

The effect of national institutional differences on education/training to work transitions in Europe: a comparative research project (Catewe) under the TSER programme
Damian F. Hannan et al.

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The effect of national institutional differences on education/training to work transitions in Europe: a comparative research project (CATEWE) under the TSER programme

Damian F. Hannan et al.¹

Abstract

The paper presents a comparative empirical study on school to work transitions in a range of European countries. The project (CATEWE, 1996-2000) is funded by the TSER programme. Discussed are the main conceptual and methodological approaches, empirical data bases, progress to date with the study and some initial results from a related earlier research project carried out under the Leonardo da Vinci programme.

The main objectives of the CATEWE project are to:

- a) develop a comparative conceptual framework to study school to work transitions in EU countries with different institutional systems, and*
- b) apply that model to both comparative stock analyses of labour force surveys (LFS) in most EU countries, and comparative flow analyses of school to work transition surveys (SLS) in five EU countries – France, Ireland, the Netherlands, Scotland and Sweden.*

To do this effectively we need to develop

- c) a set of comparatively defined variables which adequately capture the complexities of school to work transitions in France, Ireland, the Netherlands, Scotland and Sweden – as measured both by ‘flow statistics’ in their national school to work transition surveys and as ‘stock’ statistics in their national labour force surveys.*

¹ The ESRI coordinates the project. The following are the main researchers and research centres in each country: participants D.F. Hannan and E. Smyth, ESRI, Dublin; D.Raffe, CES, Edinburgh; H. Rutjes, DESAN, Amsterdam; R. van der Velden, ROA, Maastricht; M.Mansuy and P. Werquin, CEREQ, Marseilles; W. Mueller, MZES, Mannheim.

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List of selected abbreviations used in this article

CATEWE	Comparative Analysis of Transitions from Education to Work in Europe (TSER project)
CLFS	European Community Labour Force Survey
DG	Directorate General (of the European Commission)
ET	education/training
EU	European Union
FE	further education
ILM	internal labour market
ISCED	International Standard Classification of Education
LFS	labour force survey
LM	labour market
OLM	occupational labour market
SLS	school leavers survey
TIY	Transition in Youth
TSER	Targeted Socio-Economic Research
VTLMT	Vocational Training and Labour Market Transitions (TSER project)

1. Introduction

The main reason why comparative research on education/training to work transitions in European countries is important is its unique ability to assess the extent to which education, training and labour market integration processes are similar or different across EU national boundaries. If the same market and institutional processes operate in the same way and with the same outcomes and relationships across all countries there would be no need for comparative research. If, however, there are important national systemic differences in the complex relationships between individuals' social characteristics, education/training achievements and labour market outcomes then it is important for both research and policy purposes that these national differences be elucidated. The main purpose of the CATEWE research project is to do this.

The project builds on previous efforts in this field to develop a more sophisticated and comprehensive conceptual framework for this purpose. It constructs and uses a more comprehensive and standardised set of databases, and sets out to analyse these in more detail than previous efforts.

Four themes of that analysis appear most relevant to the aims of Cedefop's second report on vocational training research in Europe: the issue of educational and employment exclusion (point 7); detailed longitudinal surveys of education/training to work transitions (point 8); and the extent of 'matching' between education/training contents and levels and employment/occupational outcomes (point 9), with particular reference to low-skilled or poorly qualified school leavers (point 11).

The project is a comparative sociological and economic, empirical study on school to work transitions in a range of European countries. It is funded by former DG12² under the TSER programme (the CATEWE project, 1996-2000). This paper describes the main concep-

tual and methodological approaches to the study, the empirical databases used, progress to date with the study and some initial results from a related earlier research project carried out under the Leonardo (DG22³) programme. Since the research only started in December 1997 (to December 2000) and we have just started the analyses of the integrated, comparative databases we have no findings to report from these analyses. However we do provide some preliminary results from an earlier related comparative research project on early school leaving carried out under the Leonardo, DG22 programme (1997-98).

The main objectives of the CATEWE project are to:

- 1) develop a comparative conceptual framework to study school to work transitions in EU countries with different institutional systems, and
- 2) apply that model to both comparative stock analyses of labour force surveys (LFS) in most EU countries, and comparative flow analyses of school to work transition surveys (SLS) in five EU countries – France, Ireland, the Netherlands, Scotland and Sweden.
- 3) To do this effectively we need to develop a set of comparatively defined variables which adequately capture the complexities of school to work transitions in France, Ireland, the Netherlands, Scotland and Sweden – as measured both by 'flow statistics' in their national school to work transition surveys and as 'stock' statistics in their national labour force surveys.

The cross-national databases on national school leavers surveys contain almost 100 comparatively defined variables – though with many missing variable cells for some countries. These cover social background, initial and continuing educational/training variables, initial labour market experience vari-

² Directorate General 12, since 2000: Directorate General 'Research'

³ Directorate General 22, since 2000: Directorate General 'Education and Culture'

ables. In addition to analyses of current school leavers' and labour force surveys a limited time series analyses of these school leavers' surveys will be carried out for Ireland and Scotland (1980–96) and for the Netherlands since 1988. In addition limited analyses will also be carried out on a comparative database of six-year follow-up surveys (1992–98) carried out in France and Ireland, and for a shorter period of observation in Sweden.

This paper is divided into five sections:

- a) the conceptual framework,
- b) study design and construction of comparative databases,
- c) progress to date,
- d) discussion of some relevant results from an earlier related study, and
- e) conclusions.

2. A conceptual framework for comparative research on education/training to work transitions in Europe

Considering the varying institutional structure of European education/training systems and the varying national structure of education/training (ET) and labour market (LM) links, comparative European research on education to work transition is underdeveloped. We have only an incomplete and imprecise knowledge of the nature of the varying relationships across the different European countries, and we do not sufficiently understand the similarities and differences in these respects between EU countries, nor the mechanisms that can explain them. In the following section we will briefly discuss the major lines of research that have been pursued, highlighting the main gaps in existing knowledge.

The most influential conceptual approach has been that of Maurice, Sellier and Silvestre (1982). They conducted a detailed analysis of

work organisation, job recruitment and occupational career patterns in a small number of selected French and German enterprises. Proposing a theory of *societal effects* they argued that the different kinds of qualifications which are produced in the German and French educational systems, and their use by German and French employers, result in complex system-specific relationships between qualifications and jobs. They describe Germany as a system patterned along a *qualificational space*, while France is considered to be patterned along an *organisational space*. In Germany, a rather differentiated set of widely recognised ET qualification outcomes are produced in a bipolar educational/training system (the dual system), and these courses and qualifications are used by employers both to organise jobs/occupations and to allocate suitably qualified people to them. In France, formal education is much less vocationally oriented and less closely related to the kind of work to be subsequently taken up. Skills and qualifications required for specific work tasks are mostly obtained (both formally and informally) through on-the-job training and are thus specifically tied to the needs of individual firms. Such organisation-specific qualifications have a less convertible value when workers move between firms. The association between ET qualifications achieved and LM positions subsequently achieved is, therefore, institutionally weaker in France than in Germany.

More recent studies based on this national institutional approach have generalised it by using the more general theory of segmented labour markets, rather than conceiving cross-national differences as idiosyncratic 'societal effects'. Countries have been typified according to the predominance of either occupational labour markets (OLMs), as in Germany, or the predominance of (firm) internal labour markets (ILMs), as in France or Britain. Equally there are substantial national differences in the relative importance of organised interest groups, and nationally agreed corporate interest mediation arrangements between employers, trade unions and governments, in agreeing the curricula, examination processes and qualification arrangements for ET provision systems – and the content of vocational

education in particular. Systems where such agreed upon education/training system arrangements are institutionally linked to 'matched', occupationalised labour market arrangements, are obviously quite different from others where the ET system is quite autonomously organised and occupational labour markets are weak (see Marsden 1990; Marsden and Ryan 1990; Ryan, Edwards and Garonna 1991; Eyraud, Marsden and Silvestre 1990). Soskice (1990; 1993) extended these analyses by showing how institutional variables beyond the labour market itself help to explain the emergence of, and reliance on, occupational qualifications that are of general value beyond the individual firm. His comparative work emphasises the impact of the structure of coordination existing in an economy between the State, employers and unions. He distinguishes between liberal market economies (mainly the English speaking countries) with rather decoupled educational systems and inefficient systems of vocational training, industry coordinated systems (Germany and the Scandinavian countries), and group oriented market economies (mostly Japan).

Most of this work has been carried out within the broader field of industrial sociology and labour economics and is methodologically marked by traditions most characteristic of these fields. Most of the studies are based on comparisons of a rather limited number of, usually 'core', countries and are often restricted to small samples of firms in selected industries or locations. While this allows an in-depth analysis of the processes across two or three countries, or that operate within individual firms or workplaces across countries, the results of this approach can rarely be widely generalised.

An alternative conceptual and methodological approach has generally been pursued in studies more closely tied to the sociology of social stratification or education. These studies are usually based on national samples of individuals, representative of the adult population or of selected birth cohorts. The information collected generally includes social background data on individuals, the type and level of education and training received, and characteris-

tics of jobs and occupational careers. The most notable examples of such life history studies have been done in the 1970s in the US, Norway, and Poland, from 1980 onwards in Germany, and most recently also in the Netherlands and Sweden. Two comparative analyses from this tradition of research are of particular interest for the topic of this proposal: the studies of Allmendinger (1989) and studies done in the context of the CASMIN project. (See also Blossfeld and Shavit (eds.) 1993; Shavit and Müller (eds.) 1998.)

Allmendinger (1989) studies the effects of two specific aspects of educational systems – *stratification* and *standardisation* – on transition into employment and on patterns of associated work careers. Stratification refers to the extent of segmentation of the educational system into various tracks and their hierarchical organisation. Standardisation refers to the degree of comparability of specific educational qualifications within a given country in terms of the structure and content of curricula, examination standards as well as certification procedures. In countries like the USA both educational differentiation/stratification and national standardisation are low, while Germany is almost at the opposite extreme. Both dimensions contribute to the extent to which ET qualifications are used by employers as screening devices in selecting workers and allocating jobs to them. In her comparative study, based on life history data from Germany, Norway and the US, Allmendinger finds that stratification contributes to a closer link between the hierarchical levels of educational systems and various levels of work/occupational hierarchies, whereas standardisation contributes to early work career stability and less job search activity.

The main relevant contributions of the CASMIN project are its successful attempt to develop a unified conceptual framework and a classification schema for educational and vocational qualifications comparable for nine European countries with different educational systems, and its analysis of the relationships between such educational qualifications and occupational and class positions in the labour market (Müller et al. 1990; Müller and Karle 1993; Ishida, Müller and Ridge 1995). The

schema of educational qualifications is based on the twofold distinction between hierarchical levels of education on the one hand and the general (academic) or vocational nature of the qualification obtained on the other. While the empirical results indicate significant national similarities amongst the nations studied in the relationships between educational qualifications and labour market positions, they also show substantial national variations apparently due to specific national peculiarities of educational systems with their different historical roots as well as specific State policy interventions (particularly in the two east European countries analysed). The analyses also show the varying roles that education plays in intergenerational social mobility in the various countries.

An even more recent study in that research tradition (Müller and Shavit 1998) shows how varying national ET systems shape occupational attainment. In a comparative study of 13 European and other countries they find considerable between-country variation in the patterns of associations between educational qualifications and labour market outcomes. On the one hand, the strength of the association between educational qualification and occupational destinations appears to be clearly stronger in countries with higher degrees of stratification and vocational specificity in the ET system. On the other hand, the association appears to be weaker in countries with more general educational systems and larger proportions of the youth cohort achieving tertiary qualifications. While the study marks a significant advance the authors, however, point to several of its limitations. Its design is based on 'side by side' comparisons rather than on integrated and fully comparable data sets. It is somewhat limited in its analyses of the school to work transition process, being cross-sectional in nature, and labour market outcomes are measured mainly in terms of first stable jobs. The study is also limited in its coverage of important variables in the school to work transition process leading to stable employment.

While research discussed so far mainly attempts to elaborate and explain similarities and differences between countries in *objective*

patterns of ET-LM relationships, a few comparative studies have also addressed the varying *subjective* experiences and motivations of individuals in their transitions from school to work in various institutional and societal context. Although the empirical base using this biographical approach is still very limited a number of studies compare school to work transitions in England and Germany (Bynner and Roberts 1991; Evans and Heinz 1994; Roberts, Clark and Wallace 1994) and another study compares Canada and the United Kingdom (Ashton 1988; Ashton, Green and Lowe 1993). The evidence shows how significantly individual perceptions and people's life histories are affected by the different institutional arrangements and societal conditions which structure this crucial transition in different societies.

The main conclusions, therefore, one can draw from available studies is that the nature of both ET and LM systems, as well as the nature of the link between them, varies across European countries. In addition, it is clear that these national institutional differences have significant effects on socioeconomic inequalities in educational achievements, on labour market outcomes and on individual life course trajectories. The following appear to be the most important dimensions of national variation in these respects.

2.1 The degree of institutional standardisation of ET systems

National ET systems vary in the extent to which centralised and standardised national curricula and examination systems exist, or are 'quality controlled'; and are then used for selection/progression purposes for further education or for labour market entry. In some countries (e.g., Ireland), both curricula and examination are nationally standardised, and a pronounced emphasis is placed on educational level and on grades achieved in selection for third level education and in access to paid employment (Breen, Hannan and O'Leary 1995). In other countries (such as the United States), curricula and exams are not nationally standardised at second level, grades are awarded on a school or district basis and are therefore much less relevant in

selection for further education or subsequent labour market chances (see Rosenbaum and Kariya 1991). It should be noted that the different levels of the ET system within a country may differ from each other in these respects. For example, second level education may be relatively unstandardised while third level education may be highly standardised.

2.2 The extent and nature of differentiation within ET systems

Differentiation within ET systems concern

- a) the extent of division between general and vocational education, and the age and degree of selection into such different tracks/streams;
- b) the extent of formal differentiation or grading of educational achievement outcomes – at each stage/level of education; the degree of hierarchical ranking of educational achievement and the nature and degree of selection for progression to higher stages.

The degree of differentiation between academic and vocational ‘tracks’, courses or routes varies widely across countries (see Allmendinger 1989). The German and Dutch systems of education/training, for example, are highly differentiated institutionally with parents/pupils choosing from the age of 11 onwards what type of school and educational path is to be followed. In contrast, the Irish and Scottish systems are much more general and comprehensive, with relatively weak curricular tracking at second level (particularly lower second level), although pupils may specialise to some degree in particular types of subjects (see Hannan et al. 1993). One of the objectives of the proposed research will be to examine the extent to which such curricular specialisations in the latter countries – such as in vocational/technical subjects – have any equivalent LM effects which correspond to the strongly differentiated Dutch and German systems. These national institutional variations have obvious implications for access to appropriate vocational training and for the degree of matching (‘content congruence’) between type of training and type of occupation subsequently achieved.

The relative degree of hierarchical stratification of levels of educational achievement, or the relative significance of levels of education achieved versus other aspects of educational achievement, appears to be more significant in non-differentiated systems such as in the Irish case; though in all systems ‘level of education’ achieved is expected to be one of the most important variables in labour market integration. Related to such hierarchical ordering of achievements is the extent to which grades achieved in examinations are elaborated (and are used in selection) – varying from minimal ‘pass’/‘fail’ distinctions to A to D, E, F distinctions in each subject in all examinations in Ireland and Scotland (see Breen et al. 1995).

These different aspects of differentiation vary across EU countries – with maximal influence of vocational/general differentiation in the dual system countries and the Netherlands, while in the Irish and to a lesser extent the British and French cases the importance of both level of education and grades achieved in examinations are likely to be far more important in educational progression decisions and in selection for employment. These macro-level characteristics of ET systems are likely not only to affect the educational progression decisions of students and their parents but the nature of the whole ET-employment relationship.

The research will therefore pay particular attention to micro-level variables which reflect three aspects of educational differentiation: the highest stage/level of education achieved, educational/vocational track or degree of specialisation involved, and curricular level taken and grades achieved in examinations.

2.3 The links between ET and LM systems

Employers’ use of level and type of ET qualifications in employment decisions vary across countries and, within countries, between sectors and occupations. Employers’ evaluations of ET outputs impact on labour market entrants in two ways: first, in opportunities to obtain employment and, second, in the nature

and level of the job obtained: whether regular or temporary, full-time or part-time, occupational status and level of pay. The nature of the link between ET and LM entry can vary substantially: from situations of complete isolation, or 'decoupling' of the ET system from the LM system (in 'liberal and open' market economies) to one where both systems are highly interconnected. Drawing on a typology developed by Hannan, Raffe and Smyth, (1996) and presented in Figure 1, we can conceptualise these links as follows:

- a) *strong and direct, shared interlink*: Where employers and schools/trainers are jointly involved in the provision and delivery of training for young people, and where both employers and ET providers jointly agree on education/training requirements for specified occupations. This pattern is particularly evident in the German-speaking countries and Denmark where there is strong 'content' and 'level congruence' between educational outputs and labour market intake (see Konietzka and Solga 1995);
- b) *collinear linkage*: Here a substantial occupational labour market exists, training for specific occupational positions takes place in second-level schools, but there is little or no joint delivery of training for young people moving from school to the labour force. In the Netherlands, for example, over 1 000 detailed occupational categories, and over 120 occupational groups can be distinguished on the basis of the level and type of education required for entry. As a result, there is a highly developed occupational labour market served by a large and diversified set of education/training programmes provided on a full-time basis, with a moderate to high degree of congruence between course content and occupational position. Elements of such a collinear link exist in other systems. In most countries, for instance, there is a range of professional and higher technical positions where specified educational programmes at third level are required for entry;
- c) *no direct link but strong market signals from schools*: Although employers are not

directly involved in schooling or training, school achievement outcomes (examinations and qualifications) are publicly certified and used by employers in making recruitment decisions. Education systems are highly standardised but tend to be less differentiated in terms of school type or curricular tracking. There is a high degree of 'level congruence' between educational outputs and labour market outcomes, but little regulated 'content congruence'. In addition to 'levels', examination grades may be widely used in access to employment (see Breen, Hannan and O'Leary 1995). Such reliable measurements of 'general human capital' are, not unexpectedly, widely used in employment decisions. With the exception of the American and Canadian second-level systems, most of the English-speaking countries fall into this category, as does France and many of the Scandinavian countries;

- d) *school placement function*: a somewhat stronger version of (c) exists in countries like Japan, where besides open market 'reading' and matching of educational outputs to job offers, employers may be directly linked to schools by the school guidance service effectively acting as job placement officers in the employment system. This arrangement may be supported by, and officially acting in place of, the State employment service, as in Japan (Nakajima 1990; Rosenbaum and Kariya 1991);
- e) *no direct link and weak market signals*: the USA is the exemplar here. There is no national standardisation of the educational system at first or second level, and second-level education tends to be comprehensive and relatively undifferentiated. There also tends to be limited post-school training of those high school graduates or dropouts who do not go on to third level, compared to Germany for instance (Schupp et al. 1994). On the other hand, a much higher proportion of the cohort complete upper second level education and go on to third-level (or other further) education in the USA and Canada; and the third-level systems there appear to be much more open

Figure 1: A typology of education/training systems and labour market links: cross-classifying by level of standardisation, differentiation and link

School-work link	Degree of standardisation of ET system	
	High	Low
	Degree of differentiation of ET system	
	High	Low
Strong and direct link (dual system)	Germany Austria Switzerland Denmark	
Collinear link (diff. ET system linked to OLM)	Netherlands	
Decoupled and more general or comprehensive ET system but with strong market signals	United Kingdom France Sweden	Ireland
Decoupled school but with strong market signals and strong placement function		Japan
Decoupled with weak market signals		Canada USA

Source: Hannan, Raffae and Smyth 1996.

and flexible in terms of part-time and ‘second chance’ participation than is true for Germany, the UK (see Ashton et. al. 1993) or for Japan (Nakajima 1990). In these cases, there appears to be both weak ‘content congruence’ and weak ‘level congruence’, though high school graduates tend to be at some advantage in relation to school drop-outs, and third-level graduates have clear advantages over high school graduates (Rosenbaum and Kariya 1991).

Using the above three dimensions of national educational systems – standardisation, differentiation and ET/LM links – and crudely dichotomising each one we can derive the following typology of national ET systems.

As indicated there appear to be few differences between European countries in the de-

gree of standardisation of their ET systems at second level – at least relative to the United States. Although substantial differences do exist in how this is achieved and the extent to which it is centralised, for this initial purpose we can regard them as standardised. The dual system countries are highly standardised and differentiated, with strong and highly institutionalised relationships between ET systems and employers, etc. – particularly through the apprenticeship system. At the other extreme is the American system – relatively unstandardised, undifferentiated and with little if any institutionalised link between the ET and the employment systems. Most north and western European countries fit within the standardised and moderately to lowly differentiated box – though within this there are substantial differences in the extent of differentiation – particularly at up-

per second level, and also in the relative importance of apprenticeship/'alternance' arrangements in vocational training and labour market integration. The importance of these institutionalised differences between national systems in Europe will be explored below in the section on hypotheses.

Aside from such national ET system differences ET and LM relationships are also affected by labour market – particularly youth – characteristics.

2.4 Labour market contexts and employment decisions

The extent of differences between the adult and youth labour markets varies across countries. In some countries, the distinction is more marked with young people disproportionately concentrated in particular occupations, industries or types of firms. Points of entry into particular occupations or internal labour markets can be aged-based with certain segments disproportionately filled by younger workers (Ashton 1988; Ashton, Maguire and Spilsbury 1990). In other systems such 'youth jobs' segmentation is very limited. Segmentation can occur along a number of dimensions:

The main axes of segmentation are in terms of occupation, industry, firm size. These dimensions vary both within and between countries. Earlier conceptualisations of labour market segmentation posited a dualistic division between a primary sector (with higher paying and more secure positions) and a secondary sector (with relatively low paid unstable jobs) (see for example, Doeringer and Piore 1971; Averitt 1968). More recent approaches have moved away from this ideal type to emphasise the complexity of labour market segmentation (see, for example, Rubery and Wilkinson 1994). The approach adopted in our study draws upon these more sophisticated accounts, focusing on the diversity of labour market structures rather than positing a dualistic division.

The relative balance between occupational (OLMs) and internal labour markets (ILMs) is an important dimension of labour market

structure which also varies across societies (see, for example, Marsden and Ryan 1990). Occupational labour markets (OLMs) refer to labour market sectors where jobs are clearly defined in terms of content and have high levels of consistency across firms and industries. Workers in OLMs usually have educational qualifications or skills that are transferable from one employer to another (see Edwards 1979). In contrast, in internal labour markets (ILMs) only lower grade jobs are usually filled from outside the firm with mobility into most higher grade positions taking place after a period of training. Training tends to be firm-specific, taking place on-the-job, and consequently skills are not generally transferable to other firms (see Doeringer and Piore 1971). Occupational and internal labour markets may coexist within the same national system but the relative balance between the two forms varies between countries. OLMs tend to be more prevalent in Germany and the Netherlands and less prevalent in France, Italy and Ireland; Britain occupies an intermediate position, with considerable variation across sectors, but with a general decline in OLMs (Maurice, Sellier and Silvestre 1982; Marsden and Ryan 1990). However, even in countries where ILMs are prevalent, occupational labour markets tend to operate for more desirable LM positions, in particular professional employment.

The relative significance of occupational *and* internal labour markets is not only likely to be closely related to education/training systems but it is also likely to impact on the processes through which school leavers become integrated into stable employment. In a general and comprehensively oriented ET system and in an ILM-dominated labour market structure, new entrants to the labour market mainly learn relevant skills on-the-job. They are therefore more likely to enter the labour market at lower levels of occupational achievement, and are at a competitive disadvantage compared to insiders for higher responsibility posts, etc. In OLM systems a high proportion of entrants are more likely to find work which fits their occupationally specific qualifications. One would, therefore, expect that in the former case it is more difficult for school leavers – particularly the more poorly

qualified – to find stable employment: more job search time, more job shifting, less secure jobs; with unemployment more concentrated among new entrants (Esping-Andersen 1993). In these systems, the formation of a disadvantaged youth labour market segment becomes more likely, in particular under conditions in which demand for labour is low.

The youth labour supply is, therefore, differentiated by varying levels and types of educational and training experiences and qualifications, and the different social backgrounds of entrants. It is the way in which employers take account of these initial differences between potential young workers in making employment decisions that transforms these differences into enduring labour market opportunities. Thus, a crucial element in analysing the nature of labour market differentiation is to determine the factors used by employers in recruitment (and subsequent promotion) decisions to different labour market positions. In our analyses we pay particular attention to two general aspects of new job applicants' characteristics: their educational/training characteristics, as already discussed; and their ascribed, social background characteristics – particularly gender and social class.

3. Methods: design of study

An ideal research design would involve both stock analyses of labour force surveys – to study the ET and labour market relationships; and flow analyses of school to work transition surveys, as well as longer, panel surveys of early labour market histories. Existing labour force surveys contain a lot of information on current labour force status and more limited information on educational/training achievements; but very little information on educational/training or labour market history. Nevertheless they provide the best sources of uniform information on education/training and labour market relationships in all EU countries. There are no equivalent data sources on the flows from education/training into the labour market across EU countries, although a small number of EU countries carry out regular surveys of large samples of

young people who have left the educational system and entered the labour market, supplemented by follow-up surveys of their subsequent labour market and education/training histories. Ideally one would like such surveys to have much the same design and to have a large set of comparably defined variables/measurements for all countries of interest. However, data sources of this nature do not yet exist.

The labour force surveys (LFS) provide broadly comparable information on education/training and labour market characteristics across all EU countries. As such, the LFS is extremely useful in assessing the relationship between ET and LM systems across Europe. However, its usefulness as a data source for analysing transition behaviour is limited in a number of respects. First, most of the conventional labour force surveys have only limited information on education and training characteristics, and the categories used may also obscure important cross-national variations in education/training and labour market integration systems. Second, many such surveys have little or no information on the first jobs of young entrants to the labour market or subsequent detailed work histories. Third, because the sample covers all age groups, this may result in a very small number of labour market entrants in any given year. This makes it impossible to analyse country differences in the nature of the initial transition process. Fourth, these surveys rarely have information on the social background of respondents, thus obscuring variation between different groups of young people in the nature of the transition process. However, the national coverage of these surveys, their large sample sizes and comparable variable definitions mean that detailed comparative analyses can be carried out on the relationships between educational/training qualifications and current labour market statuses for different age/sex groupings in all EU countries. This kind of comparative analysis allows us to ground our SLS flow analyses of five EU countries within the wider EU system.

Surveys of school (or third-level) leavers (SLS) have much more potential for the analysis of

school to work transitions. These surveys allow us to examine in detail the relationship between social background, education/training characteristics and early labour market experience. This information can be supplemented by analyses of youth cohort or follow-up surveys, which give a more complete picture of the impact of education/training on longer periods of labour market experience. Since countries vary significantly in the pace, timing and patterns of the transition process, it is important to use longitudinal data to analyse the complexity of life histories among young people. In addition, changes in education/training policy and secular shifts in the economy will result in differences between cohorts of young people in their employment chances, access to further education and training, and so on. The school leavers' surveys are available for several points in time, allowing us to study the differences between cohorts of young people. However, such regular national school leavers' surveys are only carried out in a limited number of countries: France, the Netherlands, Ireland, the United Kingdom (Scotland), Sweden.

Although these surveys have not been designed to be comparable, they have substantial similarities. The five surveys comprise a year-group survey (Sweden), a labour market entrants' survey (France) and three follow-up school leavers' surveys – Ireland, Scotland and the Netherlands. Four of these surveys cover a cross-section of young people; the fifth (French) survey is targeted on leavers from specific courses. The surveys vary in the number and timing of follow-ups, and in the data they collect. For example, the most recent comparable surveys cover:

- a) Scotland: young people who left 'general' secondary education in 1993-94 (although some may have taken up various mixtures of general and vocational courses), surveyed in the spring of 1995. Vocational courses (FE colleges), apprenticeships and training schemes, as well as higher education, all count as destinations;
- b) Ireland: young people who left secondary education in 1995-96, surveyed in autumn 1997. This includes those who left Junior

or Leaving Certificate (including vocational and applied) and post-leaving certificate courses in 1995-96. Other (post-secondary) vocational courses count as destinations, together with apprenticeships, training schemes and third level education;

- c) France: young people who left general or vocational full-time (excluding general *baccalaureat* and agricultural courses) or apprenticeships in 1993-94. The survey was conducted in spring 1997 but the destinations in the data set refer to autumn 1996. Unlike the other surveys, the French (CEREQ) survey is based on labour market entry groups and does not include those who continued in the education system – for example, at university (see Becker et al. 1999);
- d) The Netherlands: young people who left secondary education (including MBO) courses in 1995-96, surveyed in autumn 1997. The data set excludes those who reentered another form of secondary education (e.g. those who entered MBO). Apprenticeships count as destinations, together with higher education;
- e) Sweden: young people who completed lower-secondary education in 1993, surveyed in spring 1997. Since most upper-secondary courses lasted two or three years, most sample members who entered upper-secondary education had left by the time of the survey, but a few were still there.

Therefore, while each survey covers a sample of young people in a given period after making a transition, the length of this period and, more importantly, the destination definitions of the transition, vary across countries. However, each survey effectively covers the school-to-work transition process – either prospectively or retrospectively – and therefore provide relatively sound comparable databases.

An inherent defect of the proposed study will be that its design neglects the direct observation of the behaviour of one crucial group of actors decisively influencing the ET-LM rela-

tionship on the side of labour demand: the strategies and selection preferences of employers in their personnel recruitment and job allocation decisions, which – as we have outlined above – are very likely to vary across countries. We recognise the importance of such information on the demand side of the labour market, and we will draw on research done by others on these issues insofar as this is possible.

The research maximises the potential of the labour force survey to ground our specific analysis in the broader European context, and uses the school leavers' surveys in the five countries to develop a conceptual and methodological framework for analysing youth transitions across Europe. One aspired objective of our research is to help move the existing national surveys towards greater comparability, as well as to help the development of such surveys in other EU countries initiating surveys of school leavers – for example, in Belgium and Portugal.

This research develops upon a substantial body of comparative research already carried out by the project partners. The network made an exploratory attempt to construct a common dataset, using a small number of variables for the Dutch, Irish and Scottish data on school leavers at one point in time (1991) (Hannan et al. 1993). In addition, a common dataset covering a range of variables has been developed for the Irish and Scottish surveys over the period 1980 to 1991 (Smyth and Surridge 1995; 1996). Two of the project partners (CES and ESRI) have carried out research for OECD on developing a conceptual framework for examining school to work transitions and have been involved in planning meetings for the OECD's current *Thematic review on transitions from initial education to working life* (see Hannan, Raffe and Smyth 1996). In addition four of the project partners (CES, Edinburgh; ESRI, Dublin; DESAN, Amsterdam; CEREQ, Marseilles) have completed a four nation comparative study on early school leaving for DG22 under the Leonardo *surveys and analysis* programme (1996-98.). This comparative research is based on a four-nation comparative dataset of school leavers' surveys in France, Ireland, the Neth-

erlands and Scotland. Some results from this comparative study are given at the end of this paper.

The following figure broadly indicates the type of information which will be used from the school leavers' surveys.

Data sources: School leavers' surveys for France, Ireland, Netherlands, Scotland, Sweden. Integration of three to five year follow-up surveys where available.
Sample characteristics: National samples of secondary level school system leavers.
Education and training characteristics: Level achieved; type of school/curriculum; general versus vocational education; vocational speciality; examination outcomes.
Individual and background characteristics: Age, gender, age of completion of education; parental socio-economic status and education for some national surveys.
Labour market entry characteristics: Labour force characteristics for first year in the labour market. Work careers available in follow-up surveys for three to six years in the labour force for France, Ireland and Sweden.
Labour market 'success': Employment status; type of job (full or part-time); occupation; industry, wages.
Periods covered: 1980 onwards for Ireland, Scotland; 1988 onwards for the Netherlands. Current data for Sweden and France.
Other outcomes: Household status; marital status; migration characteristics, etc.

Country selection

The selection of countries included in the study is partly based on the fact that these are the main countries that carry out school leavers' surveys on a regular basis and that researchers from these countries have been cooperating to explore their potential for comparative analyses. (Pottier 1993; Raffe 1993; Hannan et al. 1993; Smyth and Surridge 1995; 1996; Hannan, Raffe and Smyth 1996). The countries included do not represent all

the important dimensions of variation in ET and LM links in Europe but do differ substantially in these respects.

Ireland is perhaps at one extreme of the continuum where the second-level educational system is dominated by the vertically organised 'general education model', with a low level of horizontal, curricular/examination differentiation. Most schools are privately owned and managed, though highly State regulated. The curriculum and examination system is highly centralised and standardised (by State regulation), with State examination results being the main 'market signals'. The development of more general rather than specific (vocational) human capital is emphasised. The second level ET system is neither institutionally linked to employers nor formally differentiated to cater for occupational labour markets, although there has been some recent expansion of vocational training courses at upper second level. Although there are practically no institutional links between schools and labour markets, third level entry requirements and employment selection procedures pay particular attention both to level of examination taken as to grades in such examinations (Breen et al. 1995), with apparently little attention to vocationally specific specialisations, except in a limited range of craft and professional occupations.

In *Scotland* secondary schools are State-run and comprehensive (except for a very small private sector). The curriculum is general and follows national guidelines. There are vocational elements in the curriculum, but they are integrated into the general curriculum. There is no occupational specialisation or tracking as in some continental countries. Schools may have links with employers – for example, in the provision of 'work experience' which all secondary pupils are expected to obtain – but these tend to support the broadly general objectives of schools. This relative absence of formal curricular differentiation means that in Scottish, as in Irish, schools the vertical dimension is dominant. Progression either into further education or into the labour market is strongly influenced by the level of attainment in 'academic' examinations taken at the ages of 16, 17 and 18. In the past,

the main exception was that younger (16-year old) school leavers sometimes had an advantage compared to older school leavers, because of their opportunity to enter age-restricted apprenticeships or training opportunities. These opportunities have declined, and a majority of young people now stay at school beyond 16.

In contrast to Ireland, the Scottish system offers vocational alternatives to school at the upper-secondary level. Further education (FE) colleges provide full-time courses, typically in broad occupational areas or in 'transferable' skill areas such as catering or business and administration. Many younger school leavers enter work-based training programmes (apprenticeships or youth training programmes known as 'skillseekers') which may include part-time studying at FE colleges. This training is typically occupation- (or employer-) specific. It is based on standards which are, in principle, 'employer-led'. Within this work-based sector 'horizontal' differentiation is more important (Raffe 1992). As in the rest of the UK, the labour market in Scotland is weakly regulated and structurally diverse; it is not easily classified in terms of ILMs or OLMs, although some studies (such as Marsden and Ryan 1990) characterise the UK in terms of decaying OLMs.

Traditionally, the educational system in *France* was strongly dominated by schools of general orientation with little formal vocational training. Since World War II, France has developed a vocational training system at all levels, which is closely connected to the general education system: training of workers and employees at the end of the first cycle (CAP, BEP), technical baccalaureate, then further training as technicians (BTS, DUT). Today more than 40% of school leavers have a technical or vocational diploma. Whereas general education is of greater value within the education system, technical and vocational diplomas have better recognition on the labour market. In large French firms, the predominance of internal labour markets has led to poor qualification/occupational 'matching' at entry level and to a late articulation between qualifications and job classifications. However, the current employment crisis has

mostly penalised young people and led public authorities to promote measures developing sequences of school-based and in-company training courses alternately (e.g. *BAC* professional, apprenticeships extended to technical and engineering training, and a range of work/school based training arrangements).

With the growing shortage of jobs, decision-makers adopted a certain number of measures supporting labour-market entry. These interventions are focused strongly on the interface between the educational system and the labour market which has two important consequences. The first one is that the very existence and content of these measures, often based on 'alternance' models, reveals apparent deficiencies in the existing educational and training system. The second consequence is that some of these programmes designed to assist labour-market entry, based on alternance training approaches, have had feedback effects on initial education/training, – encouraging further reorganisation according to the new public model. All processes at work in France attest to a significant change in the conception of the aims of the educational system, now vested with a double mission: the traditional one of transmitting knowledge, and the more recent one of fulfilling a broader social function through the development of more vocationally relevant and effective education/training for labour-market entry, especially amongst young people with particular difficulties.

In some respects, *the Netherlands* is similar to Germany. The Dutch educational system is highly differentiated and standardised. It also has a strong vocational component, which at the same time is strongly segmented horizontally in many vocational specialities and a similar degree of stratification of general education. In contrast to Germany, however, the vocational training system of the Netherlands is school-based, has a low degree of overlap with workplaces and also much lower employer involvement. Besides school-based vocational training, it also has a system of apprenticeship, although small in comparison to Germany. This has, of course, consequences for the structure of the labour market. Recent research shows that ILMs and OLMs

have almost equal shares in the Dutch economy (Dekker, de Grip and Heijke 1994).

These characterisations of countries will probably need revision with further analyses. At this stage, however, they may be sufficient to indicate the variation across the countries in the main variables and outcomes of interest.

4. Progress to date: construction of the comparative databases.

Four main issues arose in constructing a comparative database from five national school leavers' surveys:

- a) definition of populations and samples;
- b) timing of interviews – in terms of years in which school leavers were sampled and in terms of post-school labour market exposure;
- c) variable definitions and specifications; and
- d) overall design of database.

Population / samples. The population aimed at is all full-time initial second level system leavers – rather than school leavers. The concept of second level system leavers is used because of possible confusion where some potential respondents leave one school or school type, and enter another second level one – particularly in highly differentiated systems such as the Netherlands where national surveys made this possible. Such 'reentry' school leavers are excluded from the comparatively defined population/sample. They are included only when they subsequently exit the total system. We therefore aimed only to include those who leave the full-time second level system for the first time ('initial' leavers). Those who leave but who continue in post-school, part-time education or training are, however, included – this generally 'mixed status' being regarded as a 'post-school' destination.

The selection of samples for the national surveys may be from national registration lists or through a process of initially sampling schools/systems and then 'school leavers'

within these schools. In most cases the sample is designed to cover all those who left the full-time second level system in the preceding academic year – i.e. those sampled and interviewed in May 1998 would have completed their initial full-time second level education in the academic year 1996/97. Most are then in a ‘post-school’ status (usually on the labour market or in further education or training) for at least nine months to a year. Interviews at that point are designed to measure respondents’ ‘post-school’ education, training and labour market outcomes and experiences subsequent to leaving school.

For the most recently surveyed, the samples include all those who left (completed course or left during course) their initial full-time (second level) education in the 1993/94 session in France and Scotland, and the 1995/96 educational session in Ireland and the Netherlands. The samples of respondents selected were interviewed between one year to one and a half years subsequent to their completion of second level education. The surveys were carried out by personal interviews in Ireland, by mailed questionnaires in France and Scotland and mostly by telephone interviews in the Netherlands.

4.1 Variable list and definitions in common database

Essentially we need as much detailed comparative information as possible on *five* areas;

- a) the social background of school leavers;
- b) their educational/training experiences and achievements/qualifications;
- c) the nature and extent of post-school education and training;
- d) their labour market experiences and outcomes; and
- e) their current household formation patterns and migration experience.

There are ca.100 comparatively defined variables in the combined datasets (see Appendix):

- a) the social background of school leavers (about 15 variables);

- b) *household status* and, to a limited extent, migration status (about 5 variables);
- c) *educational background/achievement* (about 12 variables);
- d) post-school education, training achieved (about 26 variables);
- e) current employment status characteristics (about 20 variables);
- f) labour force history characteristics since leaving full-time education (about 20 variables). See Appendix for details of common variables.

Clarifying these definitions and concepts took some time and intensive discussion; and in coming to common definitions we lost some important information. For instance, because the Irish and Scottish surveys covered only school leavers’ defined in a conventional way, all post-school youth training and further education (in, e.g. further education colleges) is defined as a ‘destination’ for school leavers and, since a significant proportion of these are still in training or further education at the time of the interview (a year later) we have no information on their subsequent labour market outcomes. One way to correct this is to follow up such initial school leavers for a number of years (five or six) to measure such long-term outcomes. This is done periodically in a number of countries (UK – including Scotland, France, Ireland, the Netherlands and Sweden).

National surveys varied significantly in the nature and extent of social background data gathered. While the usual socio-demographic data (age, sex, age of completion of schooling) is present, there is a lot of missing data on social class of origin (for only two countries), ethnicity (for one country only), educational level of parents (two countries), employment status of parents (three countries). The more complex, multivariate analyses using these variables cannot, therefore, be as comprehensive as we would have wished. One of the main aims of future collaboration would be to increase the comprehensiveness and comparability of variables covered.

Educational experiences and achievements are generally well covered in most surveys: type of school and curricular track, highest level of

Table 1: Time series of SLS surveys in Scotland, Ireland and the Netherlands

Year of Survey	Scotland	Ireland	The Netherlands
1979/80	a (1979)	a(1980)	-
1985	a	a	-
1989	a	a	a
1993	a	a	a
(Current) 1995/97	a (1995)	a(1997)	a(1997)

education achieved (CASMIN and ISCED measures); type of qualification achieved – vocational/technical or academic/general; grades/awards achieved in examinations and/or detailed educational achievement levels – i.e. from incomplete lower second level, ‘failed’ lower second level, ‘passed’ lower second level examination, to ‘passed’ or got ‘honours’ in upper second level examination. (See Appendix for details of variables covered by country).

4.1.1 Post-second level education and training

Extent and nature of participation, type and level of course; full-time or part-time, degree of vocational/occupational specificity of course, length of course, whether successfully completed, type and level of qualification achieved, etc. Extent to which education involved work experience and nature of work experience; apprenticeship training; extent and nature of involvement in ‘mixed statuses’ – (work and education). There is significant variation in variable coverage by country.

4.1.2 Labour market outcomes

Labour market entry outcomes: initial and current employment status. Extent of employment/unemployment; characteristics of jobs – occupation, industry, earnings, etc.; location of first and current job, etc. Details of the combined variable list are in the Appendix.

4.2 Time series

The most extensive information is available for the current (1993/94 to 1996/97) SLS databases. France (CEREP) has carried out school leavers’ surveys since the early and mid 1970s. Most of these, however, are only par-

tial samples of the population of leavers – the French samples are excluded from the time series. For Ireland and Scotland such national school leavers’ surveys have been carried out since 1970/71 in Scotland and 1980 in Ireland – and in both cases sampling is national and covers all second level leavers. The first national sample for the Netherlands is available from 1988 only. The Dutch sample is very large, is nationwide and comprehensive but is not initially selected as a national sample. Since it, however, covers all institutional distinctions, all regions and all levels of second level leavers it can be reweighted to approximate a national sample. The following table indicates the time series being used.

As already indicated the current, late 1990s, comparative data set has been constructed. The time series was constructed in September 1999, and analyses have started on the current database.

4.3 Construction of comparative labour force survey (LFS) datasets (coordinated by MZES, Mannheim)

Two data sources are used for LFS analyses: the EU community LFS through data requests to Eurostat in Luxembourg, and national micro data sets for Germany and the SLS project countries (France, Ireland, the Netherlands, United Kingdom, SW) and some other EU countries (Denmark, Spain, Italy, Austria and Portugal). LFS surveys for two time points will be used for most of these countries (from early 1980s and mid-1990s). Both cross-sectional stock analyses and some restricted synthetic ‘flow analyses’ will be carried out – using expected minimum age of completion of highest level of education achieved, and consequent estimate of amount

of time in the labour force. The European Community LFS (CLFS) provides a common database for the most important labour force characteristics for all EU countries. It is limited in its coverage of educational and training variables, and has very limited retrospective data. Access to individual level micro data is only by request to Eurostat. The individual national labour force surveys generally have much more information – though variable coverage and cross-national comparability of variables differs widely. In most cases, however, anonymised micro data sets are available from national census offices. In the CATEWE project, these micro data sets are now available at MZES, Mannheim – with the full set of comparable variable specifications to be completed shortly. Obviously much more complex analyses can be carried out on such a comparative European micro data set.

4.4 Progress on analyses of LFS and SLS surveys

Substantial progress has already (June 1999) been made in the analyses of the *CLFS*, and in both assembling and aligning the country level LFS micro data sets. Analyses of the CLFS has already commenced and – papers are being prepared for the September transition in youth (TIY) conference in September 1999 in Oslo. First drafts of five papers reporting analyses have already been discussed and critiqued (June 1999):

- a) changes in educational participation and qualifications over time in EU countries;
- b) national differences in youth labour markets and in transition trajectories;
- c) 'gradualism' in labour market entry: double statuses in transitions;
- d) labour market segmentation and the structure of youth employment in EU countries;
- e) educational achievement and initial labour market outcomes: national and institutional contextual effects.

Reanalyses and redrafts of these papers were prepared and second and more comprehensive drafts were given at the European TIY⁴ conference in September 1999. It is hoped to

publish the contents of these papers in journal articles as soon as possible thereafter.⁵ These analyses of the European Community LFS (CLFS), dealing as they do with all EU countries, will set the wider context for both the more detailed analyses possible with the individual country LFS micro data sets as well as the five country SLS data analyses. These later micro data LFS studies started in late 1999 and are to be completed by mid-2000. The analyses of the current SLS has already started and analyses of the time series and comparative follow-up surveys started in September 1999.

4.5 Analyses of school leavers surveys

The four country comparative database (France, Ireland, the Netherlands, Scotland) of current (1995-97) school leavers surveys was constructed by the end of March 1999. Swedish data was added in August 1999.

Construction of the time series data sets has started but will not be completed until end of June 1999. The construction of the French-Irish six year follow-up comparative data set has also started but will not be completed until September 1999.⁶

Analyses of the current four-nation data set started in May 1999. A division of labour on analyses has been agreed, with first drafts of papers reporting results to be completed by

⁴ The European network on Transitions in Youth (TIY) has been holding annual European research workshops/conferences on education/work relationships and transitions since 1993. Initially funded by the European Science Foundation (1994-96) the subsequent workshops have been partly supported by national funding in Ireland, Scotland and in 1999 in Norway. Copies of workshop papers up to 1996 are available from the ESF in Strasbourg, from 1996 from CEREQ Marseilles, from 1997 from the ESRI Dublin, from the CES, University of Edinburgh in 1998.

⁵ Copies of papers now available as CATEWE Working Papers, from Mannheimer Zentrum für Europäische Sozialforschung (MZES), University of Mannheim, Postfach 10-34-62, D-68131 Mannheim.

⁶ This paper refers to the project results available until mid-1999.

September 1st in time for the September TIY international workshop:

- i) Comparative analyses of the relationships between initial educational/training achievements and 'post-school' educational and training outcomes;
- ii) Comparative analyses of the relationship between educational/training achievements and post-school labour market outcomes;
- iii) Comparative analyses of the relationships between initial educational/training outcomes, initial labour market integration processes and the extent to which State training/employment schemes mediate difficulties in transition;
- iv) Comparative analyses of gender and social class inequalities in educational achievements and in education-to-work transitions;
- v) Comparative analyses of both youth/adult and general labour market segmentation processes in the five countries;
- vi) Comparative analyses of the nature and extent of labour market exclusionary processes amongst the least qualified.

As of mid 1999 there were no results from these analyses. But the papers were subsequently revised and are now available as CATEWE working papers.⁷

One clear result, however, is the fact that it has proved possible to construct cross-nationally comparable microdatabases from both national labour force surveys and school leavers surveys. Although there are serious missing data problems for some important variables (particularly social background variables) in the school leavers' surveys this database is still a very rich one for research and policy purposes. The earlier Leonardo study, reporting analyses of a more restricted cross-national data set based on the same type of surveys, however, indicated some important policy relevant results and conclusions. Some of these will be discussed next.

⁷ Available as a CATEWE working paper from the ESRI, 4 Burlington Rd., Dublin 4, April 2000.

5. Results and conclusions

Although there are as yet no results from our analyses of the CATEWE comparative databases some conclusions from our work on comparative database construction are important. In addition some results and conclusions from an earlier, though more restricted, comparative study of school to work transitions amongst early school leavers, under the Leonardo surveys and analyses programme, (1997-98, VTLMT⁸) appear very relevant.

Two comparative micro data sets on school to work transitions have been or are being constructed using existing national surveys. The first is based on national labour force surveys for most European countries. The Eurostat Community LFS data set is available only for a limited set of variables, and in any case is not directly accessible to the research community – although Eurostat has been very helpful in making detailed cross-tabulations available. The national data sets are generally much more comprehensive and, for most EU countries, are available as anonymised data sets to the research community. So a comparatively defined LFS data set is being set up for the majority of EU States. The initial work on the CLFS (Eurostat) database indicates not just the value of cross-sectional analyses of the existing variables, but also the value of constructing and using other more complex variables – for instance, in using expected ages of graduation and entry to the labour market in identifying recent (young) entrants to the labour market – to estimate differences in labour market outcomes for

⁸ **Vocational Training and Labour Market Transitions.** This was a project funded under the Leonardo 'Surveys and Analyses' programme, DG22, 1996-98. Contract N° – IRL/96/1/10074/EA/III.2.a/FP1. Final report Dec. 1998. The research project was based on comparative analyses of school leavers surveys in France, Ireland, the Netherlands and Scotland – primarily focusing on the education-labour market relationship amongst those who left full-time education before completing upper second level. The project was coordinated by ESRI, Dublin in partnership with CES, University of Edinburgh; DESAN, Amsterdam; and CEREQ Marseilles.

young versus older labour market entrants. These analyses show clearly the underutilised value of the existing labour force surveys for research and policy analyses purposes.

The second main methodological finding is that the existing national school leavers' surveys carried out in five EU countries (France, Ireland, the Netherlands, United Kingdom (Scotland), Sweden) – and prospectively in Belgium (Flanders) and Portugal – provide a rich comparative database for studying the longitudinal/panel aspects of school to work transition processes in a range of EU countries. These mainly cover the post-school education/training and labour market history characteristics of school leavers for one to one and a half years after they complete their second level education. Combined with the cross-sectional LFS analyses of current status characteristics of individuals these detailed 'flow data' on educational and labour market history provide for very comprehensive analyses of school to work transitions across the European Union.

Although there are many sample and variable comparability problems arising from constructing a comparative database from such national surveys – with many 'missing data' gaps, for instance – both the process itself of constructing such a database and the initial raw results illustrate clearly the advantages of such approaches. In constructing comparatively defined, meaningful variables – which capture both the common and, as far as possible, the unique in each system – overarching concepts and variables need to be respecified in ways that are not otherwise obvious. For instance the concept of 'level of education' does not always make clear whether the person reaching level 'x' has actually taken and 'passed' the relevant examination at that level. Equally, differences in the significance of different national ways of measuring educational achievement – whether, for instance, grades achieved in examinations, or 'levels' taken in courses/curricula are important/relevant – have to be dealt with in ways that are not always revealed in cross-national surveys where the lowest common denominator approach to variable definitions is often used.

Besides these comparative data construction issues, one of the main advantages of such cross-cultural (or cross-national institutional) studies is the classically stated advantage of additional insight into national characteristics gained from comparing one national system to another quite different one. By shedding normal ethnocentric conceptualisations engendered by national studies or even by limited comparisons with similar type systems, intensive comparative studies much more clearly reveal national differences. For instance, the overarching significance of 'grades achieved' in examinations in the Irish, and to a lesser extent in the Scottish system, in selection/progression to higher levels of education/training and into the labour market – and their apparent lesser significance in the Dutch or French systems – illustrate clear national system differences in educational assessment and selection. The relative significance of these different kinds of selection mechanisms becomes very obvious in any detailed comparisons – but they are very easy to miss in less detailed ones. The necessity to specify a wider range of social background, educational, training and labour market variables to capture the most relevant aspects of each national system, while at the same time trying to integrate these into an overarching, common set of concepts/measures is one of the main tasks of such detailed comparative analyses. Hopefully, these initial findings will show more insight and lead to a more comprehensive comparative analyses than would otherwise be the case.

The Leonardo VTLMT study – 1997-98

The earlier comparative European study of school to work transitions using school leavers surveys was funded under the DG22 Leonardo (Surveys and Analyses) programme (VTLMT⁹ 1996 to 1998). The empirical analyses were based on a comparative data set based on school leavers' surveys in France (1995), Ireland, the Netherlands and Scotland (1993).

⁹ *Vocational training and labour market transitions in Europe* – coordinated by ESRI, Dublin in partnership with CES, University of Edinburgh; DESAN, Amsterdam; CERQ, Marseilles.

The main focus of the study was on the relationships between initial educational/training outcomes and qualifications amongst school leavers and subsequent, post-school, labour market and education/training outcomes. In this case the main interest was in 'early school leavers' or those who left the educational system with no or poor qualifications. The final results and conclusions are included in the final VTLMT report to DG22 in December 1998, and are to be published as separate journal articles.

Four main hypotheses guided the analyses:

1. gender and social class inequalities in the type and level of educational achievement are greater in the Netherlands – the country with the most differentiated and selective ET system (Blossfeld and Shavit 1993);
2. the educational qualification distinctions amongst 'early school leavers' (or, more technically, lower second level leavers) – in terms of examination grades or 'pass'/'fail' distinctions – will almost have the same effect on labour market entry as the distinction between lower and upper second level leavers (Breen, Hannan and O'Leary 1995);
3. controlling for educational level and grades achieved in examinations, it is expected that those specialising in vocational/technical curricular 'tracks' will have significant labour market advantages over those in general tracks (Shavit and Mueller 1998);
4. the labour market effects of educational failure (early 'dropout' or 'fail' in lower second level examinations) are expected to be greater in national systems with less differentiated ET systems and less 'occupationalised' labour markets; i.e. more serious in Ireland and less serious in the Netherlands.

Main results

While the proportion of those leaving school in Scotland with only a lower second level qualification or less (40%) were almost twice

as high as in the other three countries, the extent of post-school education/training participation rates were much higher there – so reducing national differences considerably. Such post-school provision and participation for the most poorly qualified was lowest in Ireland – with less than one in four of early school leavers entering alternative education/training pathways compared to almost one in two for their Scottish counterparts. There are then substantial national differences in the provision for and participation in such post-school ET interventions.

Gender and class of origin differences in levels of educational achievement are much greater in Ireland than in the Netherlands or Scotland. Irish lower level leavers, particularly those without qualifications, are more likely to be male, working class and have parents that are unemployed. At least in terms of the first major educational transition therefore, our main hypothesis is not supported: the least differentiated system – though one with strong inter-school competitive effects (Smyth 1999) – is the most gender and class discriminatory. The Irish system is also the most highly unidimensionally stratified – a highly hierarchical general system. It appears as if the highly differentiated and early selective Dutch ET systems have both lower initial educational failure rates amongst the total school entry cohort, but also class and gender selectivity appears to be lower at that basic level. Of course in terms of type of education/training and in terms of later progressive transitions – such as to the completion of upper second level or entry to third level – these national differences may be reversed.

The four countries differ substantially in the level and quality of post-school 'corrective' ET and active labour market provision. Labour market entry (whether at work or looking for work) is most likely to be almost the only opportunity available in Ireland for those not going on to third level. There is a much more elaborated, State funded and better organised set of both ET and work-based training/employment scheme provision in Scotland. Employment chances are maximised in the Netherlands but alternatives to unemployment through apprenticeships and State training/

employment schemes are much richer. France equally, although with the lowest employment chances for early leavers, has the most elaborated and best funded system of post-school training. The extent and nature of State intervention in the labour market for early and poorly qualified school leavers is, therefore, one of the most variable aspects of school to work interventions.

What effect has examination performance on labour market access or access to more valuable post-school ET pathways? In fact 'passing'¹⁰ lower second level examinations – so distinguishing between those who either left school before taking the examination or having 'failed' the examination and others who at least got a 'passing grade' in such lower second level examinations – has a significant positive effect on employment chances in all four countries; and in all except France on access to apprenticeships also. For other less valuable traineeships or post-school training/employment schemes the effects are negative for Ireland only – a not unexpected result given that recruitment to these schemes is targeted on the more poorly qualified with the poorest employment histories in Ireland. What is significant here as in some other research (see Breen, Hannan and O'Leary 1995) is that level of performance in lower second level examinations is almost as important in labour market access as proceeding to upper second level, particularly amongst those with below average educational performance.

A State policy geared to maximising upper second level educational participation, without paying equal attention to improving the basic educational performance levels at primary and early post-primary levels, appears therefore to be a seriously mistaken one. There is little added value in keeping young people with poor performance histories in

school up to 17 or 18 unless basic educational achievement levels significantly improve. Improving the basic educational and personal and social development skills of the lower performing 10 to 20% of the cohort at lower second level is a far more fundamental educational goal than just increasing the compulsory ages of attendance to 17 or 18. The second hypothesis is, therefore, strongly supported.

Are there effective alternatives to vocation/technical tracks or post-school vocational training programmes – such as apprenticeships – in non-differentiated systems such as the Irish or British ones up to age 16? Recent research has corrected for earlier negative assessments of assignment to vocational/technical 'tracks' within the more general and more comprehensive systems of the English-speaking countries – particularly for 'non-college' bound youth – (Shavit and Mueller 1998; Kerckhoff et al. 1998 Hannan and O'Riain 1996). Effectively these results indicate that although such vocational/technical 'tracking' may divert a significant proportion of working class children away from proceeding to upper second and into third level education (and so increase social class inequality at these higher levels) successfully completing such programmes does in most (though not all) cases increase access to skilled manual and service employment – or in escaping from the lower skilled and less secure sectors of the youth labour market. Our results strongly support the latter view. Such specialisation in second level, vocational/technical subjects significantly increases access to skilled manual occupations for males in all four countries – though it has no effect on employment access as such, controlling for the effects of most other relevant variables. Again this hypothesis is strongly supported, though for males only.

There is no evidence, however, that the relative effects of educational 'failure' – no qualifications or 'failed' qualifications – on employment chances are any higher in Ireland, though the extent to which this occurs is greater in Ireland and Scotland. The fourth hypothesis is not, therefore, supported, although this hypothesis is harder to test given

¹⁰ 'passing' in this sense has a clear meaning in the French and Dutch systems; but in the Irish and Scottish systems has to be somewhat arbitrary – so the older definitions are used as in the Irish case where a minimum of five Ds in the junior certificate (and equivalent in the Scottish GCSE) examination is regarded as required to get a pass.

the various different interpretations of educational 'failure' in Ireland and Scotland versus France and the Netherlands.

The results of this initial study of early school leavers encourage optimism about the future results of the larger CATEWE project. Combining both LFS analyses of education/train-

ing and labour market relationships in all countries, with more detailed analyses of school-to-work transitions in a smaller number of countries – using both time series and longitudinal analyses – the project should yield valuable comparative European analyses of education/training and labour market relationships by the end of the year 2000.

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Appendix: Variable specification for current SLS database

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Constructed variables						
Country	land	1. Ireland 2. Netherlands 3. Scotland 4. France	Compute land=1	Compute land=2	Compute land=3	Compute land=4
Weighting	euwgt			*		
Sample exclusion		[Individual country vars]	* Excludes those who never left second-level system and those over 22 on leaving school	* Excludes those who never left second-level system and those over 24 on leaving school	* Excludes those still in school at time of survey and those over 22 on leaving school	* Excludes those over 24 on leaving school
Personal characteristics						
Month of interview	msurv	Codes 1 to 12 by month	L1_2	Ddbinnen	Recnth * Date received questionnaire	Compute msurv=11 * For France, time of survey is set at Nov. 1995
Year of interview	ysurv	Code actual year (4 digit)	Based on L1_2	Ddbinnen	Recyr	Compute yrsurv=95
Month of birth	mborn	Codes 1 to 12 by month	L2a_1	Not available	Brthmth	Mnaissq1
Year of birth	yrborn	Code actual year (4 digit)	L2a_2	Not available	Brthyr	Anaissq1
Month left school	mleft	Codes 1 to 12 by month	L5_1	goeim	Termft * recoded into proxies	Mscoreco1 or mfinapp1
Year left school	yrleft	Code actual year (4 digit)	L5_2	goeij	Termft	Asoreco1 or afinapp1
Age at time of survey	age	Derive from month/year of survey and month/year of birth		* Base on self-reported age (fft)		
Gender	sex	1. Male 2. Female	s11	Gesl	Gender	Sexe__1
Ethnic group	ethnic	1. Not ethnic minority 2. Ethnic minority	Not available	n_etni	Not available	Not available
Immigrant status	immig	1. Not immigrant 2. Immigrant 3. Child of immigrants	L2b * Only born outside country; not parents	Not available	Not available	Based on denaiss1, denaisp1 and denaism1

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Ethnic/ national grouping	nleth freth	Use within-country group codes	Not available	etn1 2 Dutch Antilles/ Aruban 3 Surinam 4 Turkish 5 Moroccan 6 Chinese 7 Belgian 8 German 9 Other	Not available	Portuga1 to langaut1 * Based on language spoken at home 1 Portuguese 2 Other European 3 Arab/semitic 4 Asian 5 African 6 Other
Marital status	marital	0. Single 1. Married (incl. living as married/ separated)	L2c	Not available	Marriedz * Note only asked in FU for S6 leavers	Based on viecoup1 with corrections using avicoup1, mvicoup1, vicoupa1, asepara1, msepara1
Has children?	child	0. No children 1. One or more children	Not available	Not available	Anykidz * Note only asked in FU for S6 leavers	Based on enfants1 with corrections using mnai1en1
Left parental home? (at time of survey)	lefthome	0. Still in parental home 1. Left parental home	L2d	Not available	Staynowz * Note only asked in FU for S6 leavers	sifami1 * But refers to time of survey rather than fixed time-point
Household situation (at time of survey)	House	1. With parents 2. With in-laws/other family 3. In own household (with/out spouse) 4. Sharing house (other than spouse) 5. Hall of residence/ other institution 6. Other	L2d	Not available	Staynowz * Note only asked in FU for S6 leavers	sifami1 * But refers to time of survey rather than fixed time-point
Location of current residence	Irarea Nlarea Scarea Frarea	Country-specific categories	Based on L3a, L3b and L3c Categories 0. Rural 1. Urban	Urbannl 0. Rest 1. West	Urbur 1. 1million + 2. 100,000-999,999 3. 10,000-99,999 4. 1,000-9,999 5. Under 1,000	Not available

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Moved from local area?	Leftarea	0. No 1. Yes	Based on L3a, L3b and L3c	Not available	Not available	Not available
Emigrant?	emig	0. No 1. Yes	L3c	Emignl	Not available	Not available
Family background						
Employment status of father	empfath	1. Employed 2. Unemployed 3. Retired 4. Not in LF (home duties/ill/disabled/in training) 5. Other 6. Deceased	L43_1	Not available	Dadnow	Sitpere1
Employment status of mother	empmoth	1. Employed 2. Unemployed 3. Retired 4. Not in LF (home duties/ill/disabled/in training) 5. Other 6. Deceased	L43_2	Not available	Mumnow	Sitmere1
Occupation of father	Occfath	10. I - Upper service class 20. II - Lower service class 31. IIIa - Upper routine non-manual 32. IIIb - Lower routine non-manual 41. IVa - Small proprietors 42. IVb - Self-employed 43. IVc - Farmers 50. V - Lower technical / manual supervisory workers	Based on L44 and L43_1	Not available	Dadsoc, dades	Not available

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
		60. VI - Skilled manual workers 71. VIIa - Semi-/unskilled manual workers 72. VIIb – Agricultural workers				
Occupation of father – France only	frocfc	1. Professional 2. Self-employed 3. Other non manual 4. Skilled manual 5. Unskilled manual 6. Other	Not available	Not available	Not available	Sitfape_1
Occupation of mother	Occmoth	As occfath	Based on L45 and L43_2	Not available	Mumsoc, mumes	Not available
Occupation of mother – France only	froccm	As froccf	Not available	Not available	Not available	Sitmere_1
Education of father	edfath	1. Less than/ incomplete upper secondary 2. Completed upper secondary/ Third-level education	Not available	Not available	Daded	sitpetu1
Education of father: age left school (Scotland)	scedf	1. 15 years or less 2. 16 years 3. 17 years 4. Not answered	Not available	Not available	Daded	Not available
Education of father: level (France)	fredf	5. No schooling 6. Primary school 7. Secondary-4 th /5 th year 8. Baccalauréat 9. Higher education 10. Not answered	Not available	Not available	Not available	Sitpetu1
Education of mother	edmoth	As edfath	Not available	Not available	Mumed	Sitmetu1
Education of mother: age left school (Scotland)	scedm	As scedf	Not available	Not available	Mumed	Not available

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Education of mother: level (France)	fredm	As fredf	Not available	Not available	Not available	Sitmetu1
No of siblings	sibs	Actual number	Not available	Not available	Brothers, sisters	Nbfrere1, nbsoeur1
Educational background						
Type of school	sctype	1. Academic 2. Comprehensive 3. Vocational	School	Based on school ID Nlschtype	Set to 2 (Comprehensive)	Based on typetab1 with corrections for strate_1
Private/public school	privat	1. Publicly owned (public authority) 2. Privately owned but subsidised 3. Privately owned fee-paying school	School	Based on school lds Nlprivat	Schstat	Typetab1
Religious denomina- tion of school	relig	4. Catholic 5. Protestant 6. Interdenominational 7. Non-denomina- tional	School	Based on school lds Nlrelig	Schdenom	Not available
Age left school	ageleft	Derive from date of birth and time left school.	Mleft, yrleft and mborn, yrborn	* Proxy based on self- reported age and time left school, mleft, yrleft, msurv, yrsurv N_gorpli	Mleft, yrleft and mborn, yrborn	Mleft, yrleft and mborn, yrborn
Highest stage: CASMIN	levcas	1. 1ab. Compulsory education 2. 1c. Basic vocational training 3. 2a. Advanced vocational training 4. 2b. Academic secondary intermediate 5. 2c. Full maturity certification	Based on L6a with correction for L9b		Totscep and nummod	Casmin

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Highest stage: VTLMT	lewtdmt	1. Incomplete lower secondary/Took no formal exams 2. 'Failed' lower second-level exam 3. 'Passed' lower second-level exam 4. 'Failed' upper second-level exam 5. 'Passed' lower second-level exam	Based on L6a and exam grade variables (L7_3, L7_6, L7_9, L7_12, L7_15, L7_18, L7_21, L7_24, L7_27, L7_30, L7_33; L7c_1 to L7c_7)	nllevtvt	Based on stage, term1ft and totscep	frlewtt
Type of programme	currtyp	1. Vocational/technical 2. Academic	Based on subjects taken (L7_1, L7_4, L7_7, L7_10, L7_13, L7_16, L7_19, L7_22, L7_25, L7_28, L7_31) with correction for L9b As currtyp	N_gorpli	Number of modules and Higher passes Nummod, totach56, totach5	Classec1
Subjects/courses taken	Coursci Cournlan Courlang Courbus Courtech Courmath Coursoc Courart Courtot	Actual number of courses taken		Subject variables	Based on SQA data	Not available
Curricular level	Ircurlev Nlcurlev	Country-specific classification	Based on L6a and subject level variables (L7_2, L7_5, L7_8, L7_11, L7_14, L7_17, L7_20, L7_23, L7_26, L7_29, L7_32) Categories: 0. Pass junior cycle 1. Hons junior cycle	NI_level VBO and MAVO only. Only categories 5 and 6 for MAVO 1. A 2. A/B 3. B 4. B/C 5. C 6. C/D 7. D	Not available	Not available

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
			2. Pass senior cycle 3. Hons senior cycle	1 is Lowest		
Grades/awards received	Irgpav Nlgrade Scgrade	Country-specific scale	Based on exam grade variables (I7_3, I7_6, I7_9, I7_12, I7_15, I7_18, I7_21, I7_24, I7_27, I7_30, I7_33; I7c_1 to I7c_7)	Based on exam grade variables (exccnml to excvnn2) * For MAVO, HAVO and VWO only	Based on SQA data – exams last sat	Not available
Last exam taken (Netherlands only)	Nlexam	0. MAVO 1. HAVO 2. VWO	Not applicable	N_gorpli * For MAVO, HAVO and VWO only	Not applicable	Not applicable
Part-time job/ work experience?	Ptime	0. No part-time job during school 1. Part-time job/ work experience during school	Not available	Not available	Not available	Based on jobvaca1, jobwend1, staentr1 and petboul1
Employment characteristics						
Principal activity: time of survey	Activ	1. Working for pay-ment or profit 2. Apprenticeship 3. Youth programmes/ Training/employment schemes 4. Unemployed 5. Student 6. National service 7. Other	Based on L11a_9 to L11a_20 with corrections based on L41 and L10_2	Based on n_mpl with corrections based on hdvbl1	Based on donow with corrections based on ytpart and apprent	* Situation at Nov. 1995 Based on sizp26 (new version of sit126, sit226, sit326)
Principal activity: May of year after leaving	Actmay	As active	Based on L11a_12 with corrections for previous participation in schemes and apprenticeships (L13c, L32a_1 to L32a_8) * May underestimate apprenticeships and schemes	Based on mp9705l * But can't distinguish those on schemes	Based on donow with corrections for ytpart and apprent	Based on sizp20 (revised version of sit120)

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Employment status	Status	1. Self-employed 2. Employee 3. Employed through agency 4. Assisting relative 5. Apprentice 6. On scheme/youth programme 7. Other	Based on L15 with corrections from activ for schemes/ apprentices.	Based on n_hdvb1l with corrections from activ for schemes/ apprentices.	Not available	Based on sizp26 with corrections from activ for schemes/apprentices.
'Mixed status': student in part-time job	mixed	0. No 1. Yes * Filtered on student as principal activity.	Based on activ, L13a and L13b.	Based on activ and vwbw	Based on donow and pjjob	Not available
Mixed status 2 (all those in part-time education)	Mixed2	0. No 1. Yes	Based on activ, nowed and nowpted	Based on activ, nowed and nowpted	Based on activ, nowed and nowpted	Not available
<i>Current job (i.e. time of survey, Nov 95 for France):</i>						
Permanent/temporary	perm	0. Temporary 1. Permanent/regular	L13a	n_hasd	Not available	Sizp26
No hours	hours	Record actual number of hours	L18	n_hau	hrswork. * But there is truncation on full-time work hours	Based on nbheu__1, nbheu1_1 to nbheu4_1 hours
Collapsed No hours	nhours	1. Less than 15 2. 15-29 3. 30-39 4. 40-49 5. 50+	hours	Hours		
Full-time/part-time (full-time is greater than 30 hours per week)	ftime	0. Part-time 1. Full-time	Recode of hours	Recode of hours	Based on donow, pjjob and hours	Recode of hours
Earnings	irearn nlearn slearn fearn	Earnings are calculated on different bases across countries (see note).	L20a	n_hbi * Data for IVBO (hmi) is not comparable	Earnpnds and earnpenc	Based on salai__1 and salai1_1 to salai4_1.

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Occupation: social class	sclass	10. I - Upper service class 20. II - Lower service class 31. IIIa - Upper routine non-manual 32. IIIb - Lower routine non-manual 41. IVa - Small proprietors 42. IVb - Self-employed 43. IVc - Farmers 50. V - Lower technical / manual supervisory workers 60. VI - Skilled manual workers 71. VIIa - Semi-/unskilled manual workers 72. VIIb - Agricultural workers	Based on L14 and L15	nlegp	Jobsoc No Employment Status so assume all are employees	Not available
Occupation: social class (9 categories)	Sclass9	1.I 2.II 3.III 4.IVab 5.IVc 6.V 7.VI 8.VIIa 9.VIIb	Recode of sclass	Recode of sclass	Recode of sclass	Pcsag__1
Occupation: status	occstat	Based on Ganzeboom's scale	L14	N_hber	jobsoc	occisco
Occupation: ISCO-88 equivalent	Occisco	Map to ISCO-88 codes	L14	N_hber	jobsoc	Iscomcom3

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Occupation: segment	occseg	Gordon's schema: 1. Indep primary prof tech 2. Independent primary craft 3. Subordinate primary 4. Secondary	occisco	occisco	occisco	occisco
More accurate version of Gordon's schema for Ireland	iroccseg	As occseg	L14 and L16	Not available	Not available	Not available
Alternative occupational classification	occalt	1. Semi/unskilled occupations to depend on industry core 2. Other	occisco	occisco	occisco	occisco
Industry: group by type (VTLMT classification)	indtype	3. Agriculture 4. Manufacturing 5. Construction 6. Distribution 7. Transport/Communication 8. Finance 9. Public administration 10. Professional services 11. Personal, other services 12. Other	L16	n_hbra	Jobsic	Based on acten__1 and acten1_1 to acten4_1
Industry: segment	indseg	Based on core/periphery distinction adapted by Hughes & Nolan	Indtype	Indtype	Indtype	Indtype

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Size of firm	firmsize	1. 1 person 2. 2-9 people 3. 10-19 people 4. 20-49 people 5. 50-99 people 6. 100-499 people 7. 500-999 people 8. 1000 + people	Not available	Hpo	Not available	Not available
Related to employer	relate	0. No 1. Yes	L17	N_hdvb1	Not available	Not available
Related to anyone in firm (France only)	frrelate	0. No 1. Yes	Not available	Not available	Not available	Trpar__1, trfam__1
Time in current job	timeemp	Record length of time in months.	Based on L13c and msurv, yrsurv	Based on hbgi, hbgi and msurv, yrsurv	Not available	Not available
How found current job	jobfind	1. Un/employment agency 2. Newspaper ad. 3. Contacting employers 4. Personal contacts 5. School 6. Work experience placement 7. Private agency 8. Other	L21	Based on n_hwv for MBO and hww1ao for VBO agriculture	Not available	moytr__1
Relationship between education and current job content	edjob	0. Education not related to job 1. Education related to job	L22b	n_haso * MBO only	Not available	Not available
Satisfaction with current job	satis	0. Dissatisfied 1. Satisfied	L49a	Not available	Not available	Not available
Job search:						
Currently looking for work?	look	2. No 3. Yes	L23	bwzk4w	lookjob	Based on reche__1 and tjsrec__1. * Only available for employed and unemployed.

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Availability for work, if currently looking for work	avail	0. Not immediately 1. Immediately/ 2 weeks	L24c	bwbsb	Not available	Not available
Job search methods	search1 to search9	Dummy variables for: 1. Employment agency 2. Private agency 3. Newspaper ads 4. Contacting employers 5. Personal contacts 6. School 7. Placed ads 8. Other employment measures 9. Other	Based on L31a and L31b_1 to L31b_9.	Not available	Not available	Based on moye1__1 to moye4__1, moyre1_1 to moyre4_1
Post sec. ed. education/training						
Full-time education (current participation):						
Currently participating?	nowed	0. No 1. Yes	Based on activ, L33 and L34a	Based on activ, wvovt, wvogev	Based on activ	Based on activ
Type of institution	edinst	1. University 2. Other third-level 3. 'Multi-level' (i.e. provides both 3 rd and 2 nd level courses) 4. Second-level: general 5. Second-level: vocational 6. Other	L34a	Not available	Instname	Not available

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Level of course	edlevel	7. 3 rd level degree (3 yrs +) 8. 3 rd level sub-degree (diploma or certificate; <3 years) 9. Upper second-level: general 10. Lower second-level general 11. Upper second-level: vocational – industry 12. Upper second-level: vocational – services 13. Upper second-level: vocational – field not specified 14. Lower second-level: vocational – industry 15. Lower second-level: vocational – services 16. Lower second-level: vocational – field not specified 17. Other	Based on L35a, L35c, L35d and edinst	Based on n_vl1 and n_secvl	Not available	Diplet_1
Subject area of course	Edsubj	1. Agriculture/Science 2. Engineering/architecture 3. Business studies 4. Medicine & related 5. Humanities/ Social Science 6. Art 7. Law	L35a	Based on edlevel and n_secvl	Not available	Not available

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
		8. Second-Level General 9. Second-level Vocational 10. Other				
Occupational specificity of course (NL only)	occspec	0. Not occupationally specific 1. Occupationally specific	Not available	Based on n_v1 and n_secvl	Not available	Not available
<i>Full-time education (previous participation):</i>						
Ever participated in full-time education?	evered	0. No 1. Yes	Based on L36, L39, L11b_1, L11b_2, L11b_3, nowed	Based on vvod, vvovt, vvogev	Not available	Diplet_1
Type of institution	Previnst	As edinst	L37	Not available	Not available	Not available
Level of course	Prevlev	As edlevel	L38	Based on n_v1 and n_secvl	Not available	Diplet_1
Whether completed course	prevcomp	0. No 1. Yes	L39	Vvod	Not available	Based on dipolet_1
Subject area of course	Prevsubj	As edsubj	Not available	Based on prevlev and n_secvl	Not available	Not available
<i>Apprenticeship training</i>						
Current participation	Appr	0. Not an apprentice 1. Apprentice	Based on activ	Based on activ	Based on activ	Based on activ
Leaver from apprenticeship – CFA (France only)	frappr	0. No 1. Yes	Not available	Not available	Not available	
Status of apprenticeship	Appemp	0. No employment contract 1. Employment contract	L13a and L15	Llwwk	Based on donow	Set to 1 (Employment contract)
Certification to be obtained	Acertir Acertnl	Country-specific categories	L41 1. Statutory apprenticeship 2. Non-statutory apprenticeship	Llwn 1. Primary level 2. Secondary level 3. Tertiary level	Not available	Not available

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Previous participation in apprenticeship (incomplete)	Appdrop	0.No 1. Yes	Not available	Llwdc and llwgev	Not available	Based on sizp01 to sizp26
<i>State training/ youth programmes:</i>						
Currently participating?	Nowsch	0.No 1. Yes	Based on L10_1 and L10_2 with corrections for appr and nowed	Based on activ	Based on activ	Based on activ
Content of scheme	Schon	1.No training (work experience only) 2.General training 3.Specific skills training	L10_2	N_hdvb1	Set to 3 (specific skills)	Based on sizp26 and mesurd_1
Institutional arrangements	Schinst	4.Classroom-based 5.Workplace-based 6.Alternance	L10_2	N_hdvb1	Based on wheretn and onjobtrn	Based on sizp26 and mesurd_1
Certification to be obtained	Schcert	7.No 8.Yes	L10_2	N_hdvb1	Set to 1 (Yes)	Based on sizp26 and mesurd_1
Previous participation in schemes	Prevsch	0.No 1. Yes	L32a_1 to L32a_9	Not available	Not available	Based on sizp01 to sizp26
<i>Other employment-related training (current):</i>						
Currently participating?	Nowtr	0.No 1. Yes	Based on L33, L34a, L35a, L40 with corrections for appr, nowsch, nowed	Cbog4w	Based on wheretn and onjobtrn	Not available
<i>Part-time education (current participation):</i>						
Currently participating?	nowpted	0.No 1. Yes	Based on L33 with corrections for nowed, nowsch, appr and nowtr	Based on vvod, vvovt and vvogev	Ednow	Not available
Type of institution	ptinst	As edinst	L34a	Not available	Instname	Not available
Level of course	Ptlevel	as edlevel	Based on L35a, L35c, L35d and ptinst	Based on n_vl1 and n_secvl	Not available	Not available
Subject area of course	Ptsubj	as edsubj	L35a	Based on n_secvl and ptlevel	Not available	Not available

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Occupational specificity of course	Ptspec	as occspec	Not available	Based on n_v1 and n_secvl	Not available	Not available
Labour force history						
Changes in labour force status since June of school-leaving year	chstat	Changes between five comparable statuses: 1. employment/ apprenticeship; 2. unemployment/ scheme; 3. student; 4. inactive; 5. other/ military service	L11a_1 to L11a_20	mp9606l to mp9712L	Not available	sizp09 to sizp26
No of changes in status since June of school-leaving year	irchstat nlchst frchst	Uses country-specific categories for changes in status	Based on L11_1 to L11a_20	Based on mp9606l to mp9712L	Not available	Based on sizp09 to sizp26
No of changes in status over whole of labour force history	chstat2	Changes between five statuses over whole period	Not available	Based on mp9509L to mp9712L	Not available	Based on sizp01 to sizp26
No of changes in status over whole of labour force history	nlchst2 frchst2	Uses country-specific categories for changes in status	Not available	Based on mp9509L to mp9712L	Not available	Based on sizp01 to sizp26
No jobs since leaving school	nojob	Number of different jobs from time of leaving school to time of survey.	Not available	Not available	Not available	Derived from mdemp__1, adem__1, mfemp__1, afemp__1
Time to first job	timejob	Time taken to enter employment (or apprenticeship) from June of the school-leaving year	Based on L11_1 to L11a_20	Based on mp9606l to mp9712L	Not available	Based on sizp09 to sizp26
Time to first job	rtimejob	Time from leaving education to first job	Not available	Based on mp9509L to mp9712L	Not available	Based on sizp01 to sizp26

continued

VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
Proportion of time in specified statuses: Employment	premp prun	Proportion of time in June of school-leaving year	Based on L11_1 to L11a_20	Based on mp9606L to mp9712L	Not available	Based on sizp09 to sizp26
Proportion of time in specified statuses: Employment	rpremp rprun	Proportion of time in specified status since leaving education	Not available	Based on mp9509L to mp9712L	Not available	Based on sizp01 to sizp26
Unemployment						
<i>Unemployment:</i>						
Duration of current spell	durat revdur	No of months currently unemployed; revdur sets <0.5 months to 0.5 months	Based on L12b and msurv, yrsurv	Based on mp9509L to mp9712L	Not available	Based on sizp01 to sizp26
Receipt of social welfare payments (unemployed only)	welfare	0. No payments 1. In receipt of payments	Based on L12c and L12d	Not available	Not available	Based on indemc_1
Ever unemployed since June of school-leaving year?	everun	0. Never unemployed 1. Employed (one or more spells)	Based on L11a_1 to L11a_20	Based on mp9606L to mp9712L	Not available	Based on sizp01 to sizp26 variables
Ever unemployed over whole period?	reverun	0. Never unemployed 1. Employed (one or more spells)	Not available	Based on mp9509L to mp9712L	everunz * FU var for S6 leavers only	Based on sizp01 to sizp26
No of previous spells since June of school-leaving year	unsp	Number of previous (separate) spells unemployed	Based on L11a_1 to L11a_20	Based on mp9606L to mp9712L	Not available	Based on sizp09 to sizp26
No of previous spells over whole period	runsp	No of previous spells unemployed	Not available	Based on mp9509L to mp9712L	Not available	Based on sizp01 to sizp26
Amount of time spent unemployed since June of school-leaving year	dursp	No of months unemployed	Based on L11a_1 to L11a_20	Based on mp9606L to mp9712L	Not available	Based on sizp09 to sizp26
Amount of time spent unemployed overall	rdursp	No of months unemployed	Not available	Based on mp9509L to mp9712L	Not available	Based on sizp01 to sizp26

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VARIABLE	VAR NAME	VARIABLE CATEGORIES	IRELAND	NETHERLANDS	SCOTLAND	FRANCE
			Filter variables			
Remove those in continuing education	edfilt	Select if (edfilt eq 1).	L11a_5	Mp9610L	Dooct	Sizp13
Principal activity is employment	empfilt	Select if (empfilt eq 1).	Activ	Activ	Activ	Activ
Eurostat definition of paid work	hrsflt	Select if (hrsflt eq 1).	Hours	Hours	Hours * Problem of truncation	Hours
Principal activity is employment, apprenticeship or scheme	wkflt	Select if (wkflt eq 1).	Activ	Activ	Activ	Activ
Lower level leavers	llfilt	Select if (llfilt eq 1).	Levvlmt	Levvlmt	Levvlmt	Levvlmt

Missing values (for all):
-9= not answered
sysmis=not applicable