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AUTHOR Hartkamp, Jannes
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ABSTRACT

A study compared developments in size of apprenticeship programs and changes in the distribution of apprentices over occupational categories in Ireland, Scotland, and the Netherlands during the last 2 decades. Data were from the "time-series" school leavers' surveys database. Findings indicated, toward the late 1990s, Irish apprenticeship was almost exclusively limited to skilled manual occupations and to crafts and related trades. The Scottish apprenticeship system was also rather "focused," but to a lesser extent. The Dutch apprenticeship system covered a broad array of occupations; only one-third of all apprentices were in skilled manual jobs. Occupational differences were smaller in the early 1980s. Apprenticeship became somewhat more limited to crafts or skilled manual jobs in Ireland and significantly less limited in Scotland, where apprentices appeared in service and market sales occupations in the early 1980s and in clerk jobs in the early 1990s. In Ireland, apprenticeship ceased to be the main route to skilled blue collar jobs. The structure of the Scottish youth labor market was very stable in comparison with Ireland, but the division of labor among apprentices, trainees, and "normal workers" fluctuated heavily in Scotland from 1979-95. The percentage of missing values for Dutch apprentices on the EGP variable was too high and too fluctuating over time to permit data analysis. (Appendixes include 20 references, 7 data tables, and 3 figures.) (YLB)

APPRENTICESHIP IN FRANCE, IRELAND, THE NETHERLANDS AND SCOTLAND: COMPARISONS AND TRENDS[1]

JANNES HARTKAMP[2]

1. Introduction

Apprenticeship has an impressive history as arguably the oldest form of vocational education. The specific combination of schooling and work also seems to have a promising future. Extensive apprenticeship programmes are certainly not a general, ready-made and easily transferable solution to tackle youth unemployment and improve the linkage between educational systems and labour markets, as sometimes has been suggested (e.g. EC, 1997; EC, 1996; OECD, 1996; OECD, 1994), often simply on the basis of the low German youth unemployment rate and the size of the German apprenticeship programmes. It has proved very difficult to assess the real relative merits of apprenticeship programmes, mainly because real alternatives for a direct comparison can seldom be found and because the relative merits highly depend on type and timing of the criteria used (see Ryan, 1998). Still, the apprenticeship programmes in different countries - each having a specific place, role and function within the respective transition systems (Hartkamp & Rutjes, 2000) – undoubtedly have their value. And the rise of 'life-long learning' as a core concept in education and labour-market policy opens new perspectives for apprenticeship. At present apprenticeship programmes are largely targeted at young people who leave school-based secondary education to train them for certain skilled manual occupations, but there is no reason why apprenticeship would not work for other age groups and other sectors and occupations. Indeed, apprenticeship may become an

[1] This paper builds on the work carried out in the CATEWE project (Comparative Analysis of Transitions from Education to Work in Europe; TSER, Area II.3; see www.mzes.uni-mannheim.de/projekte/catewe).

[2] DESAN Market Research, P.O. Box 10288, 1001 EG Amsterdam, The Netherlands. E-mail: hartkamp@desan.nl.

important instrument in the implementation of life-long learning policies. And the existing differences in the role, place, function and organisational formats of apprenticeship across countries provide a rich variety of examples that can be used in building well-tailored programmes for life-long learning, fine-tuned to the needs of each group and the characteristics of the 'surrounding' labour market and ET-system.

Subject

A small part of the rich variety in apprenticeship programmes has been analysed by Hartkamp and Rutjes (2000) which outlined the general cross-national differences and similarities in the position of apprenticeship programmes within the respective transition systems of France, Ireland, the Netherlands and Scotland around the mid-1990s, and compared basic characteristics of apprentices, using the 'current' CATEWE SLS database which integrates several recent national school leavers' surveys (see CATEWE, 2000). Even these four Western European countries with relatively modest apprenticeship programmes turned out to differ significantly in the role and position of apprenticeships and the characteristics of apprentices. Roughly sketched apprenticeship is an alternative to school-based vocational education in France and the Netherlands and a type of post-school vocational training in Ireland and Scotland. In the first two countries apprentices are much younger and have a lower level of education than school leavers in 'normal' jobs, whereas in Ireland and Scotland these differences are small or absent. The countries also differ strongly in the type and range of occupations for which apprentices are trained. Apprenticeship in Ireland is almost exclusively limited to skilled manual occupations, less so in Scotland, while in France and especially the Netherlands the array of occupations is rather broad (see table 1 and 2). Looking from another angle, in Scotland apprenticeship is more often the main route to a specific occupation or group of occupations than in the other countries, and seems sometimes the only way there.

Given the variation in programmes and transition systems the percentage of school leavers in an apprenticeship about one year after leaving secondary school was surprisingly close in the four countries around 1996, around 10 per cent. In the current paper we will look at the developments in the size of apprenticeship programmes as a whole and at changes in the distribution of apprentices over occupational categories

importance in three of the four countries (Ireland, Scotland and the Netherlands) over the last two decades of the last century.

Data and methods

The data used here are taken from the 'time-series' school leavers' surveys (SLS) database that has been constructed as part of the CATEWE project. This database integrates five surveys of school leavers in Ireland (1980, 1985, 1989, 1993 and 1997), five for Scotland (1979, 1985, 1989, 1993 and 1995) and three for the Netherlands (1989, 1993 and 1997), each surveying school leavers who left secondary education the previous school-year, about one year earlier. The period covered for the Netherlands is much shorter because the Dutch survey was initiated later. No representative time-series data were available for France, which is why the country is excluded from this study.

In principle the surveys include all 'second level system leavers': young people who had left full-time secondary education and had not re-entered it at the time of the survey. An important exception to this principle are Scottish leavers who left secondary school to enrol in education at the secondary level in colleges for Further Education. Iannelli and Raffe (2000) estimated the size of this group for the 1995 survey at 12-13 per cent of all leavers.

The time-series database has been constructed on the basis of a common set of variable-definitions. Where changes had taken place in the phrasing of questions in the surveys over the years, categories have been recoded to ensure consistency. Where the national classification systems for the coding of responses had changed, existing 'mappings' were used when available, specific mappings constructed when necessary. The national occupational and industrial classification systems changed in all three countries during the period studied here. In spite of the common variable definitions and the recoding procedures, some minor changes between different time-points concerning occupational categories may be caused by classification-artefacts (see CATEWE, 1999 for more details on the database).

What is and what is not an apprenticeship is hard to define sharply and consistently in an international-comparative context by objective criteria.[3] Apprenticeship certainly has certain features in common across countries (see Hartkamp and Rutjes, 2000 for an overview of the structure and organisation of the programmes in France, Ireland, the Netherlands and Scotland. See also Hannan, 1999; EURYDICE/CEDEFOP, 1995; CEDEFOP, 1999), but in some cases rather similar programmes might be known as 'apprenticeship' in one country and 'training programme', for instance, in another. Here we follow the national terminologies: programmes categorised as apprenticeships in their respective countries are regarded as apprenticeships here. In addition to this it should also be pointed out that 'apprentices' in this paper are those who had apprenticeship as their main activity at the time of the survey. In other words: apprenticeship programmes figure in the data as a 'destination' of secondary school leavers - like 'working for payment or profit', 'unemployed' or (full-time third-level) 'student' – and not as a type of education left. To treat apprenticeship as a destination and not as a type of vocational upper secondary education agrees in itself more with the Irish and Scottish transition systems than with the Dutch, but the definition of the population in the surveys does not allow otherwise.

2. The quantitative importance of apprenticeship programmes in Ireland, Scotland and the Netherlands, 1980-1997

The development over the last two decades of the twentieth century of the percentage of school leavers in apprenticeships about one year after leaving secondary education shows resembling patterns for Ireland and Scotland (table 3): the proportion of apprentices decreased significantly between 1980 and 1985 (from 12.6 to 6.6% in Ireland, from 21.0 to 11.5% in Scotland), than remained relatively stable, and somewhat increased again towards the end of our time-series (more significantly in Ireland than in Scotland, but the last Scottish survey was two years earlier than in the other two countries).

[3] See Schröder (2000) for a similar point on 'Youth Programmes'. See for instance CATEWE (1999), Braun & Müller (1997) and Steedman (1996) for a more general discussion on problems of educational definitions and classifications in comparative research.

Looking at the lines in figure 1a, we see for both countries a clear steadily rising line for the percentage of school leavers continuing in education. Moreover, in Ireland the curves representing 'working for payment or profit' and 'unemployed' form mirror-images, while the percentage in 'Youth programmes, Training and Employment schemes' more or less follows the developments in the percentage unemployed.[4] The apprenticeship curve seems relatively independent, and resembles the 'working' line closest, if any. In Scotland, on the other hand, the 'working for payment or profit' and 'apprenticeship' curves follow rather similar patterns, none of the other curves seems directly related to the percentage unemployed, and here the trends for 'apprenticeship' and 'Youth programmes, Training and Employment schemes' mirror each other. One should note that in 1979 most Scottish YOP (the predecessor of the YTS) programmes lasted only six months, so many school leavers would already have finished these by the time of the survey.

In the trends in the sub-division of the total 'active population' (all of the above categories minus 'students', figure 1b) and 'total working population' (active population minus unemployed, figure 1c), we also find that in Scotland the apprenticeship curve follows the 'working' curve, and mirrors the 'programmes and schemes' curve much more precisely than in Ireland. Since there is no national service in Ireland and Scotland, and 'other' is a relatively insignificant category (table 3), the size of the total 'active population' (working for payment or profit; apprentice; youth programmes, training and employment schemes; unemployed) decreases steadily as the percentage of school leavers continuing education rises. The 'total working population' obviously also decreases in relative size, but less linearly, because the general tendency is 'distorted' by unemployment fluctuations, heavier in Ireland than in Scotland. In both countries unemployment among school leavers was largely at the same level at the end of the period as at the starting point, but reached highs in 1985 and 1993.

Considering the shares of 'normal jobs', apprenticeships and 'programmes and schemes' *within* the total working population (figure 1c), we find a more stable

[4] An 'aggregate logic' similar to the "apprenticeship is good – look at youth unemployment rates in dual-system countries"-argument might lead to the conclusion that youth programmes, training and unemployment schemes *stimulate* unemployment.

pattern in Ireland than in Scotland. In *Ireland* the sub-percentage of school leavers 'working for payment or profit' is close to 80% for all years except 1985, when almost one-fifth (of the total working population) were in 'programmes and schemes'. In *Scotland* the sub-division of the working population over the three 'principal activity' categories fluctuates much more: the percentage of 'normal workers' varies between 39 (1989) and 63 (1979), of apprentices between 16 (1989) and 30 (1979), and of school leavers in 'programmes and schemes' between 7 (1979) and 45 (1989).

That 'programmes and schemes' appear to act more like communicating vessels with apprenticeship in Scotland, while in Ireland they correlate clearly with unemployment, is a function of the different characteristics of the category: more training programmes in Scotland, more employment schemes in Ireland. After the reconstruction of the Scottish YOP into the Youth Training Scheme (YTS) in the early eighties, training schemes became more widely available, in many cases as an alternative to apprenticeships (see EURYDICE/CEDEFOP, 1995; CEDEFOP, 1999). This development was in a sense institutionally confirmed after the time of the survey, in 1996, when the new Modern Apprenticeships were officially incorporated into the Skillseekers Programme, as the YTS is called since 1991 (see Schröder, 2000; PACEC, 1998).

In *the Netherlands* unemployment has been very low in comparison all through the 1990s, no training schemes as such exist and youth employment schemes, introduced in the early 1990s, have played a negligible role for school leavers, partly because of the favourable labour market situation and because eligibility for the programme requires having been unemployed for a period of six months (see Schröder, 2000; Pascual, 2000). In the Netherlands about one-fifth of all second-level leavers were in apprenticeship programmes in 1989 and 1993, but the percentage has dropped significantly since to less than fifteen percent in 1997. The decrease in the number of apprentices in the mid-1990s reflects certain negligence on the part of the educational bodies, employers and government and the ineffectiveness of policy measures to support apprenticeship programmes and ensure a sufficient supply of apprenticeship places.[5] It also reflects the increasing difference in status between

[5] See Borghans & Smits (1996) for an overview of developments in the Dutch apprenticeship system.

apprenticeship programmes and school-based vocational upper-secondary education (MBO) and the restructuring of the training systems for certain occupations (nurses for instance) from apprenticeship to school-based training with extensive periods of on-the-job practice.

In order to unify as well as flexibilise vocational education and training, but also to give new impetus to apprenticeship, the Dutch Education and Vocational Training Act (WEB) has significantly changed the organisation of vocational education. From August 1997 students in upper-secondary vocational education and training can choose at different levels between a track in which the emphasis lies on learning at school (the 'BOL' pathway, similar to former MBO) and a track which is primarily based on learning on-the-job. The latter, the 'BBL' pathway, is the successor of the apprenticeship route, although it is no longer called apprenticeship. Aim of the WEB-reforms was to offer both parallel routes for each subject in upper-secondary vocational education. In practice many occupational qualifications can still only be reached through one of the two (SER, 1999).

Although the trends for the Netherlands in the CATEWE data reflect real developments and are supported by statistics from the Dutch CSO (CBS, 2000) the exact percentages in figure 1 should be treated with some caution as the questions in the Dutch survey related to apprenticeship and the 'principal activity at the time of the survey' variable have changed over the years. Since not all changes could be corrected for, the resulting data are not fully consistent over time. Moreover, the 'time of the survey' itself has changed for the Netherlands, from Spring in the earlier years (about 10 months after leaving school for most leavers) to Autumn in 1997 (about 16 months after).[6] Most probably the percentages in figure 1a somewhat overestimate the real decrease in the proportion of school leavers in apprenticeship, which also seems to have reached its lowest point in 1997.

[6] The same change in 'timing of the survey' happened in Ireland at the same time, but whereas a comparison between principal activity in May and at the time of the survey shows minor changes for Ireland, the effect of the change in survey time in the Netherlands cannot be sufficiently established, as too many cases have missing values on principal activity in May.

3. The occupation of apprentices

EGP of apprentices

With regard to the (occupational) social class position of apprentices, *Ireland* fits the 'apprenticeship as a route to skilled manual jobs' picture best, and even more so now than two decades ago. The Irish data for 1980 in table 4 (and 5 and 6 below) are not fully comparable with the subsequent years, as they are based on a different occupational classification system (MANCO instead of the census 1981 and 1986 coding). This mainly concerns the distinctions between both routine non-manual classes and the 'semi-/unskilled manual workers' category, and the sudden drop in 'upper-routine non-manual' apprentices is partly related to coding changes. But the decrease in the share of lower-routine non-manual apprenticeships between 1989 and 1993 is real, and so is the rise in the percentage of Irish apprentices that are classified as skilled manual workers, from 80 percent in the early 1980s to 90 percent in the late 1990s (figure 2).

In *Scotland* the distribution of apprentices over EGP classes is much more diffuse and fluctuating (table 4). As in Ireland, most apprentices are in skilled manual jobs, but not as exclusively, and not increasingly so. The share of apprentices in skilled manual jobs declined between 1979 and 1989, rose to a high around 1993, than dropped again (figure 2). The proportion of apprentices in the service class topped in 1989; apprenticeship in lower technical / manual supervisory jobs disappeared after 1989; and the percentage of apprentices in semi-/unskilled manual occupations, decreasing slightly until the early 1990s, seemed to rise again since 1993. The only clear trend over the 1979-1995 period for Scotland that can be derived from table 4 is an increase in the proportion of apprentices in the routine non-manual class, from 5 percent in 1979 to 17 percent in 1995.

For *the Netherlands* the percentage of missing values for apprentices on the EGP variable is too high and too fluctuating over time[7] to analyse the remaining valid data, alone or in comparison with the total labour force or working population. The same is true for the ISCO-classification. Using the 1997 database Hartkamp and Rutjes (2000) found that apprenticeship in the Netherlands is much less restricted to the skilled manual class or 'craft and related trades' occupations than in Scotland and

[7] 49.2% valid values for 1989, 71.9% for 1993 and 78.9% for 1997.

especially Ireland. Unfortunately the time-series data does not allow an analysis investigating whether this relative variety and broad spectrum character of the Dutch apprenticeship system has increased or decreased in the 1990s, in absolute terms or in comparison with Ireland and Scotland. However, the changes *since 1997*, following the WEB-reforms, are likely to be far more significant than the developments between 1989 and 1997.

Share of apprentices within EGP classes

Looking at apprentices and EGP class 'row-wise' instead of 'column-wise', we find that in *Ireland* the share of apprentices has decreased in each major EGP class between 1980 and 1997, not only in the service and routine non-manual classes, but also in the manual workers categories. In 1980 apprentices accounted for 61% of all school leavers who were working as skilled manual workers (for 'payment or profit', as apprentice, or in 'youth programmes, training or employment schemes' – working students and 'others' are excluded), but their share dropped to 45% at the end of the 1980s and has been more or less stable since. Thus although apprenticeship in Ireland has become more and more limited to skilled manual occupations during the last two decades of the twentieth century (figure 2), it has in the same period ceased to be the main route to skilled blue collar jobs (figure 3).

This finding is not self-evident. Figures 1c and 2 may together suggest that the share of apprentices within the 'skilled manual working class' in Ireland should have risen between 1993 and 1997: apprentices account for a larger proportion of the 'total working population' (figure 1c), while the percentage of all apprentices that are trained in skilled manual jobs remains invariably high (figure 2). The reason for the apparent paradox lies in a significant change in the occupational structure of the Irish 'school-leavers labour market' as a whole in the period under study: between 1993 and 1997 the percentage of 'normal workers' that were in skilled manual jobs rose from 13 to 23 percent (table 4), and the overall size of the skilled manual class increased from 23 to 34 percent of the 'total working population' (figure 4). In the same period the category of semi-/unskilled manual workers shrank accordingly. The growth of the skilled manual class within the Irish labour market for young people who leave secondary education may from one side be explained by booming

manufacture and construction industries[8] - typical skilled manual sectors - and from the other by an increase of vocational qualifications.[9] More Irish leavers left the ET system with skills, and at the end of the 1990s the Irish economy could use these very well.

Since apprenticeship in *Scotland* is less limited to skilled manual jobs than in Ireland, especially towards the end of our time-series, it is no surprise to find that apprentices form more sizeable (albeit never large) shares of other occupational classes, most importantly the routine non-manual classes and semi-/unskilled manual workers. Following the overall proportion within the working population (figure 1c), the share of apprentices within these classes decreased (semi-/unskilled manual workers) or was stable until 1989, and has grown since (figure 3). Concerning the proportion of apprentices among all skilled manual workers, the directions of the developments are at any point in time the same as in Ireland, but the fluctuations are much larger. In the late 1970s and again in the early 1990s apprenticeship formed the main route to skilled manual occupations, but in 1989 less than one-third of all school leavers in skilled manual occupations were apprentices. In Scotland these fluctuations cannot be explained by changes in the occupational make-up of the 'school-leavers labour market' as a whole: the distribution of the 'total working population' over the EGP classes (figure 4) does not change much in the 1979-1995 period, except for a steady decline of the lower service class. But the relative share of 'normal workers', apprentices (figure 3) and 'trainees' within each EGP class varies significantly and so does the distribution of each category over EGP classes (table 4). There is much more movement between the three sub-categories of the 'total working population' than in Ireland. They seem closer to each other in content and their relative share seems to depend much on current rules, programmes and arrangements.

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[8] While the proportion of apprentices in manufacturing decreases, in construction it almost doubles between 1993 and 1997, from 23 to 42% of all apprentices (table not shown).

[9] The proportion of school leavers in 'normal jobs' who left upper-secondary vocational/academic programmes increased significantly between 1989 and 1993, then slightly decreased. This is also true for 'normal workers' in the manufacturing and in the construction industry. As we have seen, the proportion of 'normal workers' in skilled manual jobs only increased after 1993, and so did the proportion of skilled manual jobs within manufacture and construction. Perhaps the skills came earlier than the jobs, as Ireland went through a minor recession in the early 1990s (see figure 1a).

ISCO of apprentices

The trends described above on the basis of the EGP scale are to a certain extent reflected in the ISCO-88 classification.

In *Ireland* the percentage of apprentices working in crafts and related trades was stable during the 1980s, increased in the early 1990s, then decreased somewhat (table 5). In 1997 more than three-quarters of all apprentices were in crafts and related trades, slightly more than in 1980. However, the share apprentices form of all school leavers who are working and/or being trained in crafts and related trades has decreased, from 57 per cent in 1979 to 45 per cent in 1997 (table 6). The trends are similar to those shown above for the EGP-class of skilled manual workers, and so is the explanation: the total size of the occupational category (ISCO 7) has grown significantly in the mid-1990s, from 21 percent in 1993 to 30 percent in 1997 (table 7). Besides crafts there is only one other ISCO category in Ireland where a sizeable percentage of apprentices can be found: 'service workers and market sales workers' (ISCO 5). The significance of this category for apprenticeship increased strongly in the early 1980s but decreased again in the early 1990s. As opposed to crafts, apprentices never formed more than a very small proportion of all school leavers in service and market sales occupations: less than fifteen percent at the beginning of the period, less than ten at the end.

In *Scotland*, where apprentices are occupationally more diversely distributed, the ISCO trends for crafts and related trades also resemble the developments for skilled manual workers in the EGP classification above: the percentage of all apprentices that were in crafts decreased significantly from 1979 until 1989, then increased, and dropped again. The share apprentices form of all school leavers in crafts and related trades has fluctuated more heavily: in 1979 two-thirds of all crafts workers were apprentices, in 1989 less than one third, in 1995 61 per cent (table 6). The proportion of apprentices within the category increased since 1989 not because the category as a whole would have shrunken (table 7 shows the overall size of all occupational categories is rather stable in Scotland), but because the total number of trainees decreased and a smaller proportion of them went to craft occupations (table not shown). Around 1980 apprenticeship in Scotland was almost as limited to crafts as it was in Ireland, but since the early 1980s significant numbers of apprentices can also

be found in service and market sales occupations and in 1995 more than ten percent of all apprentices were clerks. But less than fifteen percent of all clerks (in the 'school leavers labour market' that is) are apprentices, and roughly one quarter of all service and market sales workers.

4. Conclusion

Towards the end of 1990s apprenticeship in Ireland was almost exclusively limited to skilled manual occupations (EGP) and to crafts and related trades (ISCO). The Scottish apprenticeship system was also rather 'focused', but to a lesser extent. In the Netherlands, however, the apprenticeship system covered a broad array of occupations and only one third of all Dutch apprentices were in skilled manual jobs. Due to this 'diffusion' and the existence of very occupation-specific school-based vocational education apprenticeship hardly ever formed the predominant route to a certain occupation in the Netherlands. In Scotland apprenticeship was the main route to crafts and related trades as a whole and to some occupations almost the only way. Although Irish apprenticeship was more limited to crafts, crafts were less limited to apprentices than in Scotland.

Studying the developments in apprenticeship in Ireland and Scotland from the early 1980s to the second half of the 1990s, we find that the 'occupational differences' were smaller at the beginning of the period: apprenticeship became somewhat more limited to crafts or skilled manual jobs in Ireland and significantly less limited in Scotland, where apprentices appeared in service and market sales occupations in the early 1980s and in clerk jobs in the early 1990s. Paradoxically in Ireland apprenticeship ceased to be the main route to skilled blue collar jobs even though a larger percentage of all Irish apprentices were found in these occupations. This is explained by the fact that the overall size of the skilled manual class in the 'school leavers labour market' in Ireland increased strongly toward 1997, due to a boom in manufacture and the construction industry and an increase of vocational qualifications: the Irish ET system provided more skills and the Irish economy employed these eagerly.

The structure of the Scottish youth labour market has been very stable in comparison with Ireland. But the way the labour is divided between apprentices, trainees and 'normal workers' has been fluctuating heavily in Scotland between 1979

and 1995. Whereas in Ireland the percentage of school leavers in 'youth programmes, training and employment schemes' largely seemed to follow unemployment rates and the apprentice percentage appears as rather independent, in Scotland the apprenticeship, training and 'normal work' categories seem communicating vessels, their shares going up and down depending on current rules and arrangements. Admittedly the 'youth programmes, training and employment schemes' is a very ambiguous category. In Ireland it covers more employment schemes, in Scotland training programmes that are not so far from apprenticeship.

The occupational trends in relation to apprenticeship could unfortunately not be analysed for the Netherlands because of the high percentage of missing values on EGP and ISCO in the Dutch data for 1989 and 1993 (there are no earlier time points in the data base). What can be said about the three countries is that at any time point in the table the percentage of school leavers in apprenticeships was higher in the Netherlands than in Scotland, and higher in Scotland than in Ireland. The development in number of apprentices shows similar curves for Ireland and Scotland, with a steep fall in the early 1980 and a slow rise towards the end of the1990s, but the fall was deeper in Scotland and the rise less clear. Because of this, and because the percentage of apprentices in the Netherlands dropped heavily in the mid-1990s, in numbers of apprentices the three countries were much closer to each other towards the end of the 1990s than they were in 1989. On this point Ireland and Scotland were also much closer than in 1980, even though the occupational make-up of their apprenticeship systems diverged.

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Table 1: Occupational Class (EGP) of Apprentices, 1995/1997*

	Ireland 1997	Scotland 1995	Netherlands 1997	France 1995
I - Upper service class	0.5	1.5		
II - Lower service class	1.4	2.8	4.4	4.4
IIIa – Upper routine non-manual	1.4	11.8	14.6	**24.7
IIIb – Lower routine non-manual	4.2	4.8	18.6	**
IVa – Small proprietors	0.5			
IVb - Self-employed	0.5			
IVc – Farmers			0.1	0.2
V - Lower tech./manual supervisory	0.5		3.3	0.6
VI – Skilled manual workers	88.9	64.5	33.7	21.5
VIIa – Semi-/unskilled manual w.	1.4	14.0	19.4	47.1
VIIb – Agricultural workers	0.9	0.8	5.9	1.4
Total	100.0	100.0	100.0	100.0
N	216	400	1034	497

*Data in all tables and figures refer to position of second level system leavers at the time of the survey, i.e. 1-1.5 year after leaving full-time secondary education.
**France IIIa/IIIb = III (no distinction coded)

(source: Hartkamp and Rutjes, 2000)

Table 2: Occupational Position (ISCO) of Apprentices, 1995/1997

	Ireland 1997	Scotland 1995	Neth. 1997	France 1995
1 – Legislators, senior officials and managers	**1.4**	**1.2**	**0.2**	
2 – Professionals	**1.4**	**2.7**	**0.1**	**0.2**
3 – Technicians and associate professionals	**1.8**	**4.0**	**16.6**	**4.8**
32 - Life science and health associate professionals		0.2	13.0	4.0
323 – nursing and midwifery associate professionals			*10.4*	
4 – Clerks		**11.2**	**4.0**	**3.4**
41 – Office clerks		10.5	2.7	2.8
419 – other office clerks		*5.2*	*0.3*	*0.4*
5 – Service workers and market sales workers	**14.7**	**18.7**	**22.5**	**33.0**
51 – Personal and protective services workers	12.8	17.0	11.3	20.5
512 – housekeeping and restaurant service workers	*3.7*	*3.0*	*3.4*	*9.8*
513 – personal care and related workers		*2.2*	*7.2*	*0.8*
514 – other personal service workers	*9.2*	*11.7*	*0.6*	*10.0*
52 – Models, salespersons and demonstrators	1.8	1.7	11.2	12.4
522 – shop, stall and market salespersons and demonstrators	*1.8*	*1.7*	*11.2*	*12.4*
6 - Skilled agricultural and fishery workers		**2.0**	**5.1**	**2.8**
61 – Skilled agricultural and fishery workers		2.0	5.1	2.8
7 - Craft and related trades workers	**77.1**	**55.2**	**33.5**	**46.7**
71 – Extraction and building trades workers	16.5	28.4	17.5	20.1
712 – building frame and related trades workers	*2.8*	*14.4*	*9.2*	*6.4*
713 – building finishers and related trades workers	*11.5*	*9.0*	*4.7*	*13.2*
714 – painters, building structure cleaners and related tr.w.	*1.8*	*5.0*	*3.6*	*0.6*
72 - Metal, machinery and related trades workers	34.4	22.2	11.5	14.5
720 – metal, machinery and related trades workers				*9.8*
721 – metal moulders, welders, sheet-metal workers etc.	*6.9*	*4.0*	*2.1*	*1.0*
723 – machinery mechanics and fitters	*13.3*	*11.4*	*4.7*	*2.6*
724 – electrical and electronic equipment mechanics and fitters	*14.2*	*5.5*	*4.0*	*0.8*
73 – Precision, handicraft, craft printing and related tr.w.	5.0	2.2	0.6	0.2
74 - Other craft and related trades workers	21.1	2.5	3.8	11.0
741 - food processing and related trades workers		*1.7*	*3.5*	*11.0*
742 – wood treaters, cabinet-makers and related trades workers	*20.2*	*0.2*	*0.1*	
8 - Plant and machine operarors and assemblers	**1.4**	**3.0**	**7.4**	**8.0**
82 – Machine operators and assemblers	1.4	1.7	3.5	6.6
83 – Drivers and mobile plant operators		1.0	3.3	0.4
9 – Elementary occupations	**2.3**	**2.0**	**10.7**	**1.0**
91 - Sales and services elementary occupations		0.5	6.5	0.8
913 – domestic and related helpers, cleaners and launderers			*6.2*	*0.8*
93 – labourers in mining, construction, manufacturing and trade	1.4	1.0	3.8	0.2
Total	**100.0**	**100.0**	**100.0**	**100.0**
N	**218**	**402**	**1164**	**497**

(shown: all 1 digit groups,
2 digit groups with >= 3.0% in at least one country,
3 digit groups with >=5.0% in at least one country)

(source: Hartkamp and Rutjes, 2000)

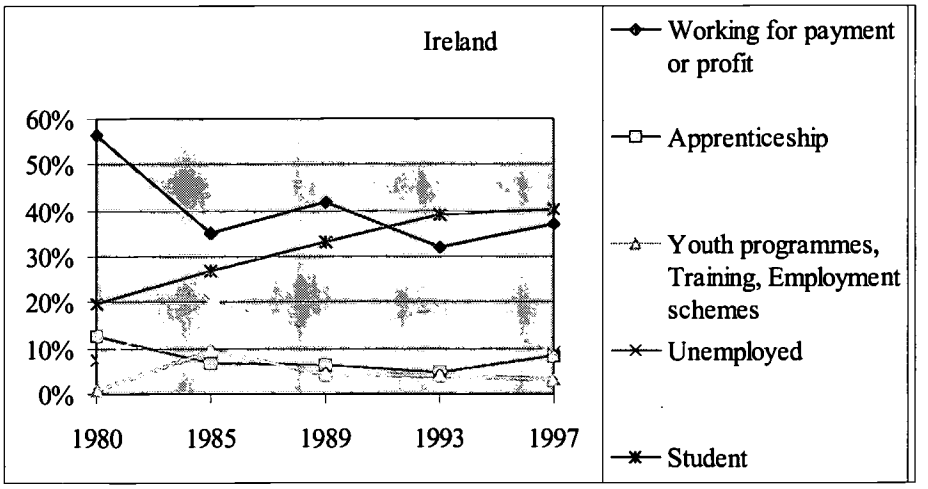
Table 3: Principal Activity of School Leavers, 1980-1997

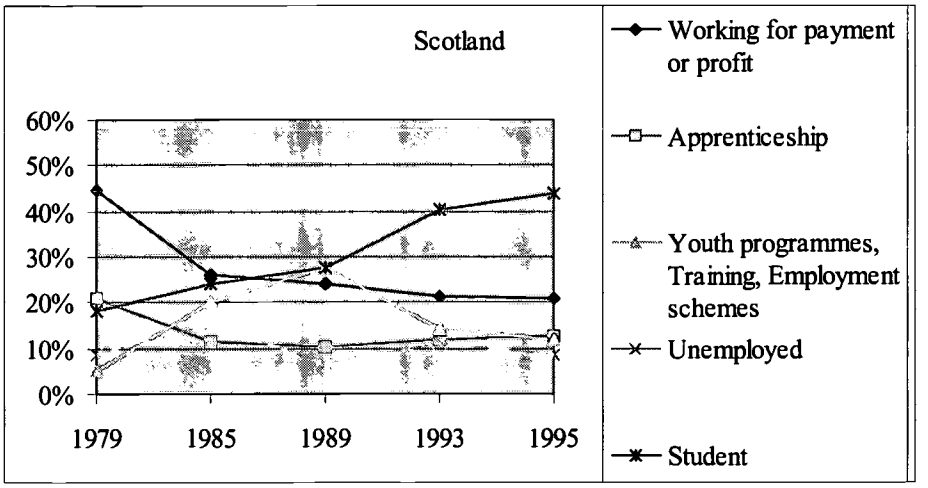
Ireland	1980	1985	1989	1993	1997
Working for payment or profit	56.6	35.3	41.7	32.1	37.3
Apprenticeship	12.6	6.6	6.5	4.7	8.2
Youth programmes, Training, Employment schemes	0.8	9.3	4.2	3.9	3.0
Unemployed	7.6	20.7	12.9	18.6	9.2
Student	19.9	26.8	33.2	39.2	40.2
National service					
Other	2.5	1.3	1.5	1.6	2.1
Total	100.0	100.0	100.0	100.0	100.0
n	3404	2067	1987	2192	2654

Scotland	1979	1985	1989	1993	1995
Working for payment or profit	44.4	26.2	24.0	21.3	21.1
Apprenticeship	21.0	11.5	10.1	11.6	12.6
Youth programmes, Training, Employment schemes	5.2	20.2	27.5	14.1	11.7
Unemployed	8.8	15.4	6.5	11.0	8.5
Student	18.1	24.0	27.5	40.2	43.9
National service					
Other	2.5	2.7	4.3	1.8	2.2
Total	100.0	100.0	100.0	100.0	100.0
n	5948	5518	4753	3641	3192

Netherlands			1989	1993	1997
Working for payment or profit			37.6	29.9	47.3
Apprenticeship			21.4	20.5	13.8
Youth programmes, Training, Employment schemes				1.4	0.8
Unemployed			3.8	4.1	2.6
Student			24.1	34.7	34.3
National service			7.9	7.1	
Other			5.2	2.3	1.2
Total			100.0	100.0	100.0
n			16236	17728	11488

Figure 1a: Principal Activity of School Leavers, 1980-1997 (%)





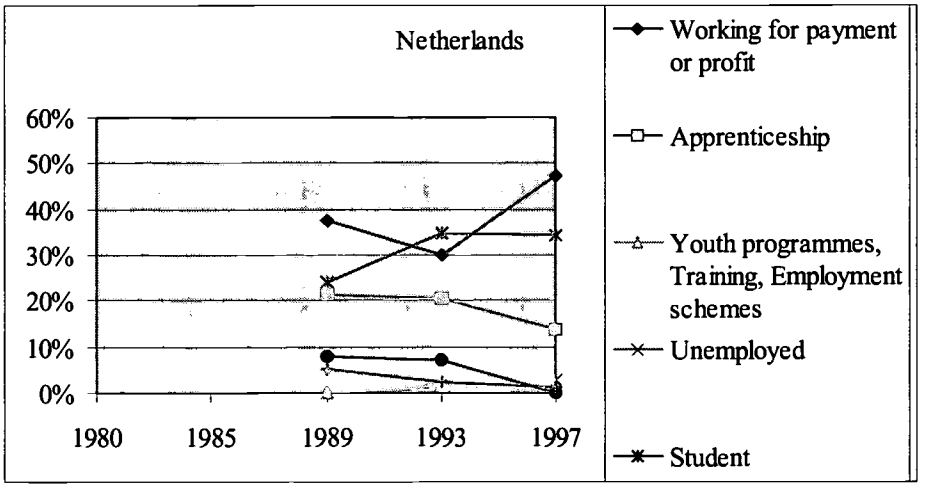
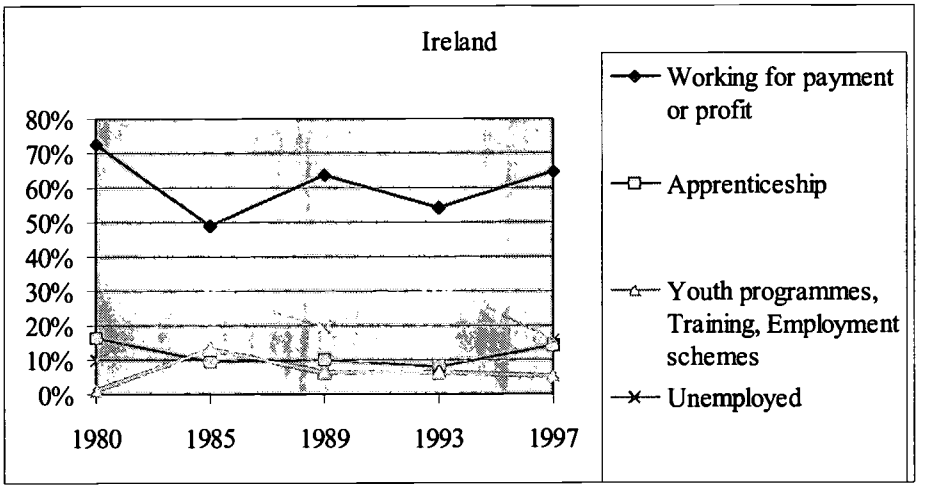
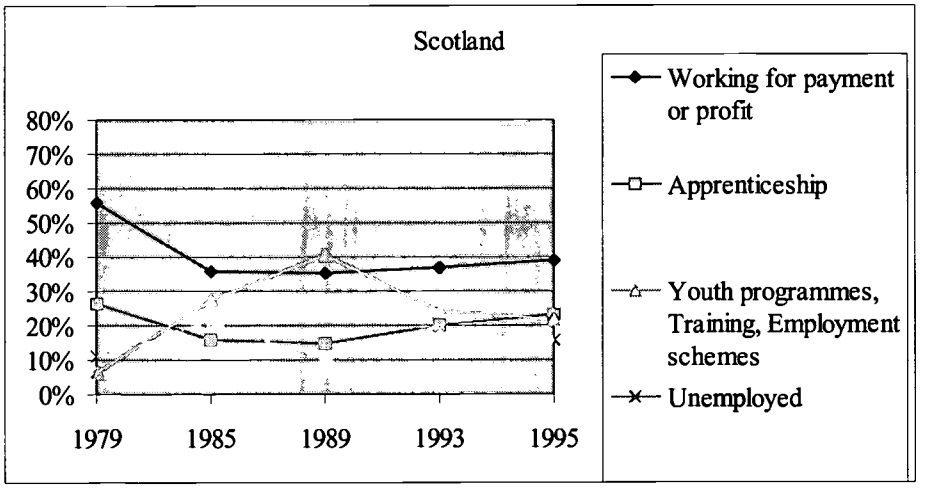


Figure 1b: Principal Activity of School Leavers, 1980-1997 - Active Population





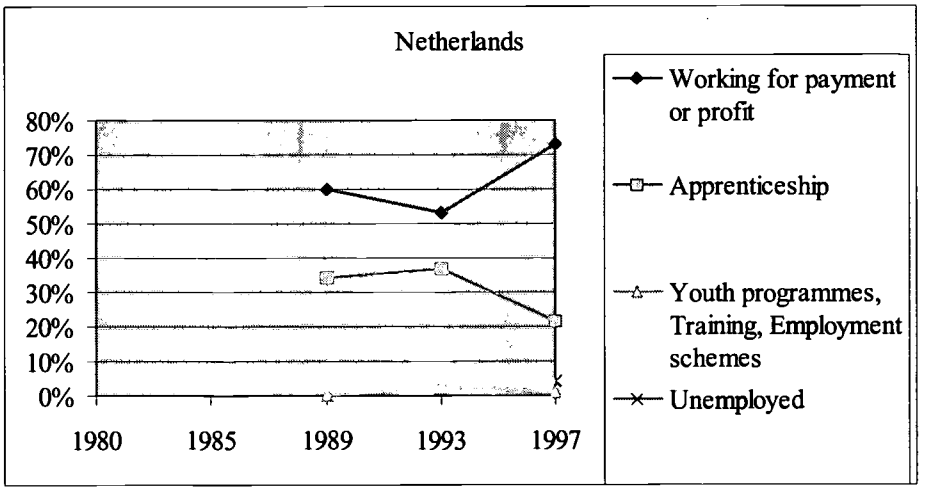
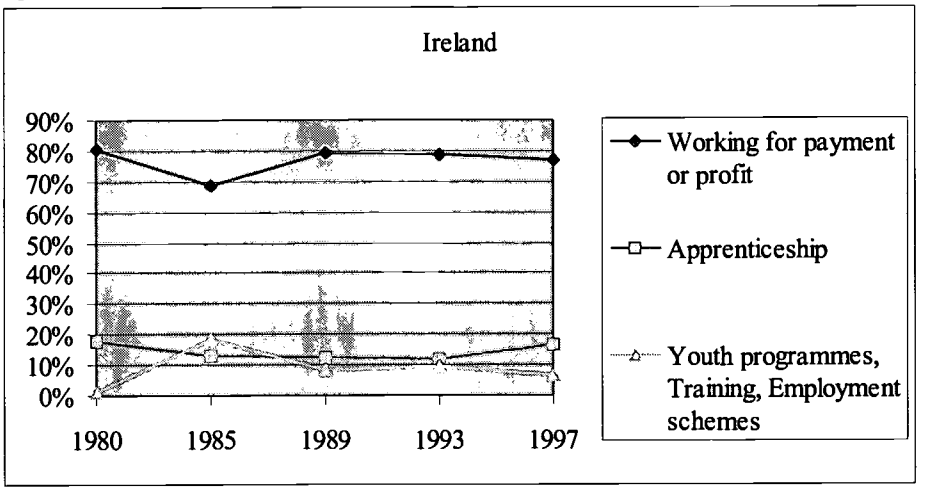
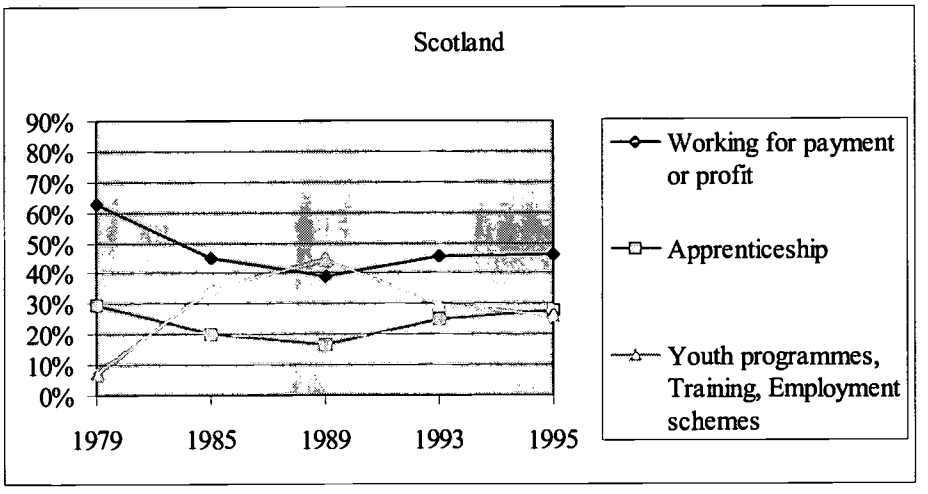


Figure 1c: Principal Activity of School Leavers, 1980-1997 - Working Population





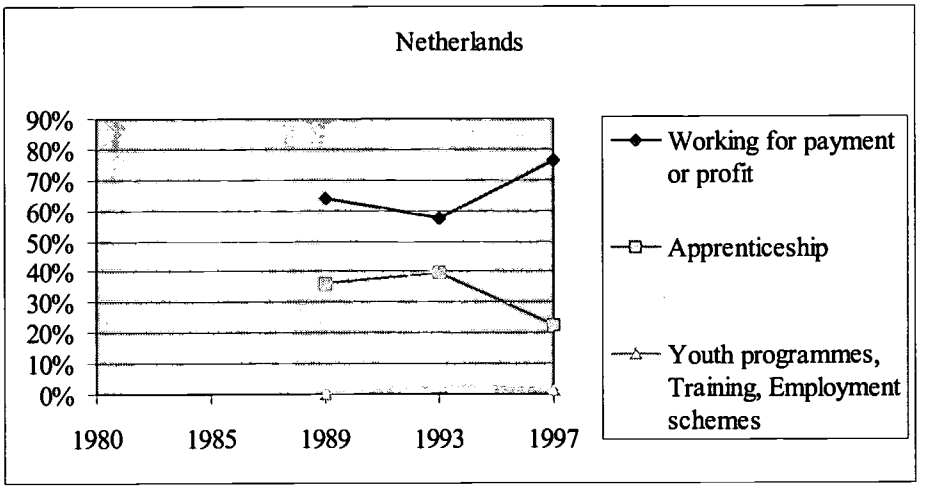
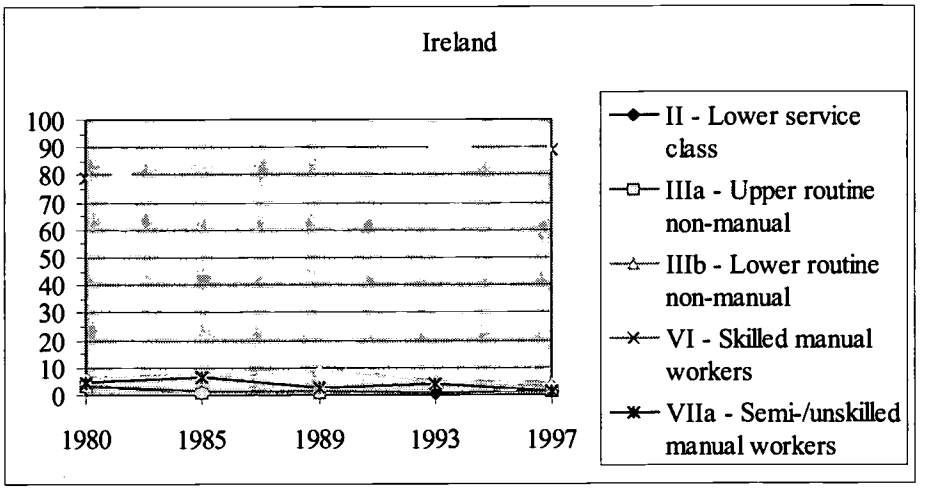


Figure 2: Social Class Position (EGP) of Apprentices, 1980-1997 (%)



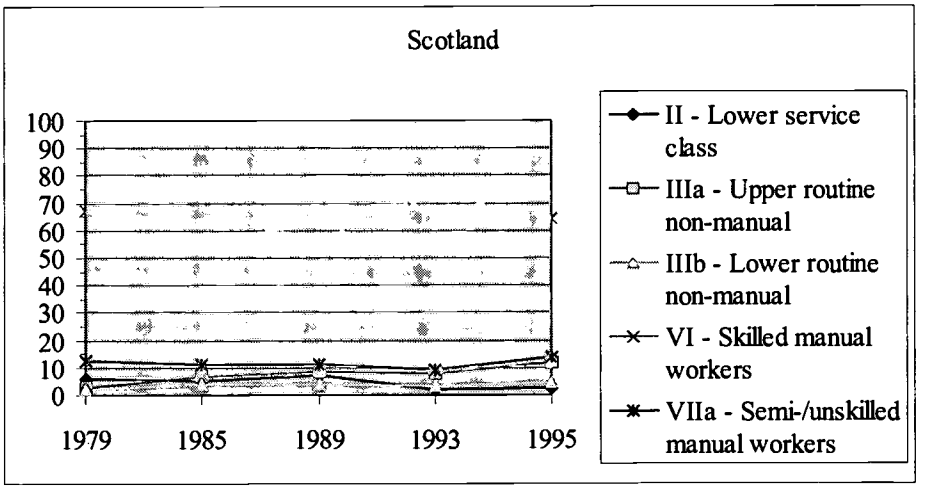
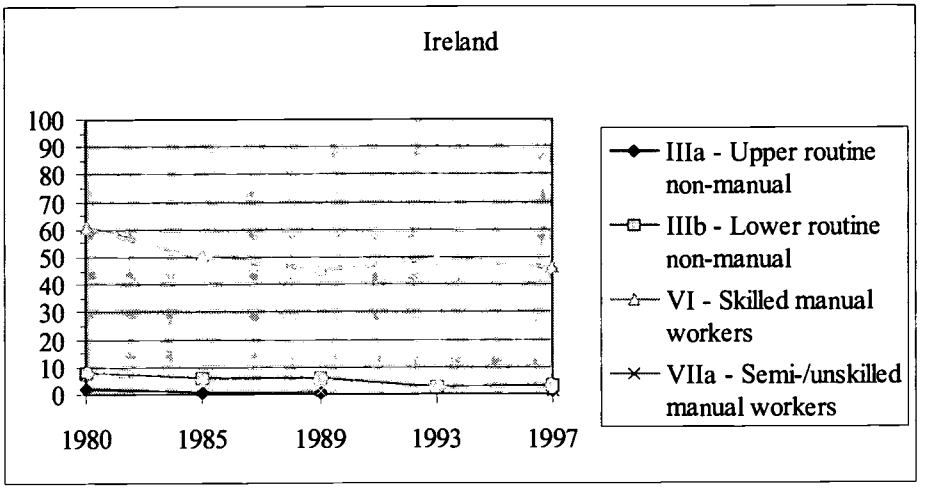
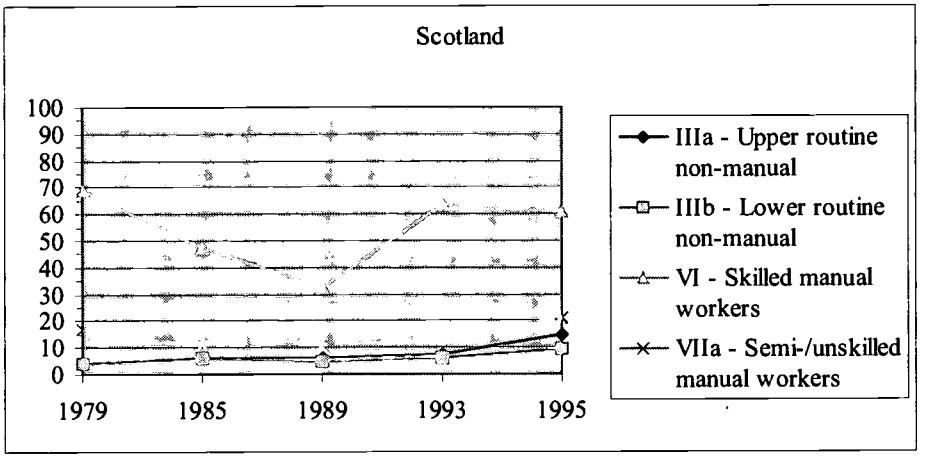


Figure 3: Proportion Apprentices of the Total Working Population* by EGP class, 1980-1997 (%)





*Total working population = school leavers 'working for payment or profit', apprentices or in 'youth programmes/training/employment schemes' at the time of the survey.

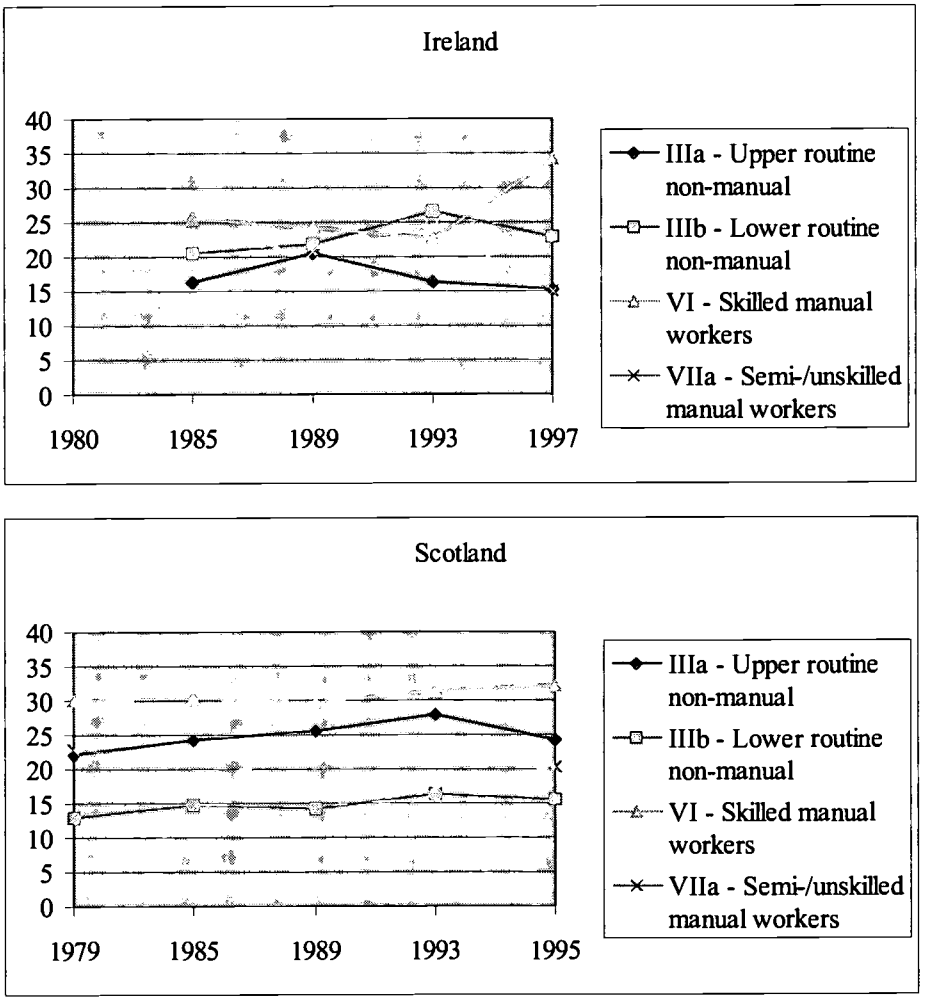
Table 4: Social Class Position (EGP) of School Leavers by Principal Activity*, 1980-1997 (%)

Ireland	1980		1985		1989		1993		1997	
EGP Scale of Social Class Position	Work	**Appr.**	Work	**Appr.**	Work	**Appr.**	Work	**Appr.**	Work	**Appr.**
I - Upper service class	1.2	**2.1**	0.8		0.6	**1.6**	0.3		0.3	**0.5**
II - Lower service class	8.3	**3.5**	7.8	**1.5**	6.3	**1.6**	4.8	**1.0**	5.7	**1.4**
IIIa - Upper routine non-manual	44.0	**3.5**	19.2	**0.7**	23.7	**0.8**	18.3		18.3	**1.4**
IIIb - Lower routine non-manual	16.2	**6.1**	23.0	**7.5**	24.0	**9.4**	30.0	**4.9**	27.3	**4.2**
IVa - Small proprietors	0.3	**0.5**	0.7	**0.7**	0.5	**0.8**	0.6		0.5	**0.5**
IVb - Self-employed	0.4		0.4		0.1		0.7		1.3	**0.5**
IVc - Farmers	0.5	**0.2**	0.6		0.1		0.1		0.2	
V - Lower technical / manual supervisory workers	0.8	**0.2**	0.3		0.6		0.3		1.5	**0.5**
VI - Skilled manual workers	11.4	**79.2**	15.5	**82.8**	15.6	**83.5**	13.2	**90.2**	22.6	**88.9**
VIIa - Semi-/unskilled manual workers	13.1	**4.4**	25.3	**6.7**	23.2	**2.4**	26.9	**3.9**	18.2	**1.4**
VIIb - Agricultural workers	3.7	**0.2**	6.4		5.2		4.7		3.9	**0.9**
Total	100.0	**100.0**	100.0	**100.0**	100.0	**100.0**	100.0	**100.0**	100.0	**100.0**
Count	1864	**427**	708	**134**	826	**127**	703	**102**	981	**216**

Scotland	1979			1985			1989			1993			1995		
EGP Scale of Social Class Position	Work	**Appr.**	*YPTES*	Work	**Appr.**	*YPTES*	Work	**Appr.**	*YPTES*	Work	**Appr.**	*YPTES*	Work	**Appr.**	*YPTES*
I - Upper service class	0.7	**2.6**		0.2	**0.3**		0.2	**5.0**	*1.4*	0.6	**2.1**	*1.2*	0.9	**1.5**	
II - Lower service class	4.5	**6.1**	*2.5*	4.5	**5.3**	*1.2*	4.9	**7.1**	*2.0*	2.2	**2.1**	*2.2*	2.9	**2.8**	*1.7*
IIIa - Upper routine non-manual	32.3	**2.8**	*13.9*	33.8	**6.5**	*22.7*	39.5	**8.7**	*19.6*	38.2	**7.6**	*32.2*	29.3	**11.8**	*30.6*
IIIb - Lower routine non-manual	17.8	**1.7**	*17.2*	18.1	**4.2**	*17.4*	15.6	**4.0**	*17.2*	23.5	**3.6**	*18.2*	20.2	**4.8**	*20.6*
IVa - Small proprietors															
IVb - Self-employed															
IVc - Farmers	0.3	**0.1**	*0.4*								**0.2**	*0.8*	0.4		*0.3*
V - Lower technical / manual supervisory workers	3.0	**3.6**	*1.2*	3.9	**5.2**	*0.7*	4.7	**5.2**	*1.2*	1.4	**1.9**	*0.8*	1.3		*1.1*
VI - Skilled manual workers	12.4	**67.3**	*23.8*	10.5	**64.5**	*34.9*	10.4	**56.5**	*36.4*	7.8	**72.9**	*25.5*	13.1	**64.5**	*25.6*
VIIa - Semi-/unskilled manual workers	26.4	**12.6**	*38.5*	26.0	**11.0**	*20.5*	21.8	**11.4**	*17.9*	23.6	**9.3**	*15.7*	27.7	**14.0**	*15.6*
VIIb - Agricultural workers	2.6	**3.2**	*2.5*	2.9	**2.9**	*2.6*	3.0	**2.1**	*4.2*	2.7	**0.2**	*3.3*	4.3	**0.8**	*4.7*
Total	100.0	**100.0**	*100.0*	100.0	**100.0**	*100.0*	100.0	**100.0**	*100.0*	100.0	**100.0**	*100.0*	100.0	**100.0**	*100.0*
Count	2513	**1221**	*244*	1291	**617**	*886*	1117	**481**	*1233*	631	**420**	*490*	559	**400**	*360*

*Principal activity (at the time of the survey):
Work = 'working for payment or profit'
Appr. = apprentice
YPTES = in Youth Programme, Training, Employment Scheme

Figure 4: Distribution of Total Working Population* over Social Class (EGP) (%)



*Total working population = school leavers 'working for payment or profit', apprentices or in 'youth programmes/training/employment schemes' at the time of the survey.

Table 5: Occupation (ISCO-88) of Apprentices, 1980-1997(%)

	Ireland					Scotland					Netherlands		
	1980	1985	1989	1993	1997	1979	1985	1989	1993	1995	1989	1993	1997
1 - Legislators, senior officials and managers	1.4	0.7			1.4	0.2	0.3	1.2	0.5	1.2	0.3	0.1	0.1
2 - Professionals	3.3	0.7	2.4	1.0	1.4	4.2	2.8	8.3	2.1	2.7	0.8	1.5	0.1
3 - Technicians and associate professionals	1.4	0.7	1.6		1.8	6.5	4.1	5.6	4.3	4.0	24.0	19.8	15.0
4 - Clerks	4.0					3.7	7.6	6.4	6.9	11.2	2.0	3.3	4.4
5 - Service workers and market sales workers	12.4	22.2	20.5	12.7	14.7	8.2	18.5	16.0	18.3	18.7	21.4	23.2	23.0
6 - Skilled agricultural and fishery workers						1.3	1.3	1.5	2.4	2.0	0.2	0.2	5.0
7 - Craft and related trades workers	73.0	71.1	72.4	85.3	77.1	68.1	59.2	52.4	60.5	55.2	40.9	41.7	32.5
8 - Plant and machine operators and assemblers	3.8	1.5	0.8	1.0	1.4	3.9	2.6	4.4	3.3	3.0	3.3	4.4	6.8
9 - Elementary occupations	0.7	3.0	2.4		2.3	3.9	3.7	4.2	1.7	2.0	7.1	5.9	13.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Count	426	135	127	102	218	1219	617	481	420	402	1715	2619	1377

Table 6: Proportion Apprentices of the Total Working Population* by ISCO category, 1980-1997 (%)

	Ireland						Scotland						Netherlands			
						*% in class***						*% in class**				*% in cl**
	1980	1985	1989	1993	1997	*mean*	1979	1985	1989	1993	1995	*mean*	1989	1993	1997	*mean*
1 - Legislators, senior officials and managers	20.0	8.3			14.3	*1.2*	10.7	10.5	21.4	5.9	31.3	*1.2*	9.3	2.0	0.9	*1.8*
2 - Professionals	8.4	1.9	6.0	3.3	6.4	*5.2*	33.6	28.3	40.4	33.3	55.0	*2.5*	6.2	27.1	2.7	*1.8*
3 - Technicians and associate professionals	17.1	5.0	8.7		12.1	***2.1***	52.3	32.9	27.8	21.4	22.2	***4.2***	19.3	35.8	17.2	***21.8***
4 - Clerks	1.9					***20.4***	4.7	6.3	3.9	6.7	13.6	***26.4***	6.3	6.8	7.1	***12.3***
5 - Service workers and market sales workers	14.2	12.8	9.6	4.6	9.1	***26.8***	14.0	18.9	13.3	24.8	26.4	***20.4***	18.1	31.8	20.9	***24.9***
6 - Skilled agricultural and fishery workers						*0.7*	27.6	18.2	11.1	31.3	21.1	*2.1*	18.8	66.7	19.1	*2.0*
7 - Craft and related trades workers	57.3	48.0	47.2	50.9	45.8	***23.5***	65.2	44.3	31.9	57.9	60.7	***29.1***	46.9	59.6	41.8	***19.9***
8 - Plant and machine operarors and assemblers	16.0	6.9	1.9	2.2	4.3	***4.8***	21.2	11.9	17.5	23.0	15.0	***5.0***	19.4	36.6	18.2	***5.3***
9 - Elementary occupations	1.6	2.2	1.7		3.3	***15.4***	11.2	8.1	7.7	5.9	7.1	***9.2***	16.7	16.4	29.6	***10.4***
Total	18.4	15.5	13.1	12.5	17.8	*100.0*	30.7	22.1	17.0	27.3	30.5	*100.0*	22.8	32.9	21.6	*100.0*
n (working, apprentice, in programmes and schemes)	2319	869	967	819	1220		3975	2793	2830	1538	1318		7528	7954	6378	

*Total working population = school leavers 'working for payment or profit', apprentices or in 'youth programmes/training/employment schemes' at the time of the survey.
**% in class mean: mean of the total size of the ISCO class (the % of the total working population that falls in the ISCO class) (see table 7)

Table 7: Distribution of the Total Working Population over ISCO categories, 1980-1997 (%)

	Ireland						Scotland						Netherlands			
	1980	1985	1989	1993	1997	mean	1979	1985	1989	1993	1995	mean	1989	1993	1997	mean
1 - Legislators, senior officials and managers	1.3	1.3	0.9	0.9	1.7	1.2	0.7	0.7	1.0	2.2	1.2	1.2	0.7	1.2	3.4	1.8
2 - Professionals	7.2	6.2	5.1	3.7	3.8	5.2	3.8	2.1	3.5	1.7	1.4	2.5	3.0	1.8	0.6	1.8
3 - Technicians and associate professionals	1.5	2.3	2.4	1.3	2.8	2.1	3.8	2.7	3.4	5.4	5.4	4.2	28.3	18.2	18.7	21.8
4 - Clerks	37.6	15.2	19.1	15.3	14.7	20.4	23.9	26.8	28.0	28.2	25.1	26.4	7.4	15.9	13.5	12.3
5 - Service workers and market sales workers	16.0	26.9	27.9	34.3	28.7	26.8	18.0	21.6	20.5	20.2	21.5	20.4	26.9	24.0	23.7	24.9
6 - Skilled agricultural and fishery workers	0.5	1.2	0.7	0.9	0.2	0.7	1.5	1.6	2.2	2.1	2.9	2.1	0.2	0.1	5.7	2.0
7 - Craft and related trades workers	23.5	23.0	20.2	20.9	30.0	23.5	32.1	29.5	27.9	28.5	27.8	29.1	19.9	23.0	16.8	19.9
8 - Plant and machine operarors and assemblers	4.3	3.3	5.4	5.5	5.6	4.8	5.7	4.8	4.2	3.9	6.0	5.0	3.9	4.0	8.0	5.3
9 - Elementary occupations	8.2	20.6	18.3	17.3	12.6	15.4	10.5	10.2	9.2	7.7	8.6	9.2	9.7	11.8	9.6	10.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
n	2319	869	967	819	1220		3975	2793	2830	1538	1318		7528	7954	6378	

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