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**The From-school-to-work dynamics : timing of work and quality of work in Italy, the Netherlands and the United States, 1980-1998**

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**THE FROM-SCHOOL-TO-WORK DYNAMICS.  
TIMING OF WORK AND QUALITY OF WORK IN ITALY,  
THE NETHERLANDS AND THE UNITED STATES, 1980-1998**

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## **Abstract**

This paper studies the transition from school to work in Italy, the Netherlands and the US from a dynamic perspective. Its aim is to investigate to what extent observed variations in returns to education reflect institutional differences in the three countries. Hypotheses are developed about how the characteristics of the educational system and the productive structure affect the school-to-work transition in the three countries. Two aspects of the transition are analysed by means of event history and regression methods: the duration of job search and the quality of the first job obtained. The results largely support the hypotheses.

## INTRODUCTION

In the past years social research has developed a growing attention for cross-national differences in the association between education and work (e.g. Maurice, Sellier & Silvestere, 1986; Allmendinger, 1989; Kerckhoff, 1995, 2001; Shavit & Müller, 1998; Ryan, 2001). How and to what extent education is used as a selection criterion on the labor market is dependent on institutional characteristics within which job seekers and employers operate.

Although the school-to-work transition has regularly been studied from a dynamic perspective in single-country studies, few attempts have been made to study cross-national differences within a dynamic framework (but see Bernardi, Layte, Schizzerotto & Jacobs, 2000; Scherer, 2001; McGinnity, 2002). The strong demands that such analyses have to the data material have made this difficult. Thus, research like the exceptional comparative work collected in Shavit and Müller (1998), normally concentrates on the impact of education on occupational status and social class for young adults using cross-sectional data. These outcomes can be seen as indicators of the *quality* of a job.

The progress in data collection in many countries has, however, made available quite a few data sets that allow for a cross-national comparison of the school-to-work transition in a dynamic framework. This makes it possible to study also the impact of institutions on the *timing* of first employment after leaving school.

A second point on which we advance on existing research on the school-to-work transition is that we, unlike most contemporary research, try to consider institutional differences on the demand side of the labor market in addition to supply factors. We interpret our findings, more specifically, in terms of the job creation possibilities that employers have. Both the overall amount of vacancies as well as the ratio of high/low vacancies shed light on cross-national differences in how smooth people of different types of schooling transit from the schooling phase to the employment phase of their lives.

This paper brings together life-history data for Italy, the Netherlands and the United States. More specifically, we will aim to study the duration of the transition from school to

employment, and further analyse the quality of the job in terms of occupational status. Our interests are threefold:

1. Cross-national differences in the effect of education on *duration* to first post-school job;
2. Cross-national differences in the effect of education on the *occupational status* of the first job;
3. Cross-national differences in the impact of the duration to the first job on the occupational status of the first job.

The structure of the paper is the following. In the next section we will discuss the theoretical framework of our three countries comparison. In the third section we will present data, variables and statistical models used in the analyses. Finally, in the last two sections we will discuss the main results of our study and draw some tentative conclusions.

## **INSTITUTIONS, MARKETS, AND THE TRANSITION FROM SCHOOL TO WORK**

Following a classical distinction, an explanation of labor markets outcomes has to take into account three factors: the characteristics of the labor supply, labor demand and the matching process that connect them together (Granovetter, 1981). At cost of some simplification, we will discuss how the cross-national differences in each of these factors affect educational returns at entry into the labor market.

### **Cross-national differences in supply of qualifications**

A first institutional factor that should be taken into account when examining cross-national differences in the transition from school to work is the educational system. An influential classification is provided by Allmendinger (1989) and Shavit and Müller (1998). These works argue that educational systems vary in their level of stratification (the proportion of a cohort that attains the maximum numbers of school years provided by the educational system and the extent and system of tracking into 'higher' and 'lower' secondary education), and standardization (the extent to which the education system meets the same standards nationwide, such as in terms of budgets, examinations, or teachers' training).

Thus, it has been argued that in countries with highly stratified and standardized educational systems, educational returns in terms of the quality of the first job (occupational status, earnings) should be stronger than in other countries. This is because high levels of stratification makes it possible for employers to select among fewer applicants with a well-cut hierarchy in the qualifications, and higher levels of standardization makes the signals provided by education more reliable. Indeed, this hypothesis has already been confirmed by the cross-national studies of Allmendinger (1989) and Shavit and Müller (1998). With regard to the *timing* of the first job, if the educational system is standardized and most types of education within a country offer accurate signals towards employers, then we could expect to see *little* difference between qualifications in entry rates. The information that employers have on the productivity is then less differentiated across educational programmes of applicants than in settings with lower levels of standardization. In other words, in countries with a standardized system one should observe that the clear signalling function actually leads to *small* differences between types of education in entry rates.

Also another aspect of the stratification dimension is important, namely the percentage of people with tertiary qualifications (cf. Shavit & Müller, 1998). In highly stratified secondary educational systems, fewer people enter tertiary education than in systems with a low level of secondary educational stratification. Low stratification at the secondary level induces people to aim as high as they can in tertiary education, because few valuable signals can be obtained below college level. One might argue that in a stratified educational system

highly educated school leavers should be advantaged in the job search process because they have fewer competitors with the same level of education. Therefore, one should expect to observe stronger differences in entry rates by qualification in stratified educational systems. However, this will crucially depend on the availability of adequate jobs for highly qualified job applicants. We turn therefore to examine an important but rather overlooked aspect of the school-to-work transition: the characteristics of the demand of highly qualified labor.

### **Cross-national differences in demands for qualifications**

Alongside these cross-national differences in the design of educational systems (i.e. *supply*), cross-national differences on the employers' side of the labor market (i.e. *demand*) form a second group of factors that potentially have severe consequences for the transition from school to work. In most general form, demand side institutional differences that are of particular interest in our context refer to cross-national variation in the overall amount of vacancies (i.e. possibilities to create jobs in general) and the ratio of high/low job vacancies. These two dimensions seem particularly important to understand educational differences in the *timing* of work. If an extremely high amount of vacancies is created in each segment of the labor market (i.e. labor demand uniformly exceeds labor supply), educational differences in the likelihood of finding the first job are less likely emerge because for each qualification level there is a surplus of job offers<sup>1</sup>. Conversely, if there is a qualification bias in the jobs created (i.e. if the demand is concentrated in a segment of the labor market), educational differences will more strongly appear. A simple illustration of these arguments is provided in Table 1. Here for sake of simplicity, we consider that labor supply and demand are divided in two segments, high and low qualified school leavers/vacancies. In situations a) and b), labor demand is equal to or exceeds labor supply and therefore, assuming that there are no differences in the matching procedures, no educational differences in the timing of work should be observed. On the other hand, in situation c) the demand for qualified jobs is

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<sup>1</sup> At this point the discussion, we don't not take into account market failures in the *matching* of labor demand and supply. With this regard, we have argued above that the standardization of the educational system and the signalling role of the educational qualifications are crucial.

relatively higher and thus we should expect to observe that highly qualified school leavers are advantaged in finding a job. Finally, in situation d) the ratio high/low vacancies is the same as in situation a) and b) but labor supply exceeds labor demand. No educational differences should be observed in the likelihood of finding the first job, unless higher qualified school leavers are keen to accept a lower qualified first job. This will crucially depend on two factors: the chances of upward move once a low level type of job is accepted and the possibility of waiting until a satisfying qualified job is found.

**Table 1. Hypothetical combinations of labor supply and demand and consequences for educational differences in the timing of work**

Qualification	Supply	a)	b)	c)	d)
		Demand	Demand	Demand	Demand
High	20	20	30	40	15
Low	80	80	120	60	60
	100	100	150	100	75
Expected educational differences in the timing of work		Ref.	0	+	?

Various institutional factors affect the overall level and structure of labor demand. First, labor markets differ in the extent that a dichotomy exists between ‘insiders’ and ‘outsiders’ on the labor market. As Esping-Andersen (1999) has shown, countries with a high level of employment protection generally experienced lower levels of job growth. Moreover, there is evidence that strong employment hinder youth employment (OECD, 1998, p. 100; Esping-Andersen, 2000, p. 89). With this regard, the Italian labor market is protective for adult male workers making it hard for employers to create jobs for new entrants.

Secondly, something that has received considerable attention in studies on occupational careers but has largely been overlooked in studies on the school-to-work transition, developments in the distributions of types of jobs or labor market sectors have a potential impact on transitions (cf. DiPrete, 1993; DiPrete, De Graaf, Luijkx, Tahlin & Blossfeld, 1997). Finding a job or obtaining a prestigious job after leaving school are outcomes that are dependent on the availability of jobs in certain sectors.



The demand for skilled and unskilled labor will crucially depend on the productive system of a country. With this regard useful insights can be found in the political economy literature on national varieties of capitalism (Crouch & Streek, 1998; Soskice, 1999). For the purpose of this paper, it is sufficient to stress that the quality of labor demand will be largely determined by the dominant market and organizational strategies of national firms. At the costs of some simplification, one can argue that where, like in US, firms tend to compete on the development of innovative products, opening of new markets and “radical innovation” to use Soskice’s (1999) term, there will be a larger demand for very highly skilled workers, such as scientists, managers, professionals. On the other hand, in those countries where firms mainly compete on the base of the constant improvement and incremental innovation in their production process (“diversified quality production”), such is the case of Germany but also the Netherlands, there will be a relatively high demand for vocationally trained and medium-educated workers. Finally, in the case of Italy, where the largest number of firms is small-medium sized, the demand for both the very high and middle skilled workers is limited and job creation is more eminent in the low segments of the workforce.

### **Cross-national differences in the matching of labor supply and demand**

Alongside institutional differences in the supply and demand of qualified labor, countries vary substantially in the characteristics of the job search process, i.e. how labor supply and demand eventually match. In line with the analytical distinction between quality and duration of the school-to-work transition that drives our study, it is important to consider those institutional arrangements that favour the match of specific educational qualifications to specific occupations (quality) and those that support a longer and more through-out job search (duration).

With regard to the quality of the match, it seems important to consider the nature and strength of the linkages between school and work. In this respect, Hannan, Raffe and Smyth

(1996) distinguish between strong and direct linkages, collinear linkage, and no linkage<sup>2</sup>. *Strong and direct linkages* exist in the dual system types of vocational training, such as the German and Danish ones, where employers and school jointly collaborate in the provision of training. *Collinear linkages* are found when there is a strong congruence between training and certification provided in school and training or legal requirements for specific occupations in the labor market. For instance in the Netherlands, although there is little joint delivery of training by school and employers, there are over 200 occupations which require that training programmes in the educational system have been taken before entry (Hannan, Raffe & Smyth, 1996). The congruence between the occupational labor market and the courses offered by the educational system is guaranteed by a combination of State and professional body regulations. Collinear linkages might also emerge as a consequence of credentialism. Thus, in some countries such as Italy, access to occupations in the public sector, in the professions and semi-professions is regulated by law and conditional on the possession of a given educational qualification (Schizzerotto & Cobalti, 1998). Finally, where *no direct linkages* between school and work exist, as in USA, employers are not involved in any form in schooling and there is no formal congruence between training and certification provided by the educational system and training or legal requirements to access given occupations in the labor market.

With regard to the duration of the school-to-work transition, one has to consider the role played by those institutional arrangements that might allow a more careful job search. In this respect a key role is played by the state and the family. Thus, the availability of unemployment benefits, social assistance and housing benefits reduces the pressure of accepting immediately a job offer. The same is true if the youth are still living in their parental home and/or receive some financial support from their parents. These public or family forms of support are important because they might allow highly educated school-leavers to wait for an adequate job offer and prevent them to compete downwardly for not qualified jobs.

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<sup>2</sup> Hannan, Raffe and Smyth. (1996) consider also as a separate dimension the situations where the school act as a job placement office, as in the case of Japan. Since this seems a somehow different type of strong linkage, we don't discuss it here in details (but see for instance Rosembaum, Settersten, & Maier, 1990).

## Summary

The three countries that we study form an exceptionally clear combination to test these claims on the role of institutions on the transition from school to work. The transparency of education-based skills, and the extent to which employers have the power to create and destruct jobs as a response to changes in supply and/or in the economic tide, seem crucial axes along which cross-national differences in the school-to-work transition must be understood, and the three countries we study differ significantly on these axes.

In Italy, a substantial part of secondary education is organized in vocational tracks, but no dual system exists in Italy. The Italian educational system is highly standardized, both at the secondary and at the university level in terms of the curricula and examination system<sup>3</sup>. In this regard, the Italian educational system does provide employers with clear information that can be used when making the decision whom to employ (Bernardi, 2003; Hannan, Raffe & Smyth, 1996). Educational qualification have legal validity and, as it was mentioned above, access to occupations in a large segment of the labor market is conditional to having achieved a specific qualification credential. If one considers labor demand, employment growth in the period under analysis has been almost null and the insider/outsider division that characterises the Italian labor market further penalizes young school leavers in search of their first job<sup>4</sup>. Moreover, the relatively high incidence of small-medium size firms, concentrated in specialised suppliers (for instance, specialized machinery industry) and suppliers dominated (textiles and apparel industry) industries, with little research and development and low technical and organizational complexity, further limits the demand for highly qualified school leavers (Porter, 1990; Guerrieri, 1994; Moscati & Rostan, 2000). All this would lead to relative advantages of the low-skilled in Italy as regards the timing of employment. At the same time, highly educated school leavers wait for a job that matches their educational level and initially refrain from taking up lower level jobs. This strategy is viable because young school leavers in most cases still live in their parents' home.

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<sup>3</sup> In this paper we refer to the Italian educational system prior to the reforms that have been issued at the end of the 1990s.

<sup>4</sup> In 1997 the unemployment rate of young people aged 14-24 (34%) was almost 3 times higher than the total unemployment rate (12%).

The Netherlands is a country with a highly developed vocational training system at secondary and tertiary level. About one-third of vocational secondary education is organized in the dual system (OECD, 1998), which is not quite as much as in Germany but still higher than many other countries. In general, the educational system can also be considered as standardized to the extent that qualification represent the same skill level through the country (Shavit & Müller, 1998). On the demand side, the Dutch labor market is more protective to insiders than the American, although in the 80s and 90s several policies to enhance labor market flexibility have been implemented (Gorter, 2000). With regard to the purpose of our analysis, two features of the Dutch labor market are relevant. First, employment growth in the 80s-mid 90s has been much above the OECD average<sup>5</sup>. And even more important, there is evidence that since the late 80s vacancies have exceeded unemployed labor supply (Gorter, 2000). Second, in the Netherlands since 1991 there is a special programme of direct job creation at the low end of the labor market for disadvantaged young unemployed (OECD, 1998). This programme subsidizes public sector, non profit sector and in some cases, private sector jobs for young unemployed and school leavers who have been unemployed for six months. In addition, among the three countries considered in this paper, the Netherlands stands out because its relatively high level of public transfers to the youth, in the form of income support and housing allowances that reduce the pressure find a job immediately after leaving the educational system (OECD, 1998).

The American educational system can be characterized by low levels of nation-wide standardization, stratification and vocational specificity. Rather than an indicator of productive skills, therefore, American employers use education as an indicator of trainability. This suggests that employers have a preference for workers with as much education as possible, thus enhancing employment opportunities for the highly educated. Because of the few institutional restrictions as regards employment protection, this preference for highly skilled personnel is not disturbed by an insider/outsider labor market or by limited opportunities to higher-level job creation. In addition, the production structure with a strong emphasis on research and development and complex organizational structure favour job

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<sup>5</sup> It should be noted that employment growth in the Netherlands has been mainly a part-time job growth (Visser & Hemerijck, 1997).

creation in the higher segment of the labor market. Truly, part of the high job growth in mid 80s-mid 90s is due to the expansion of low level jobs in the consumer sector (Esping-Andersen, 1993). It is important to stress that these jobs are typically filled in by adult immigrants but also by university or secondary education school leavers that use them as stepping stones into the labor market.

In table 2 we classify the three countries on the base of the institutional dimensions examined in the previous sections.

**Table 2. Institutional dimensions of the labor supply and demand: a three countries comparison**

	Yes	No	High	Medium	Low
<i>Supply (educational system)</i>					
Standardization	IT, NL	US			
Stratification	IT, NL	US			
Vocationally oriented	NL	IT, US			
<i>Demand (vacancies)</i>					
Overall amount			NL, US		IT
High/low ratio			US	NL	IT
<i>Matching</i>					
Support to through-out job search					
.. public support	NL	US			
.. family support	IT				
School to work linkages:					
by training	NL	US			
by credentialisms	IT				

## Hypotheses

One should stress that our hypotheses refer to educational returns i.e. the relative advantage of highly qualified school leavers at entry in the labor market (both in terms of duration of the job search and quality of the job achieved) when compared to low qualified school leavers. In addition, we also focus on differences between general and vocational type of qualifications. With these caveats in mind, the discussion on the impact of the supply and demand institutional factors on the school-to-work transition of the previous sections can be summarized in the following hypotheses:

H1. *The timing of work hypothesis*: we should expect that university and secondary education school leavers have shorter job search in those countries where: the demand for qualified labor is relatively high (i.e. there is an abundance of qualified job for school leavers); no institution arrangement prevent downward competition; the education educational system is stratified (fewer competitors for the good jobs); and the provision of high education is standardized (the signal conveyed by the educational credential is clearer and thus less time lost in the recruitment process).

H2. *The quality of work hypothesis*: we should expect that the advantage of university and secondary education school leavers in the quality of the first job is higher in those countries where: the demand for qualified labor is high, there are institutional arrangements that prevent highly qualified school leavers from downward competition for unqualified first jobs and favour the congruence between qualifications and first occupation; the educational system is stratified; and the provision of high education is standardized.

H3. *The stigmatization hypothesis*: highly qualified school leavers who have to wait long for a job are negatively stigmatized in those countries where fast transition are the norm and there is an institutional pressure to find the first job quickly.

## **RESEARCH DESIGN**

### **Data**

The Dutch data come from two Family Surveys of the Dutch Population, 1992/93 and 1998. Both surveys contain data of nationally representative samples. The 1992 survey consisted of 1,000 primary respondents (200 single, 800 married or cohabiting), of whom also 800 partners were interviewed. The 1998 survey consisted of 1,142 primary respondents, whose partners were also interviewed (879). The data sets contain information on several issues, varying from occupational and educational careers, housing history, family formation, to several types of consumption of respondent and their parents (Ultee & Ganzeboom, 1993; De Graaf, N., De Graaf, P., Kraaykamp & Ultee, 1999).

The Italian data used in this paper come from the first wave of the ILFI (Italian Household Longitudinal Survey), carried out in 1997 on a national representative sample of 9770 individuals belonging to 4.457 households throughout Italy.

The American data come from the U.S. Survey of Income and Program Participation (SIPP; U.S. Bureau of the Census, 1991). This study is a nationally representative household panel survey. The interval between surveys is four months, allowing for detailed information about employment careers. The years for which information is used are 1984-1995, thus covering a slightly shorter span than the Dutch and Italian data.

We only study school leavers who left school during the 1980s and 1990s. This way we minimize all kinds of within-country changes in institutional characteristics, such as changes in educational systems that emerged throughout Europe in the 1960s and 1970s. We analyse the transition to the first job after leaving full-time education. So this is not necessarily the first job one has had in his/her career, but plausibly the first job for which one's education provided an accurate signal.

There are a few limitations with regard to the comparability of the data. The Dutch data provide no information on the employment status of the period in between leaving school and starting a job. Hence, we do not know whether individuals were unemployed or out of the labor force in this period.<sup>6</sup> For the Netherlands we have to assume that individuals who left school start to look for a job immediately. To avoid extremely long durations for this group, for example as a consequence of the low labor force participation of Dutch women up to the 1980s, we excluded people who have never worked and who are out of the labor force (e.g. housewives, pensioners; anyone who is not unemployed) at the time of the survey. The Italian data are better in this respect, since separate dates are available for leaving school and starting to search for a job. We chose to use the most accurate date for Italy, i.e. the start of the search period rather than of leaving school. For the US we used the same procedure as with the Dutch data.

Another difference between the datasets is that the Dutch data only provide information for jobs that lasted for at least three months. This way only more ‘serious’ transitions are taken into account. A third difference among the datasets are their size; for the Netherlands we cover the life histories of 1106 individuals, for Italy we observe 2482 individuals, and the US analyses are conducted on 9529 cases. We are therefore more concerned with the magnitude of effects than with their statistical significance.

## **Variables**

The variables we use are the following<sup>7</sup>. Education is measured in seven categories using the CASMIN classification (Braun & Müller, 1997): 1a ‘primary’, 1b ‘lower secondary general’, 1c ‘lower secondary vocational’, 2ab ‘higher secondary vocational’, 2c ‘higher

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<sup>6</sup> It is known for people who are in this period at the time of the survey, but not in retrospect for people who were working at the time of the survey.

<sup>7</sup> In previous analyses we have also considered the variables class of origins (in Italy and the Netherlands) and ethnicity (in US). Since the introduction of these variables did not imply any substantial change in the effects of the key variables of our analyses, we have decided to exclude them.



secondary general' (reference category), 3a 'short tertiary', 3b 'university degree'. In Italy given the few cases of school leavers with short tertiary education, 3a and 3b have been coded together. Moreover, given the structure of the US educational system, we have only one category for lower secondary education (1b and 1c, including 1a which is basically non-existent in the US) and higher secondary education (2ab and 2c). Gender is operationalized with a dummy variable representing women. Unemployment rate is a time-varying covariate (of the year of entering a job), and refers to the yearly national rate in the Netherlands, the yearly regional rate in Italy, and the yearly state-level rate in the US. Quality of the first job is measured by the International Socioeconomic Index (ISEI; Ganzeboom, De Graaf, & Treiman, 1992), a widely used measure for occupational status. As our arguments about the impact of duration refer to 'better' or 'worse' jobs we prefer a uni-dimensional way of measuring job quality. Another obvious choice would be to use earnings, but we do not have earnings data in retrospect for the Dutch and Italian data. Table 3 shows descriptive statistics for all used variables.

## Statistical Models

We focus in this paper on the transition into *dependent* employment. In the first step of our analysis, the timing of a job and the quality of this job are modelled with two separate equations. The set-up of our analyses is thus equivalent to the continuous state-space model described in Petersen (1988): our model consists of estimating a continuous-time event-history model for the timing of first jobs and an OLS regression for occupational status of first jobs conditional on exit into a first job. More specifically, we employ a piecewise constant exponential model for the event-history part of the analysis (Blossfeld & Rohwer, 2002). We estimated a competing risk model which treats entry into self-employment and entry into dependent employment as two different destination states. We will only show parameter estimates for the entry into dependent employment. This way, we avoid problems with entry into self-employment regarding the troublesome relationship between self-employment and occupational status ( Ganzeboom, De Graaf, & Treiman, 1992). The occupational status associated to the first job is estimated with a regression with robust standards errors.

**Table 3. Descriptive statistics**

	Italy (N = 2482)			Netherlands (N = 1106)			US (N = 9529)		
	Min	Max	Mean	Min	Max	Mean	Min	Max	mean
Duration in months	1	60	7.31	1	60	8.21	1	39	3.78
Duration squared	1	3600	180.47	1	3600	188.20	1	1521	47.77
Education <sup>a</sup>									
1a Primary	0	1	.05	0	1	.005			
1b Low sec general	0	1	.32	0	1	.08			
1c Low sec vocational	0	1	.08	0		.16			
1abc (US)							0	1	.21
2ab High sec voc	0	1	.34	0	1	.28			
2c High sec gen	0	1	.09	0	1	.06			
2abc High sec (US)									.30
3a Tertiary vocational/short				0	1	.26	0	1	.33
3b Tertiary university				0	1	.16	0	1	.16
3ab Tertiary (IT)	0	1	.12						
Female	0	1	.50	0	1	.50	0	1	.49
Unemployment rate	3.1	26.9	11.41	4.3	11.7	7.71	.63	20.37	5.50

<sup>a</sup> For lack of differentiation within educational levels (within the secondary level in the US and within the tertiary level in Italy), educational classifications are used that represent these institutional differences.

## RESULTS

Table 4 provides the estimation results of our key model in the three countries studied. Apart from duration dependence and the effects of education that are discussed more extensively below, the estimates show that women tend to have lower transition rates into first jobs in Italy and the United States, though not in the Netherlands. In all three countries, however, women achieve higher occupational status in first jobs than otherwise comparable young men. In more detailed results not shown here, we also obtained evidence of the effects of social background, but also of ethnicity and race on transition patterns. In the Netherlands and Italy, we could include origin class but it had hardly any direct effect on transition rates (not reported). In the United States, non-white young people, particularly black youth face more significant difficulties in locating first jobs than whites, yet there is little evidence of racial differences in terms of occupational status given that a first job has been located. Also, as evident from Table 4 again, high local unemployment tends to depress youth chances of finding first jobs. While effect sizes are similar in all three countries, the coefficient is not statistically significant in the Netherlands, however.

In terms of our key variables of interest, our estimates show evidence of negative duration dependence in transition rates to first jobs in all three countries. Clearly, the longer the search duration for the first job, the more difficult it becomes for young people to actually locate one. Negative duration dependence is strongest in the United States, intermediate in Italy, and lowest in the Netherlands. While this ranking of countries is consistent with our stigmatisation hypothesis, it is important to recognize that this ranking is driven by cross-national differences in transition rates in the first month after leaving school (that are highest in the United States), but also by respective cross-national differences in transition rates after a few months of job search (that are lowest in the United States). Hence, the extent of stigmatisation in terms of access to first jobs seems indeed to be negatively related to the structural difficulty of obtaining a first job offer.

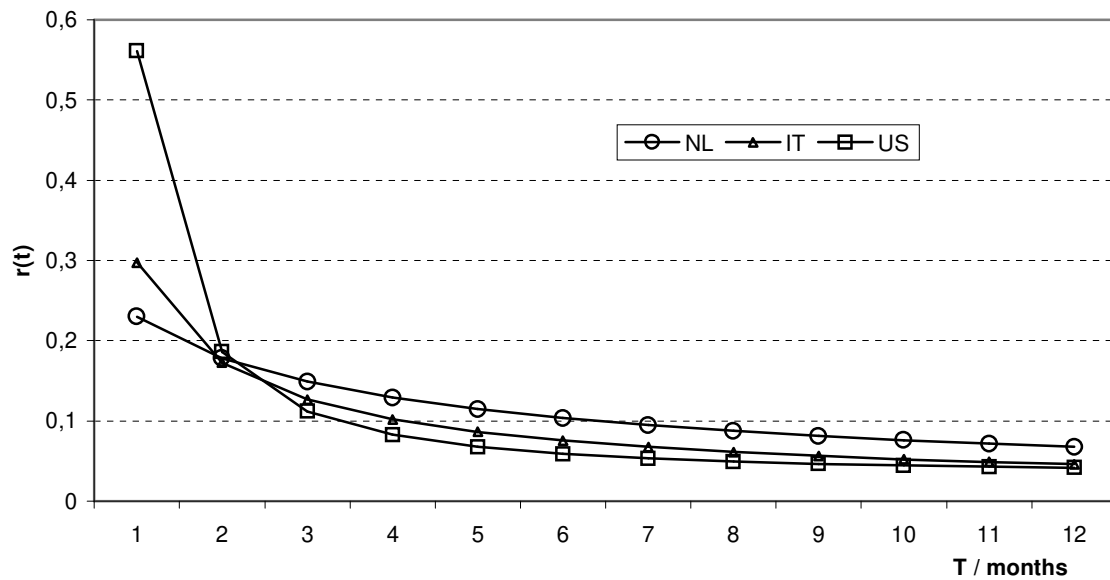
**Table 4. The timing and quality of work in the Netherlands, Italy and US (event history analysis and robust regression, separate specifications)**

	Event history analysis of the rate of entry into the first job <sup>a</sup>			OLS Regression of ISEI status in first jobs		
	NL	IT	US	NL	IT	US
Constant	-1.20**	-0.85**	-0.39**	44.20**	46.64**	34.49**
Log duration	-0.32**	-0.80**	-1.80**	-0.25	0.50	-1.46**
Log duration squared	-0.07**	0.02	0.30**	0.14	-0.18	0.39
<i>Education</i>						
1a Primary	-0.11	0.67**		-15.72**	-19.49**	
1b Lower secondary general	-0.01	0.38**	-0.47**	-9.43**	-15.22**	-1.64**
1c Lower secondary vocational	0.03	0.43**		-7.86**	-12.17**	
2ab Higher secondary vocational	0.10	0.25**		-3.12**	-4.47**	
2c Higher secondary general (ref)	0	0	0	0	0	0
3a Tertiary vocational / short	0.11		0.14**	6.19**		3.54**
3b Tertiary university	-0.28*	0.14	0.29**	17.66**	16.09**	12.49**
<i>Female</i>						
	-0.05	-0.17**	-0.11**	2.75**	1.53**	5.70**
<i>Unemployment rate</i>						
	-0.03	-0.05**	-0.03**	0.22	0.01	0.10
(Pseudo) R <sup>2</sup>	0.124	0.228	0.257	0.303	0.454	0.192
LR-/F-Test for education-duration interactions (df in parentheses)	14.9 (12)	57.3** (10)	45.7** (6)	1.03 (12,1034)	1.49 (10,1852)	1.75 (6,7202)

<sup>a</sup> Piecewise constant exponential competing risk model. Only entry into dependent employment is displayed, entry into self-employment is estimated in the same competing-risk equation, but not displayed in the table.

~ p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001

**Figure 1. Average transition rates for entry into the first job in the Netherlands, Italy and US**



With respect to the role of education, the statistical evidence also largely supports our initial hypotheses. Clearly, the effect of education on transition rates into first jobs is very different across the three countries under study. In the United States, we observe a strongly positive effect of educational levels on transition rates. Leavers with university education have significantly smoother transitions to first jobs than leavers from high school. In turn, leavers with completed high school face significantly less problems in entering the labor market than young people who dropped out of high school. A similar relationship between education and duration to first jobs is not found in neither the Netherlands nor Italy, however.

In the Netherlands, in particular, there is no significant relationship between education and time to first jobs at all. The only group significantly deviating from the reference group are university leavers (CASMIN 3b) who have somewhat lower chances of entering a first job than leavers from CASMIN 2c. In Italy, moreover, the relationship between education and duration to first jobs actually becomes negative: compared to leavers from both the licei (CASMIN 2c) and university education, it is leavers with compulsory levels of education who make the fastest transitions into first jobs. Both in the Netherlands and in Italy, advantages of vocational qualifications are slight at best, and statistically significant only for the comparison of CASMIN 2ab leavers to CASMIN 2c leavers in Italy. When testing for further interaction effects of education and duration dependence, we found little variation and no systematic effects (cf. bottom row of Table 4).

With respect to occupational attainment, there is much more cross-country similarity. In all three countries, level of education has clear positive effects on the occupational status of first jobs. At a more detailed level, however, significant country differences are apparent again. Most importantly, education has significantly stronger effects on occupational outcomes in both European countries. The expected status difference between university leavers and upper secondary (CASMIN 2c) leavers is more than 17 ISEI score points in the Netherlands, 16 ISEI score points in Italy, yet only 12.5 score points in the United States. In comparison to educational differentials at the lower levels of education, country differences in returns to tertiary education are relatively small. Completing upper secondary education rather than compulsory education (CASMIN 1b) in the Netherlands conveys occupational returns of slightly less than 10 ISEI score points on average, and the same differential

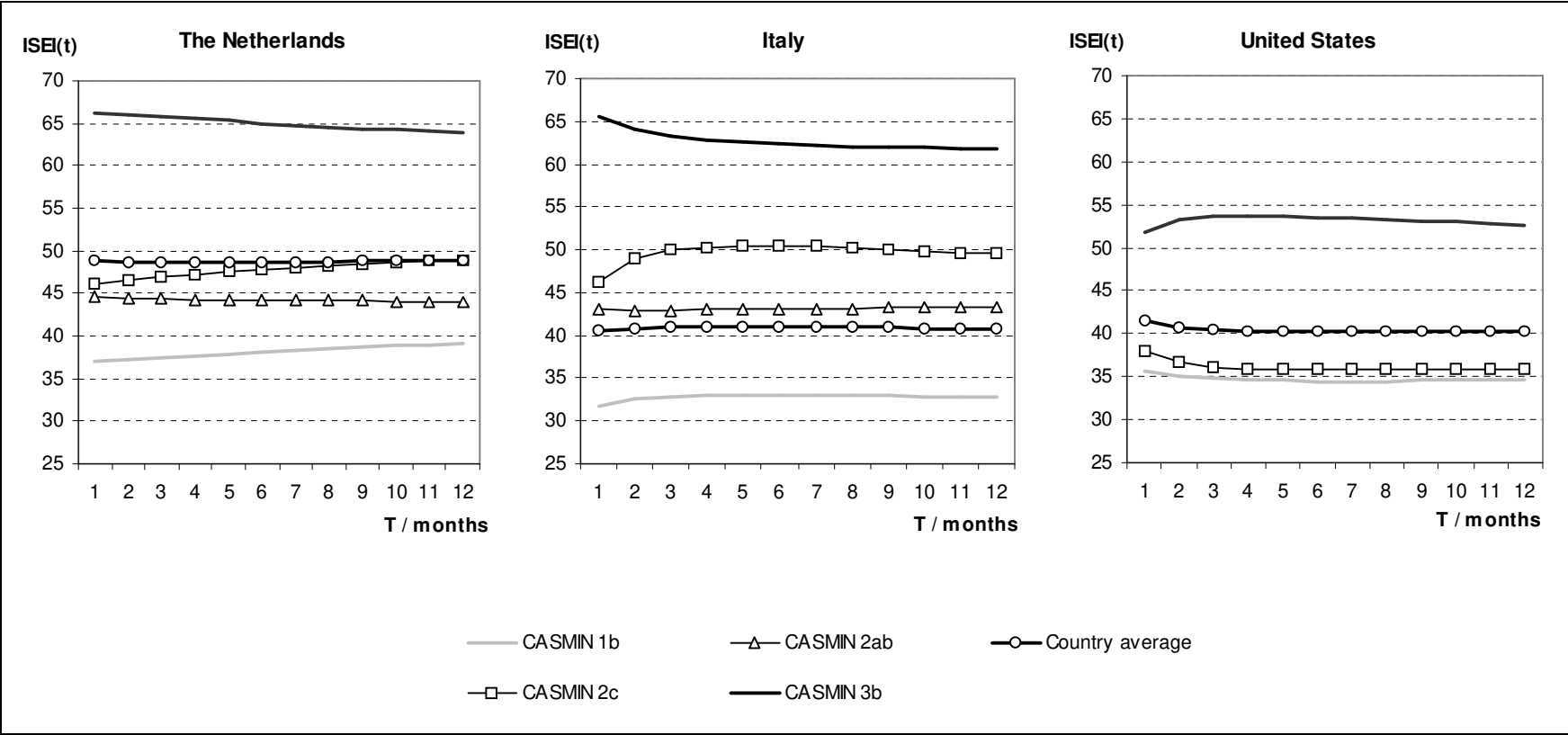
amounts to a full 15 ISEI score points in Italy. In the United States, however, occupational status returns to completing high school amount to a mere 1.6 ISEI score points on average.

Consistent with our hypotheses derived from institutional differences in the structure of training systems, the relationship between education and occupational status in first jobs is evidently much weaker in the United States than in the two European countries. This applies in particular to the secondary level where we find returns to completing high school in the United States marginal in comparison to completing upper secondary education in both the Netherlands and Italy. While consistent in principle with an account that points out the undifferentiated nature of the American system of secondary education, there is one aspect of the results that suggest that this explanation is not fully complete.

If one compares absolute status levels in first jobs across countries, it is evident that low returns to education in the United States are also low absolute status returns (Fig. 2).

Compared to their European counterparts, American school leavers with more than minimum education tend to have significantly lower status outcomes in first jobs, and the fact that upper secondary and tertiary educated Americans enter low-level first jobs (rather than the fact that they enter jobs similar to those entered by the least educated) seems to constitute the key cross-national difference of interest. Explaining this from differences in the signalling value of education would be more plausible if there was merely evidence of weaker educational differentiation of status of first jobs in the United States. The fact, however, of a mean status difference between the American case and the two European countries also suggests differences in the structure of labor markets at work here. Interestingly, since U.S. outcomes are well below those for European school leavers, it does certainly not seem to be true that higher U.S. job growth in skill-intensive occupations comes to benefit school leavers in their first jobs.

Figure 2. Returns to education in the Netherlands, Italy and US



Finally, there seems to be no appreciable effect of search duration on status outcomes. Basically there is no evidence to support the stigmatisation hypothesis i.e. a worsening of the status of the first job achieved as function of the search duration. In this regard we would have expected to find a stigma effect particularly in US, where immediate transitions into first jobs are the norm. On average, however, a year of job search implies only a one ISEI score point reduction. Even for the university degree holders the Netherlands and Italy, who tend to have the longest first job search duration, the stigma effect of long durations is rather weak, amounting to about four ISEI status score point for a year of job search. It is important to stress that these finding should be corroborated by further analyses using additional indicators for the quality of the first job such as the income, type of contract and fringe benefits associated to the first job.

## CONCLUSIONS AND DISCUSSION

In this paper we have examined the impact of educational qualifications on the transition from school to work, and have further addressed the question why this impact differs across countries. We have contributed on earlier research on two accounts. First, we have put the cross-national comparison of the transition from school to work in a dynamic framework using life-history data. Although contemporary sociological practice in analysing life cycle transitions is to employ event-history techniques, cross-national research on the transition from school to work using such a dynamic framework is scarce. Our dynamic research design has not only expanded on earlier work to cover three countries, but, more importantly, has also enriched sociological insight in the transition process by combining questions relating the *timing* of events (how long does it take to find a job with a given qualification level) with the *quality* of the outcome (what is the occupational status of the obtained job given a particular search duration and qualification level). A second advancement of our approach in comparison to earlier work is that we simultaneously studied supply and demand factors that affect the labor market value of a particular qualification level in a particular country (with a particular search duration). In addition to the frequently observed differences (cross-national and between types of qualifications) in the supply of



skills, cross-national variation in demand factors that affect the labor market opportunities for people of different qualifications has only modestly been addressed (but see Culpepper & Finegold, 1998). The main demand-side indicator that we theoretically focus on is the opportunity for employers to create and destruct jobs of various types.

The countries we analysed are the United States, Italy and the Netherlands. These three countries form an exceptionally rich comparison as they differ in many of the characteristics that are hypothesized to affect the value of qualification types. First, the countries differ strongly with regard to the educational system, in particular the vocational education and training system. In the US, vocational education is very weak on occupational specificity (Shavit & Müller, 1998), despite an increased vocational orientation of the two-year colleges since the 1960s (Brint & Karabel, 1991). In Italy, the vocational educational system is certainly larger than in the United States, but not very closely linked to the labor market. Furthermore, no vocational education exists at the tertiary level. The Dutch educational system is of these three countries the most occupationally specific. Vocational education and training comprise a large fraction of both secondary and tertiary education, and the dual system, in which students combine employment with school-based learning, is larger than in most other countries (Breen & Buchmann, 2002).

Secondly, the countries differ strongly in the possibilities employers have for the creation and destruction of jobs in general, and of jobs of different skill levels in particular. In Italy, the labor market is highly protective for employees and relatively hostile to ‘outsiders’ such as school leavers. Governmental policy measures make it hard for employers to lay off workers and thus make internal careers the standard pattern. Additionally, the demand for highly-skilled workers is rather low due to factors such as low expenditure on Research and Development, and a large fraction of small and medium sized firms. All this makes that jobs open to outsiders can often be found at the bottom of an organizational hierarchy, causing a negative expected association between qualification level and employment entry rate. The American institutional structure aimed at ‘radical innovation’ (Soskice, 1999) is supportive for highly skilled work, whereas the Netherlands, with its incremental innovation and reasonably strong employment protection, takes an intermediate position as regards the (skill-level differentiated) job creation possibilities.

In sum, two basic patterns of school-to-work transition can be identified. On one hand, in the United States, people with higher levels of schooling land a job much sooner than lower qualified school leavers, much more so than in Italy and the Netherlands. However, the occupational ‘returns’ to education in terms of job quality (occupational status) are weaker in the United States than in Europe. As costs of some simplification one could label this pattern of transition as “fast but bad”.

On the other hand, in the Netherlands highly educated school leavers have no advantage in the length of the job search, while in Italy they are even at disadvantage when compared to those who are low educated. However in both countries, they enjoy high rewards in terms of the quality of the job. Notably they do not incur in any strong penalty for long unsuccessful searches. Thus, at cost of some simplification, this pattern of school-to-work transition could be described as “slow but good”. There is however, an important difference between the two countries that can no be overlooked.

A specific feature of the Netherlands, is that vocational secondary and tertiary education is more beneficial than in Italy both with regard to the timing and quality of employment (see also Shavit & Müller, 1998). This finding can be explained referring to the dominant productive and organization strategy of Dutch firm based on DQP that implies a relatively high demand for vocationally trained school leavers. Moreover, in the Netherlands there is a strong congruence between training and certification provided in school and training requirements for specific occupations in the labor market (Hannan, Raffae & Smyth, 1996). This favour the matching of specific vocational qualifications to specific well rewarded occupations.

One has also to consider that the overall similar pattern found in the two countries reflect rather markedly different institutional arrangements. In the period under study the Netherlands have enjoyed very high level of labor growth that has benefited all levels of qualifications. In particular, programs of direct job creation have been targeted to low skilled school leavers. Moreover, the possibility various forms of income support also reduce the pressure for a fast job search. As a consequence, entry rates are rather similar across educational groups, besides the advantage of those who have vocational training

qualification, as it has been mentioned above. In Italy job growth has been stagnant and more eminent in the low segments of the workforce. This seems to explain why school leavers of lower qualification levels find jobs soon. In addition, highly educated school leavers do not engage in downward for unskilled jobs since they can rely on family support and thus wait for a job that match their qualification.

Two general conclusions can be drawn from the findings of our comparative study. First, in order to make sense of the school-to-work transition one has to take a broad view and consider all the factors that make up the institutional context in which the transition is embedded. For instance, it is difficult to explain the negative effect of education on the duration of the first job search for Italy, if one focuses on the characteristics of labor supply only. Given the standardized and stratified nature of the Italian educational system, one should expect to observe the opposite results. In order to make sense of this findings has to consider the characteristics of Italian productive system, with a labor demand biased to low skilled workers, and family forms of support that prevent highly qualified workers to engage in downward competition for low qualified job.

Second, from a policy perspective, if the aim is making the school-to-work transition smoother and improve the quality of the matching of qualifications and occupation, it makes little sense to act on a single institutional dimension. In other words, a reform is likely to fail if it acts on one specific factor only. Thus, a reform of the educational system that does not take into account the characteristics of the labor demand is unlikely to bring about the expected results. As it has already been noted, the attempts to emulate the German dual system in UK have not improved the employment chances of the low qualified school leavers because of the deep institutional differences that characterize the productive systems of the two countries (Soskice 1991). Analogously a program of direct job creation for highly qualified school leavers will not necessarily speed up the transition if university qualifications are unstandardized and thus prove to be of little currency in the selection process.

These policy considerations open up the normative question of which pattern of school-to-work transition is socially preferable<sup>8</sup>. In order to offer an answer one should first define a moral principle to make the judgment and then try evaluating the social benefits and costs implied by the different patterns of school-to-work transition identified in our analysis. For instance, the “fast but bad” pattern identified in US implies, at least at the beginning of employment career, a loss of human capital, while the “slow but good” Italian pattern has been associated to the very late emancipation of the Italian youth and the consequent postponement of reproductive behaviour. In the Netherlands, the social costs related to the slow school-to-work transition can be conceived in terms of public resources (i.e. income support, housing allowances) transferred to the youth. Although, this question goes far beyond the scope of present paper, we hope that the findings of our research might serve as base for further speculation in this direction.

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<sup>8</sup> On the importance of addressing this type of normative question, in order to clarify and make the assumptions that drive the sociological research clear, see Coleman (1976).

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