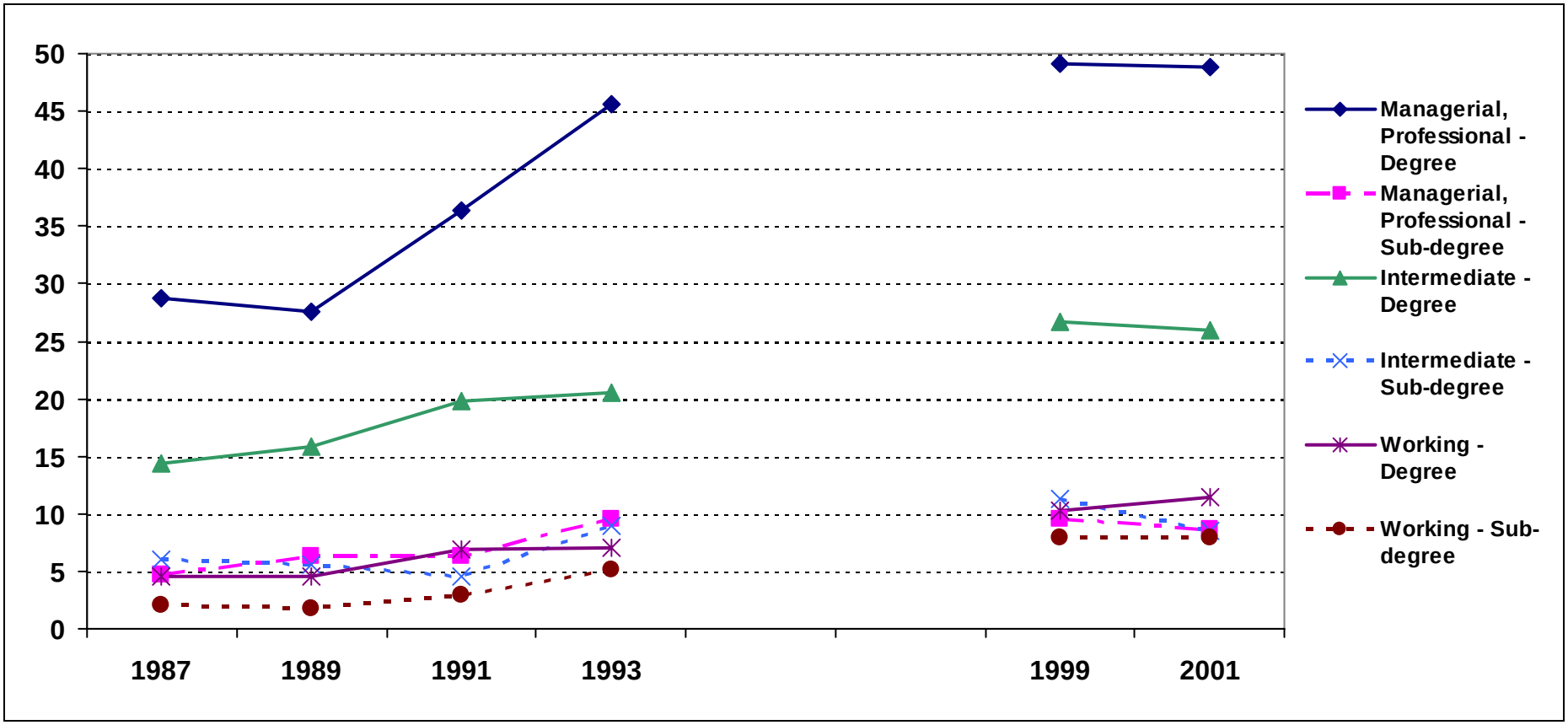


Figure 9: Percentages of young people studying for a degree or sub-degree qualification by social class - Scotland



APPENDIX

Table A.1: Main characteristics of young people in SSLS and YCS follow-up data (weighted percentages and absolute unweighted numbers)

	1987	1989	1991	1993	1996	1998	1999/2000	2001/2002
England and Wales								
Female	49.4	50.6	48.8	48.9	48.9	49.1	50.5	50.7
Parents' occupational class								
Managerial, professional	-	34.2	36.7	33.7	35.3	35.9	35.9	37.6
Intermediate	-	27.2	28.0	27.8	27.6	26.7	28.1	29.4
Working	-	28.6	26.1	27.0	25.2	25.1	26.2	21.8
Missing	-	10.1	9.2	11.4	11.8	12.3	9.3	11.2
HE entrants	10.2	10	13.3	16.7	22.6	23.9	24.3	25.2
Total no. of cases (unweighted)	5061	9328	8189	8396	8199	10130	6304	7238
Scotland								
Female	49.1	49.2	49.2	49.7	-	-	50.3	49.1
Parents' occupational class								
Managerial, professional	23.9	27.3	30.9	33.5	-	-	34.9	36.5
Intermediate	22.5	23.0	24.7	23.9	-	-	23.0	23.8
Working	43.0	40.2	36.0	35.0	-	-	29.0	26.6
Missing	10.7	9.5	8.5	7.6	-	-	13.1	13.2
HE entrants	15.9	17.3	23.3	30.3	-	-	37.0	37.2
Total no. of cases (unweighted)	4008	4090	3594	2743			2490	5003