5 The basic qualification and labour market perspectives

5.1 Introduction

The part of the project that concerns the relationship between the basic qualification and the labour market perspectives with which it is associated was carried out by Rolf van der Velden of the Research Centre for Education and Work (Researchcentrum voor Onderwijs en Arbeid - ROA), with the collaboration of Maarten Wolbers, Robert de Vries and Patrick van Eijs.

The structure of the chapter is as follows. Section 5.2 goes into the question of how the value of a programme can be established and the methods by which a demarcation criterion can be found so as to specify a minimum level as the basic qualification. Examined on the one hand will be the extent to which labour market theories can offer a basis for such a demarcation. Explored on the other hand will be the arguments that figured in the policy of both the Ministry of OCW and the OECD when it came to defining a particular level as the basic qualification or as “level completion”.

Section 5.3 will compare the value of the Dutch basic qualification (WEB level 2) with the programmes immediately above it (levels 3 and 4) and the programmes immediately below it (level 1 and VBO). This analysis takes place on the basis of school-leaver research carried out by the ROA. Proceeding from the premise that level 3 and level 4 lead to a basic qualification in any case while level 1 and VBO do not, the position of programmes at level 2 allows us to investigate whether these are more similar to one group of programme or the other. Where the labour market value of a basic qualification does not differ substantially from that of programmes not regarded as a basic qualification, while there is a distinct difference as regards programmes at level 3 and level 4, there can indeed be some doubt about whether level 2 really offers us an adequate basic qualification.

Section 5.4 reports on a later study into the labour market perspectives of those in possession of a basic qualification. The measurements used as the basis of the earlier analysis related to cohorts leaving school in 1997-1998 and 1998-1999, years of economic boom. In order to compensate for economic effects, the analysis was repeated for cohorts leaving school in 1999-2000 and 2000-2001, years in which economic conditions were deteriorating. Section 5.4 also takes a look at sector differences. This analysis work falls outside of the terms of the actual project, but the results in question were generously made available to us by the ROA.
Section 5.5 determines the value of the Dutch basic qualification by means of an international comparison of the relative positions of those in possession of an ISCED level 3C short diploma. This comparison takes place based on data from the European Union Labour Force Surveys (EU LFS). Here again, the crucial point at issue is the position of the ISCED level 3C with respect to programmes immediately above and below it. The point of reference for the Dutch programmes at ISCED level 3C short are foreign programmes at ISCED level 3C short, a simultaneous comparison being made with other programmes at ISCED level 3 (3A, 3B and 3C long) and ISCED level 2.

Section 5.6 contains the chapter’s conclusions.

5.2 The value of a programme

5.2.1 The problem

The policy aim of ensuring that everyone obtains at least a basic qualification implies the assumption that this basic qualification is necessary in order to play a fully fledged role in society. The basic qualification in other words is the key to a (good) job, a proper income, a worthwhile social position in society, etc. The term was introduced for the first time in a recommendation made by the Rauwenhoff committee (1990) and was subsequently elevated to the position of a policy norm by the Ministry of Education, Culture and Science. The value of a basic qualification will be understood in this study as the value of a programme in relation to the perspectives it provides for access to the labour market, opportunities for work and the quality of work (including pay). The focus is therefore on the yield provided by a programme. This again implicitly means that programmes intended to result in a basic qualification must generate certain minimum yields.

Even though Dutch educational policy has elected for transparent operationalising of the basic qualification concept (namely a programme at level 2 in BOL or BBL, HAVO or VWO respectively), the intrinsic foundation of the concept is rather more diffuse. Nijhof and Streumer (1994) refer in this connection for instance to the very broad and open definition given by Droste et al. (1993): “the qualifications baggage necessary in order to function satisfactorily within society” (op. cit. in Nijhof & Streumer, 1994, p. 12). The Ministry’s memorandum Een goed voorbereide start (A well-prepared start) states that it is important for students to attain an occupational qualification “which enables programme graduates to make an effective entrance into the labour market and which has also provided them with an adequate basis for further development during the course of their occupational careers” (OCW, 1993). Requirements are also set for personal and social qualifications. In terms of
this definition, it immediately becomes apparent that the intrinsic foundation
of the concept contains at least two elements: acquisition of a particular level
of competence on the one hand, and achievement of a particular level of func-
tionality -or yield- on the other.

It is precisely when it comes to establishing these two levels that it is difficult
to find a clear demarcation criterion. In principle, a demarcation can be based
on two different grounds (which do not need to exclude each other). This can
be illustrated from figures 5.1a and 5.1b. In figure 5.1a the relationship
between number of years of schooling and level of competence achieved or
expected yield is represented as a straight line. The higher the number of years
of schooling, the higher the level of competence achieved or the higher the
expected yield. In order to arrive at a demarcation in this case, an absolute
assessment needs to be made regarding the desired level of competence or the
desired yield based on social considerations. These are the kinds of absolute
judgements which, either explicitly or implicitly, lie at the root of policy on the
basic qualification, but which we also see recurring in primary education
policy and the statutory compulsory education requirement. The history of
compulsory education in fact teaches us that even a legislative borderline as
solid as this can undergo radical displacement due to social developments.

The relationship between number of years of schooling and achieved compe-
tence levels or expected yields may also proceed discontinuously however. This
situation is illustrated in figure 5.1b. It is possible for instance that starting
from a particular programme level, acquisition of relevant competencies
becomes strongly intensified or yields increase rapidly (or the contrary of this:
that after a particular number of years of schooling the added yield factor drops off dramatically). Assuming equal costs for each year of additional schooling, a demarcation criterion could be found in this case at the point where the marginal improvement to be gained from an additional year of schooling is greatest. In other words, where the relative spurt ahead is at its maximum.

The existence of such discontinuities needs to be established on empirical grounds. This immediately confers an advantage as compared to absolute assessment, since this latter method assumes a particular social consensus. Theoretical legitimisation also needs to be established however, even for discontinuities. Empirical discontinuities can after all have a coincidental basis. In this section therefore we first look into the question of whether points of contact can be found for the existence of such discontinuities within existing labour market theories. This examination is made in section 5.2.2.

5.2.2 Theoretical viewpoints

This section takes a look at the extent to which points of reference can be found in existing labour market theories for the existence of continuity or discontinuity in the relationship between number of years of schooling on the one hand and acquired competencies or educational yields on the other. A number of important theoretical trends covering the area of alignment between education and occupational practice will be reviewed systematically for this purpose. Where indications can be found in a theory that point towards discontinuity in the relationship between programme level and labour market position, this fact can be used alongside other data as a basis for a policy that everyone should be schooled to at least that level.

The “Human capital” theory

The formation of (economic) theories on the relationship between education and the labour market is dominated by the “human capital” theory, which finds its origin in Becker (1964). The human capital theory posits a direct relationship between level of education and productivity and by consequence, pay. The higher the level of education, the higher the pay. This implies that pay is determined solely by the level of educational attainment (or more broadly: knowledge and skills) possessed by the individual. The context (the job) in which acquired knowledge and skills are applied has no role to play. The human capital theory is deeply rooted in the neoclassical tradition. This means that it must be assumed that allocation within the labour market takes place via the price mechanism (wage competition). Human capital theory literature mainly looks at the reimbursement effects of education. In a slightly wider context, this argument also applies to other (secondary) working conditions. It needs to be emphasised that there is no room for explaining differences in
work opportunity in this theory. In the (neoclassical) world of human capital
after all, the price mechanism ensures that markets determine everything in
the economy and that everyone can find a place in the labour market.

In general, human capital theory literature assumes a continuous relationship
between programme level and pay. More strongly, the profit (in terms of pay)
gained from an extra year of schooling is assumed to be a constant (c.f. figure
5.1a). In other words, an extra year of schooling taken by a VMBO pupil
results in the same amount of profit as an extra year of schooling taken by an
academically trained student. As already stated, human capital theory more-
over offers no perspectives for explaining differences in work opportunity. This
means that no points of reference are to be found in human capital theory
that might support the existence of discontinuity in the relationship between
programme level and labour market position.

The “screening” theory
The “screening” theory can be regarded as the counterpart to the human
capital theory. The screening theory lays emphasis on job characteristics as the
most important determinants for pay. The knowledge and skills required for a
job determine the productivity and thereby pay. How do people manage to get
these jobs then? It is here that educational background does indeed play a
major role. Education constitutes a criterion on the basis of which the
employer establishes a potential employee’s suitability (in other words: educa-
tion functions as a “screening device”). Under the strictures of labour queue
theory, which is related to the screening theory, the shortlist is used as a
metaphor for this selection process (Thurow, 1975). The employer places can-
didates on a shortlist. The more suitable the candidate, the better his or her
position in the queue.

A candidate’s degree of suitability is determined by the ease by which he or
she can be slotted into the job. This suitability determines the degree to which
supplementary training will be necessary and the speed at which a new
employee will be able to function independently within the organisation.
Expressed in economic terms, the lower the adjustment costs, the more
suitable the candidate.

Seen generally, level of education will have a positive influence on a candi-
date’s position in the queue. It can be anticipated that a more highly educated
candidate will need less training, will be able to function independently within
the organisation more quickly and will need a shorter training period than a
less well educated candidate. Lower educated candidates consequently end up
towards the back of the queue. According to the screening theory, it can also
be anticipated that a higher educated candidate will have better labour market
opportunities than a less educated candidate. With this, the screening theory
not only places the emphasis on a different allocation mechanism in the
labour market to that of the human capital theory, but also offers an option for explaining possible differences in work opportunity. When all is said and done, as demand for labour falls in relation to the numbers of those seeking work, people further down in the queue are more likely to miss the boat altogether and be unable to find a job.

Mechanisms such as the ones described in the screening theory can result in discontinuity in the relationship between programme level and labour market position. Given that it can be anticipated that those with the lowest level of educational attainment will increasingly end up behind in the queue, there is a big danger they will experience difficulty finding a job. This means that discontinuity might occur in economically adverse conditions. On the positive side of the “divide”, we encounter higher educated individuals who gain a good position in the queue and find it relatively easy to find a job. On the negative side of the divide are the least well educated, for whom hardly any work is available.

A problem here however is that the position of the divide depends on the relationship between demand and supply. The lower the demand for labour, the more people will miss the boat. Apart from other things, demand for labour is dependent on shifts in the economy. This implies that the worse the economic situation, the higher will be the level of education that offers decent opportunities in the labour market. In other words: in situations of economic adversity, the divide moves to the right. This is illustrated in figure 5.2.

Figure 5.2

Yields

A

B

Number of years of schooling

A = economic prosperity; B = economic adversity.
Line A equates to a situation in which demand for labour is high, while line B reflects an unfavourable economic situation. From the policy perspective therefore the screening theory offers us insufficient to go on. This theory after all implies that it is the economy that to a significant extent determines the level of the basic qualification.

The “job-matching” theory
Where human capital theory lays emphasis on personal characteristics and screening theory on job characteristics, the “job matching” theory lays the emphasis on the interaction between personal characteristics and job characteristics (Hartog, 2000). The better the connection between acquired knowledge and skills and the knowledge and skills required for the job (in other words, the better the match), the better the individual functions. It can be anticipated that this better functioning will be reflected in higher remuneration. The term “comparative advantage” is introduced in order to describe an optimum system for allocating people to jobs. A person has a comparative advantage in a job where he or she performs relatively best in that job in comparison to others.

What then is the importance of the job matching theory to the subject of this study? First of all, the job matching theory underscores the importance of education to developments on the demand side of the labour market. Attention can be drawn here particularly to the increases in admission requirements for programmes due to technical and organisational developments and other developments. This process of upgrading consequently places increasing demands on the education field as a whole. It also implies an expectation that the less well educated will find things steadily more difficult. The job matching theory may therefore tend to underscore the importance of a basic qualification.

Secondly, the comparative advantage concept offers possibilities for supporting the notion of discontinuity in the relationship between level of education and labour market position. It can be anticipated that the least well educated will have a comparative advantage in jobs for which little or no schooling is required. Partly due to the upgrading of educational programme admission requirements, the importance of unschooled labour in the Dutch economy has declined dramatically. The least well educated accordingly face a threat of missing the boat altogether. Here again however the problem is that supply and demand relationships play a role. Particularly in unfavourable economic circumstances, the least well educated will have difficulty in finding jobs. If the demand for labour is high on the other hand, the least well educated will gain a comparative advantage with regard to jobs for which a certain amount of schooling is required and so will be able to secure a place in the labour market. With the job matching theory moreover, in contrast to the screening theory, it can be argued with some degree of plausibility that the labour market position of the highly educated may be more precarious than that of the
least well educated. In totally different segments of the labour market for instance, social scientists at the academic level may have less of a comparative advantage than for example care workers trained at MBO level. It is therefore entirely possible, depending on supply and demand relationships in the relevant labour market segments, for unemployment among social scientists to be higher than among trained care workers.

As in the case of the screening theory, the job matching theory gives us too little to go on from a policy perspective. In the final analysis, the job matching theory would also imply that supply and demand relationships in specific segments of the labour market, themselves subject to economic shifts, determine the level of the basic qualification to a significant extent.

**Segmentation theories**

The notion that the labour market cannot be regarded as a single whole, but that there are labour market segments with their own allocation mechanisms, is the point of departure for a large number of theories on how the labour market functions. Examples of these are the insider-outsider theory and the internal labour market theory. Each of these theories has its individual approach. Of primary interest in the context of this study is the Lutz and Sengenberger theory (1974), since it posits a relationship between allocation mechanisms in the various segments and the qualifications required. Lutz and Sengenberger propose that there are three segments:

1. the business-specific submarket (roughly corresponding to the internal labour market concept used in Anglo-Saxon literature on the subject);
2. the occupation specific submarket or trade submarket; and
3. the non-specific submarket (“Jedermanns Qualifikation”, roughly corresponding to the secondary labour market concept).

Business-specific skills play an important role in business-specific submarkets. These specific skills offer the employer a greater likelihood of retaining the employee. The employee is able to build up a career within the organisation. From the employer’s perspective, the primary task in initial education is that of learning cognitive skills. These cognitive skills enable the employee to function within the organisation and so gradually acquire business-specific skills. The level of the educational programme followed determines the level of the cognitive skills acquired to a significant extent. A secondary level education programme is therefore the minimum essential requirement for gaining entry to the business-specific submarkets.

Trade submarkets contain jobs for which occupation-specific skills are extremely important. The content of the job differs specifically between occupations and much less between companies and organisations. Opportunities for advancement are generally less than those in internal labour markets.

From the perspective of the trade submarket, the employee’s education (which
must be taken as including the dual programmes) principally accounts for the
task of learning occupation-specific skills. A vocational course is essential in
order to gain access to a trade submarket and national standardisation of the
final attainment levels of these programmes guarantees mobility between com-
panies.

The non-specific submarket includes jobs for which no knowledge or skills at
all or only very basic knowledge and skills are required. This is often work per-
formed by less well educated employees. In general, working conditions are
significantly poorer than in the business-specific and trade-specific submar-
kets. The wages are low, job security is often negligible and there are few if any
prospects for advancement.

This distinction between business-specific submarkets, trade submarkets and
non-specific submarkets underscores the importance of good (secondary)
vocational education that is accessible to all. Education at a secondary or
higher level is essential in order to ensure that school-leavers are in possession
of the general cognitive skills that will give them access to business-specific
submarkets. It is occupation-specific qualifications on the other hand that
regulate access to the trade submarkets. Where a school-leaver has acquired
neither the necessary general cognitive skills nor the necessary occupation spe-
cific skills in initial education, the likelihood is high that he or she will end up
in the non-specific submarket where there is little if any call for general or
occupation-specific skills.

This being so, the segmentation theory of Lutz and Sengenberger (1974)
offers possible support for the existence of discontinuities in the relationship
between level of education and labour market position. Under this theory, the
divide occurs at the level of education that allows a school-leaver access to the
business-specific submarkets and/or the trade submarkets. The non-specific
submarket after all has significantly poorer working conditions than the busi-
ness-specific submarkets and the trade submarkets.

**Institutional theories**

Institutional measures can also lead to a discontinuity in the relationship
between level of education and labour market position. An important example
of this is the minimum wage. The minimum wage is an instrument intended
to guarantee a minimum subsistence level to all. It is accordingly a means of
bringing about a fairer distribution of incomes. The consequence of the mea-
sure however is that it disrupts the free operation of the labour market. It can
mean for instance that employers find it unattractive to take on unskilled
employees. Employers argue in these cases that the performance of unskilled
workers no longer compensates for the (wage) costs involved in employing
them. Only a certain level of performance therefore can guarantee a good
position in the labour market. The theories described have shown that it is
plausible to believe that education has a positive effect on the level of performance. Where from an employer's perspective, the knowledge and skills possessed by an individual place him or her in a position to achieve a level of performance that justifies the minimum wage, the chance of a candidate's finding work is high. Where this level of performance is not achieved, the chance of finding work is slight. A discontinuity may therefore exist in the relationship between level of education and labour market position. The divide in this case is centred on the performance or programme level that represents a balance vis-à-vis the minimum wage. A weaker labour market position manifests itself mainly in a diminished chance of finding work, poorer work security or quality of the work offered, but hardly if at all in primary working conditions. These conditions after all are institutionally determined and they place unskilled employees who do manage to find work in a relatively good position.

5.3 The basic qualification in the Dutch context

5.3.1 Data and methods

In this section we compare programmes at level 2 with programmes immediately below them in the structure (level 1 and VBO) and immediately above them (levels 3 and 4). The position taken up by programmes at level 2 in this comparison is a fair indication of the value of these programme. The basic assumption adopted for the analysis is that programmes at levels 3 and 4 provide a basic qualification in any case, while programmes at level 1 and VBO do not. The debate currently going on between the OECD and the Dutch policy standpoint relates to the question of whether programmes at level 2 are to be classified in the first group or in the second. Where it emerges from the programme comparisons that programmes at level 2 are similar to programmes at level 3 and level 4, but are to be distinguished from those at level 1 and VBO, it can be assumed that programmes at level 2 offer school-leavers an adequate basic qualification. The moment it appears that programmes at level 2 are indistinguishable from programmes at a lower level however, while a clear distinction exists between level 2 programmes and programmes at levels 3 and 4, this assumption is to be doubted.

In general, school-leavers with a higher level of education are more successful in the labour market than school-leavers with a lower level of education. It was already indicated in the previous section that the relationship between yields to be gained from a programme and the duration of the programme might be either continuous or discontinuous. Where the relationship is continuous, the labour market position of school-leavers improves at a fixed percentage rate for each additional year of schooling. Where the relationship is discontinuous, there is an instance of disproportionate improvement in labour market posi-
tion that commences from a particular level of educational achievement. The position of this “divide” in the relationship indicates the level of educational attainment that gives rise to a relatively strong leap ahead as compared to the previous level. This fact might then be used to support the policy that students should be schooled to attain at least that level.

The data used in this section is taken from the Registration of School-leaver Numbers and Destinations (Registratie van Uitstroom en Bestemming van Schoolverlaters - RUBS) report drawn up annually by the ROA. The study relates to school-leavers from pre-vocational education (VBO), general secondary education (MAVO, HAVO, VWO) and secondary vocational education (BOL, BBL). Two surveys of school-leavers who left school with a diploma at the end of the 1997-1998 and 1998-1999 school years have been used for the purpose of the present analysis. These school-leavers were interviewed approximately eighteen months after leaving school. The principal objective of the study was to map out the labour market position of school-leavers in detail. The study accordingly includes information on several aspects of entry into the labour market, such as the chance of finding work, the nature of the contractual relationship and other characteristics of jobs obtained. The RUBS school-leavers study also comprises information on participation in further study programmes and the likelihood of dropping out from such further study programmes. Approximately 21,000 school-leavers from VBO, BOL and BBL participated in the study. Table 5.1 shows the weighted and non-weighted numbers of respondents for each programme level included in the analysis. School-leavers leaving VBO to continue their studies in BBL were not included in the analysis. This was so as to be able to measure in isolation the effect on school-leavers who entered the labour market with only VBO qualifications.

<table>
<thead>
<tr>
<th>Programme Level</th>
<th>Non-weighted</th>
<th>Weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBO</td>
<td>3,578</td>
<td>70,382</td>
</tr>
<tr>
<td>BOL level 1</td>
<td>144</td>
<td>2,331</td>
</tr>
<tr>
<td>BOL level 2</td>
<td>1,482</td>
<td>20,345</td>
</tr>
<tr>
<td>BOL level 3</td>
<td>1,927</td>
<td>10,561</td>
</tr>
<tr>
<td>BOL level 4</td>
<td>11,088</td>
<td>71,680</td>
</tr>
<tr>
<td>BBL level 1</td>
<td>149</td>
<td>2,701</td>
</tr>
<tr>
<td>BBL level 2</td>
<td>1,246</td>
<td>24,775</td>
</tr>
<tr>
<td>BBL level 3</td>
<td>874</td>
<td>18,270</td>
</tr>
<tr>
<td>BBL level 4</td>
<td>409</td>
<td>8,823</td>
</tr>
</tbody>
</table>
In the comparison of the programmes, a first look was taken at the options available for further study (two indicators: participation in further study programmes and the likelihood of abandoning such further study programmes before completion). Entry into the labour market by school-leavers was then examined. The value of educational programmes to school-leavers entering the labour market was examined from the perspective of six indicators. These were the chance of finding paid work, the chance of finding a permanent job, the chance of finding a full-time job, the chance of finding a job in the individual’s chosen educational direction or a related direction, the level of the occupation and the gross hourly wage paid to school-leavers. These indicators provide a good impression of what their educational background yields to school-leavers entering the labour market.

The comparison of the scores given to programmes on the basis of these eight indicators (two relating to opportunities for further study and six relating to the labour market) is presented in figures 5.3 to 5.10 inclusive. The scores given to programmes based on these eight indicators are then assessed again, but this time taking into account individual characteristics of school-leavers (gender, age, ethnic background, programme sector and year of gaining the diploma). This allows the effect of the programme studied to be assessed more closely. The results of these multivariate analyses are given in figures 5.11 to 5.17 inclusive. Separate analyses were carried out for BOL and BBL school-leavers. These provide a clearer picture of programme comparisons, since BOL and BBL school-leavers can differ significantly with respect to each other where participation in further study and labour market position are concerned, eighteen months after gaining the diploma (cf. ROA, 2001).

### 5.3.2 School-leavers going on to further study programmes

School-leavers who have successfully completed their education now take the following step in their career. They can opt for direct entry into the labour market or elect to continue their studies and so acquire new knowledge and skills. They can also decide to combine work and study in BBL. Figure 5.3 shows the percentage of school-leavers electing to continue their studies and the percentage deciding to combine work and study in BBL. The lower part of the graph shows the comparison between school-leavers at BOL levels 1 to 4 inclusive and VBO. The same comparison is made in the upper part of the graph between school-leavers at BBL levels 1 to 4 inclusive and VBO.

It emerges from figure 5.3 -and this is certainly not surprising- that VBO school-leavers are the ones that most often elect to follow a course of further study (more than 80%).
More striking is the fact that both BOL and BBL level 1 and level 2 school-leavers elect to follow a course of further study or go in for a combination of work and study equally often, while level 3 school-leavers do so less than level 2 school-leavers. It appears that programmes at levels 1 and 2 are more often seen by school-leavers as preparation for full-time or dual continuation programmes than are programmes at level 3. It is also clear that only in the case of BOL do school-leavers at level 4 elect to continue their studies equally often as do school-leavers at levels 1 and 2. The majority of school-leavers at BOL level 4 go on to an HBO programme. For BBL by contrast, the percentage of school-leavers electing to follow a continuation programme is the lowest among level 4 school-leavers.

Figure 5.4 shows the percentage of school-leavers who elect to follow a further education course that will discontinue their studies before completion (dropout rates). These are school-leavers who left a (full-time or dual) continuation programme within a year without gaining a diploma. A number of reasons can be given for this: the continuation programme may have failed to provide the anticipated connection with the programme completed earlier, motivation for further study may be lacking or an inappropriate choice may have been made, resulting in the school-leaver deciding to switch to a different programme. This means that even reasons unrelated to the programme previously completed may contribute to school-leavers deciding to leave a con-
tinuation programme before completion. We must therefore be cautious in drawing conclusions regarding the value of programmes for school-leavers who elect to go on to a subsequent study programme based on comparisons of percentages of premature school-leavers. Figure 5.4 shows that level 2 school-leavers who elect to study further within BOL are the ones that most often leave their continuation programmes before completion (17%). The percentages of school-leavers who leave their programmes prior to completion are lower for both VBO and the lower and higher programme levels of BOL. In the case of BBL there is a clear distinction between VBO and BBL level 1 on the one hand, and BBL levels 2, 3 and 4 on the other. School-leavers at the VBO and BBL 1 level appear to leave their programmes before completion more often on average than school-leavers at a higher programme level. School-leavers at BBL levels 2, 3 and 4 differ little from each other in this respect.

**Figure 5.4 Premature abandonment of further education courses**

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### 5.3.3 Entry of school-leavers into the labour market

Figures 5.5 to 5.10 inclusive provide an impression of the labour market position of qualified school-leavers eighteen months after graduation. We look first at job opportunity and job security and then turn to quality of work. When discussing the labour market position of school-leavers, we should never lose sight of the fact that following a period of economic growth, the labour market became extremely tight from the end of the nineteen nineties. It is therefore...
BOL and BBL school-leavers who to an increasing extent managed to find jobs more often and more quickly (c.f. ROA, 2002). This picture also emerges from figure 5.5, which shows school-leaver unemployment percentages.

**Figure 5.5** **Unemployment rates among qualified school-leavers**

Figure 5.5 shows that by far the majority of school-leavers who placed themselves in the labour market had found paid work eighteen months after gaining their diploma. Even so, there are some (small) differences between programme levels. In the case of BOL, a distinction in the unemployment percentage can be drawn between school-leavers at BOL level 1 and VBO on the one hand and school-leavers at BOL levels 2, 3 and 4 on the other. In the case of BOL level 1 and VBO, approximately 5% of school-leavers are unemployed, while the percentage of unemployed school-leavers at BOL levels 2, 3 and 4 is approximately 2%. There is little difference between school-leavers at BBL levels 1, 2 and 3 where unemployment percentages are concerned. Approximately 2% of school-leavers at BBL levels 1, 2 and 3 are out of work. This percentage is lower than for VBO school-leavers and slightly higher than for school-leavers at BBL level 4, nearly all of whom were in paid work eighteen months after gaining their diplomas.
Conditions for school-leavers have also become more favourable due to the tightness in the labour market. Employers compete with each other more than ever in order to attract good personnel. Both primary and secondary working conditions play an important role in this “competitive battle for the job-seeker”. Job security has increased significantly for BOL and BBL school-leavers for instance over recent years (see ROA, 2002). Figure 5.6 shows the percentage of working school-leavers with a permanent contract of employment. For BOL, a distinction is drawn between VBO/BOL levels 1 and 2 on the one hand and BOL levels 3 and 4 on the other. Higher levels of education result in more job security. Job security for level 2 school-leavers is at its lowest in the case of BBL. When compared to levels 1, 3 and 4, level 2 school-leavers have a permanent contract of employment less often. It remains true however that all of the BBL programmes referred to provide significantly more job opportunity than VBO.

The next graph, figure 5.7, shows the percentage of working school-leavers with a full-time job. School-leavers at BOL levels 1, 2 or 3 are more or less equally likely to have a full-time job. Only BOL level 4 school-leavers are more likely to have a full-time job than those who have completed lower-level programmes. For BBL, a distinction is made between VBO and BBL level 1 on the one hand and BBL levels 2, 3 and 4 on the other. Less than 80% of VBO and BBL level 1 school-leavers have a full-time job. At least 90% of BBL level
2, 3 and 4 school-leavers have a full-time job. It needs to be noted here however that having or not having a full-time job is strongly determined by institutional factors such as the partial compulsory education legislation, which means that lower level school-leavers automatically show a lower percentage of those in work who have a full-time job. The question therefore is whether this statistic represents a good indicator for the actual labour market value of an educational programme.

**Figure 5.7**  
**Percentage of working school-leavers with a full-time job**

Figure 5.8 shows the occupation level of jobs held by working school-leavers. Use has been made here of occupational codes based on the CBS Standard Occupation Classification of 1992 (Standaard Beroepen Classificatie 1992 - SBC). The SBC distinguishes five levels: elementary occupations (required entry level: primary education), lower occupations (required entry level: secondary education, lower stage), intermediate occupations (required entry level: secondary education, higher stage) higher occupations (required entry level: higher education, first phase) and academic occupations (required entry level: higher education, second phase). These levels have been converted into numbers of years of required schooling (for an account of this, see ROA, 1999, p. 60). For elementary occupations this is six years, for lower occupations ten years, for intermediate occupations thirteen years, for higher occupations seventeen years and for academic occupations nineteen years.
With regard to BOL, it is clear that the occupational level of the job gradually rises in line with the increase in programme level. Where BOL is concerned, an increase in programme level also results in a job at a higher level. An average of 9.8 years of schooling is required for VBO jobs, for BOL level 4 school-leavers this is 12.4 years. This is not the case for BBL, where there is a clear distinction between programmes at level 1 and 2 and programmes at level 3 and 4. The average occupational level accounted for by level 1 and 2 school-leavers is more or less equivalent, each requiring 11 years of schooling, while the average occupational level accounted for by level 3 and 4 school-leavers is considerably higher. We need to qualify this however by pointing out that the SBC does not permit a highly differentiated assessment of necessary programme levels. Differences of level exist even in the intermediate occupations group, although no account of these is taken in the classification.

The comparison of the percentage of school-leavers with a job that connects with their individual sector of study or a related sector of study in figure 5.9 shows that relatively few BOL level 1 and VBO school-leavers and a relatively large number of BOL level 3 and 4 school-leavers have managed to find a job that connects in terms of direction with the programmes they studied previously. BOL level 2 school-leavers find themselves exactly in the middle of the two groups were this is concerned. BBL level 2 school-leavers managed to find a job that connects with the educational programmes studied previously less often than BBL level 3 and 4 school-leavers. Of the BBL level 2 school-

![Figure 5.8: The occupational levels of working school-leavers](image-url)
leavers, approximately 60% have a job that connects with their direction of study. At BBL levels 3 and 4, the percentage is above 75%.

**Figure 5.9** Percentage of working school-leavers with a job in their individual study sector or a related sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>BBL Level 4</th>
<th>BBL Level 3</th>
<th>BBL Level 2</th>
<th>BBL Level 1</th>
<th>VBO</th>
<th>BOL Level 4</th>
<th>BOL Level 3</th>
<th>BOL Level 2</th>
<th>BOL Level 1</th>
<th>VBO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment in sector, in percentages</td>
<td>82</td>
<td>75</td>
<td>59</td>
<td>54</td>
<td>43</td>
<td>73</td>
<td>74</td>
<td>57</td>
<td>36</td>
<td>43</td>
</tr>
</tbody>
</table>

Figure 5.10 finally shows the gross hourly wage paid to school-leavers. The first thing that strikes us is that there is a considerable difference between the gross hourly wage of level 1 school-leavers and VBO school-leavers. This may be partly due to age differences, which have a strong knock-on effect where the minimum youth wage is concerned. Corrections for age will therefore be made in the following section. The second striking feature in figure 5.10 is that for both BOL and BBL, the difference between level 1 and level 2 is less than the difference between level 2 and level 3. In short, where pay is concerned, level 2 school-leavers are more like level 1 school-leavers than level 3 school-leavers. Here again however the results may be marked by age differences.
5.3.4 A closer look at the value of level 2 programmes

In the comparison of programmes so far, no account has been taken of the individual characteristics of school-leavers. It is quite possible for instance that differences between programmes are caused by age differences or by differences in the programmes themselves during the final year. The differences between the programmes were therefore analysed again, this time with corrections for gender, age, ethnic origin, sector classifications of programmes completed by school-leavers and the year in which diplomas were gained. Figures 5.11 to 5.17 inclusive show the results for VBO, BOL levels 1 to 4 inclusive and BBL levels 1 to 4 inclusive. The figures give parameter estimates for the programme levels concerned, VBO serving as a reference category. The relevant figures accordingly show the deviation with respect to VBO and can be interpreted as the effect of taking one, two, three or four years of extra schooling in BOL or BBL.

The figures show the overall trend as a broken line. This indicates the average rise for each programme level with respect to the indicator. In the case of a continuation model it could be expected that the comparison between programmes would give rise to a linear connection, since an increase of a single level also means one extra year of schooling. The (nominal) number of years of schooling from the age of six is shown, together with the programme level for those leaving VBO (ten years), up to and including those leaving level 4 (fourteen years).
The figures also indicate whether differences between the sequential programme levels are significant. This enables an indication to be given of whether an increase of a single level (i.e. one year of additional schooling) will provide school-leavers with significantly better opportunities in the labour market.

**Figure 5.11**

Likelihood of participation in (full-time/dual) further studies by BOL school-leavers, corrected

** = significant at the 1% level; * = significant at the 5% level.

**Figure 5.12**

Likelihood of participation in (full-time/dual) further studies by BBL school-leavers, corrected

** = significant at the 1% level; * = significant at the 5% level.
Figures 5.11 and 5.12 show the number of school-leavers who go on to further education courses. Following correction for individual characteristics it emerges that VBO school-leavers are significantly more likely to go on to further studies than are BOL level 1 school-leavers. Also, where BOL is concerned, the likelihood of level 1 school-leavers deciding to continue their studies is even less than for level 2 school-leavers. Figure 5.12 shows that BBL level 1 school-leavers elect to study a continuation programme significantly less often than VBO school-leavers, while within BBL there is almost no visible difference between participation in further education courses by school-leavers from the different programme levels. BBL levels 1 to 4 inclusive differ to approximately the same extent as VBO as regards number of school-leavers who go on to further education courses.

Figures 5.13 and 5.14 show the likelihood of BOL and BBL students who have elected to continue their studies abandoning their programmes before completion (dropout rates). In point of fact the likelihood of dropout in continuation programmes says little with regard to a programme’s value to school-leavers in the labour market. This indicator is not therefore taken into account in the final assessment of the value of the programme for school-leavers. Following correction for the background characteristics of school-leavers, it emerges that the likelihood of dropout is greatest among VBO school-leavers who elect to continue their studies. The difference in the likelihood of dropout between VBO and level 1 programme school-leavers is not in fact significant.

**Figure 5.13**  
Likelihood of dropout from further education courses by BOL school-leavers electing to continue their studies, corrected

** = significant at the 1% level; * = significant at the 5% level.
Striking however is the fact that for BOL, dropout among school-leavers studying a continuation programme is highest at level 2. The difference between level 2 and level 3 is not significant here. This might be an indication that for BOL level 2 school-leavers, this level 2 programme connects less well with a continuation programme than it does for BOL level 3 school-leavers. Figure 5.14 shows that the likelihood of premature abandonment of continuation courses within BBL does not differ much between the different programme levels.

Figures 5.15 and 5.16 show the likelihood of finding work. Figure 5.15 shows that the likelihood of finding work has increased most for VBO and BOL level 1 school-leavers. It means that in the case of VBO school-leavers, a single year of extra schooling provides a significant improvement in the chance of finding work. As compared to VBO, BOL level 1 offers school-leavers a better start in the labour market where the likelihood of finding work is concerned. There is only a slight increase in the chance of finding work between BOL level 1 school-leavers and BOL level 2 school-leavers, but again there is a large increase between BOL level 2 and BOL level 3 school-leavers. It emerges from figure 5.15 that the differences between sequential programme levels are not in fact significant where the chance of finding work is concerned.
Figure 5.16 shows that the increase in the chance of finding work in the case of BBL programmes occurs particularly at the point of transition from BBL level 1 to level 2. In addition, it appears that the chances for BBL level 2 and 3 school-leavers of finding work differs little between these two levels. Here again however there are no significant differences in the chance of finding work between sequential programme levels. This probably has to do with the tightness in the labour market, as a result of which the vast majority of school-leavers have found work within eighteen months of gaining their diplomas.

**Figure 5.15** Chance of finding work for BOL school-leavers, corrected

**Figure 5.16** Chance of finding work for BBL school-leavers, corrected

** = significant at the 1% level; * = significant at the 5% level.
Figure 5.17  Chance of finding a permanent job for BOL school-leavers, corrected

** = significant at the 1% level; * = significant at the 5% level.

Figure 5.18  Chance of finding a permanent job for BBL school-leavers, corrected

** = significant at the 1% level; * = significant at the 5% level.

Figures 5.17 and 5.18 show the likelihood of obtaining a permanent position. With regard to BOL (figure 5.17), there is a clear distinction between levels 1 and 2 on the one hand and levels 3 and 4 on the other. The likelihood of level
3 and 4 school-leavers finding a permanent position is correspondingly greater than for level 1 and level 2 school-leavers. The figure shows a significant difference in the likelihood of obtaining a permanent job in the case of level 2 and 3 school-leavers.

With the BBL (figure 5.18), similarly, level 2 school-leavers appear to resemble level 1 school-leavers more than they do level 3 school-leavers when it comes to the chance of gaining a permanent position. The major leap forward here however occurs at the transition from VBO to BBL level 1. A single year of extra schooling provides VBO school-leavers with a significant improvement in the possibility of gaining a permanent position. The figure also shows that there is a significant improvement at the point of transition from BBL level 2 to BBL level 3.

Figures 5.19 and 5.20 show that in the case of BOL and BBL school-leavers the chance of a full-time job increases in line with programme level. Level 1 school-leavers end up in a full-time job less often than do VBO school-leavers, but for both BOL and BBL, the likelihood of gaining a full-time job gradually increases with each programme level attained. The relatively high percentages of full-time jobs for VBO school-leavers is due to the selection used here: those who elected to follow a BBL programme on completion of their VBO programme have been disregarded for the purpose of determining the value of the VBO programme. The connection is almost linear in the case of the BBL.

**Figure 5.19**  Chance of finding a full-time job: BOL school-leavers, corrected

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** = significant at the 1% level; * = significant at the 5% level.
The likelihood of finding a full-time job increases approximately pro rata with each successive programme level. The same applies to a slightly less extent in the case of BOL: the relative increase from BOL level 2 to BOL level 3 is greater than the relative increase from BOL level 1 to BOL level 2. The real question here though is whether we ought to attach much significance to this indicator. Most school-leavers do in fact end up with a full-time job and those who do not have a full-time job have made a conscious choice not to have one, because they wish to combine work and study in BBL for instance, or because their age precludes them from having a full-time job. As in the previous case, this indicator will not be included in the final evaluation of the value of the programmes.

Figures 5.21 and figure 5.22 show the occupational level of jobs obtained by school-leavers. BOL level 2 school-leavers distinguish themselves clearly from level 1 school-leavers with regard to occupational level. Figure 5.21 shows that the increase in occupational level is greatest at the transition from BOL level 1 to BOL level 2. Similarly there is a significant increase in occupational level of jobs starting from level 2, but the size of these increases is less than those between level 1 and level 2.

In BBL (figure 5.22), there is no difference in occupational level between BBL level 1 and BBL level 2 school-leavers. This means that for BBL level 2 school-leavers, the extra schooling does not result in a job at a higher occupational level comparative to BBL level 1. BBL level 3 school-leavers by contrast clearly distinguish themselves in terms of occupational level comparative to BBL level 2 school-leavers. Figure 5.22 shows a strong (significant) increase in the occupational level of jobs on transition from BBL level 2 to BBL level 3.
Figures 5.23 and 5.24 show the results regarding the likelihood of finding a job that connects with the previous course of study. With regard to BOL, it is clear that BOL level 2 programmes provide a better chance of finding a job that connects with the previous course of study than do BOL level 1 programmes. The difference is not significant however. In addition, the likelihood of obtaining a job that connects with the previous course of study is signifi-
Significantly higher for BOL level 3 school-leavers than for BOL level 2 school-leavers. The difference between level 2 and level 3 however is exactly equivalent to the difference between level 1 and level 2, though it must be pointed out that the difference is significant in the one case, but not in the other. This again could be due to the fewer observations made at level 1.

**Figure 5.23**

Likelihood of finding a job in the individual’s own sector of study or a related sector: BOL school-leavers, corrected

** = significant at the 1% level; * = significant at the 5% level.

**Figure 5.24**

Likelihood of finding a job in the individual’s own sector of study or a related sector: BBL school-leavers, corrected

** = significant at the 1% level; * = significant at the 5% level.
In the case of BBL (figure 5.24), the likelihood of finding a job that connects with the individual’s chosen course of study increases pro rata to the level. Figure 5.24 shows that BBL level 2 school-leavers have a significantly higher chance of finding a job that connects with their course of study than BBL level 1 school-leavers. It also emerges that BBL level 3 school-leavers have a job that connects with their own course of study more frequently than BBL level 2 school-leavers. The biggest jump here though is from BBL level 1 to BBL level 2.

Finally, figures 5.25 and 5.26 show the gross hourly wage paid to school-leavers. The first point of interest to emerge is that the largest increase in gross hourly wage for both BOL and BBL occurs at the transition from VBO to level 1. The extra year of schooling with respect to VBO provides BOL level 1 school-leavers with a significant increase in gross hourly wage (9%). Next, it appears that BOL level 2 school-leavers do not earn significantly more than BOL level 1 school-leavers. The gross hourly wage does increase again significantly beyond level 2 however, in line with programme level. BOL level 3 school-leavers earn 6% more than BOL level 2 school-leavers and level 4 school-leavers in their turn earn 8% more than level 3 school-leavers.

In the case of BBL level 1 school-leavers, an extra year of schooling provides a considerable increase in gross hourly wage as compared to VBO school-leavers (18%). For BBL from then on, gross hourly wage per programme level increases fairly uniformly across the board. The gross hourly wage paid to BBL level 2 school-leavers is 6% higher than for BBL level 1 school-leavers and the gross hourly wage paid to BBL level 3 school-leavers is similarly 6% higher than for BBL level 2 school-leavers.

The discontinuities identified rule out an explanation based on institutional wage manipulation. The minimum youth wage system after all results in the differences at the bottom end of the scale being smaller rather than larger. The analyses however reveal that the largest discontinuities are to be found at the lower end of the wages structure, between VBO and level 1.
**Figure 5.25** Gross hourly wage for BOL school-leavers, corrected

![Graph showing wage trends for BOL school-leavers](image)

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**Figure 5.26** Gross hourly wage for BBL school-leavers, corrected

![Graph showing wage trends for BBL school-leavers](image)

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** = significant at the 1% level; * = significant at the 5% level.
5.3.5 Conclusion

It is clear from the analysis of programme yields that in general these yields increase in accordance with the level of programmes, but that the increase is not the same for each year of additional schooling. Table 5.2 presents a survey of the most important indicators analysed in this section. The table shows the programme levels at which the largest relative improvement occurs. Figures 5.11 to 5.26 are taken as the point of departure.

It is clear from table 5.2 that for BOL programmes the boundary is to be set between VBO and level 1 in three instances (likelihood of participation in further studies, chance of finding work and gross hourly wage), between level 1 and level 2 in one instance (occupational level) and between levels 2 and 3 in two instances (chance of obtaining a permanent position and chance of obtaining a job in the individual’s own sector of study). At the same time it needs to be noted that the difference between VBO and level 1 is not significant where the chance of finding work is concerned and that the difference between level 1 and level 2 where the chance of obtaining a job in the individual’s own sector of study is concerned is of the same magnitude as the difference between level 1 and level 2. This means that when school-leavers follow a programme at level 3 instead of level 2, they gain a significant improvement in their labour market position principally in relation to their chances of obtaining a permanent job. As far as the other indicators are concerned, it appears that a level 2 programme offers a robust improvement and that in three of the five cases the boundary line can even be found at the level 1 programme level.

What does this mean for the basic qualification? If we take as a starting point that the basic qualification needs to generate a substantial improvement in yields with respect to the lower programme levels across the largest possible number of indicators, it can be concluded that BOL level 2 achieves this on five of the six indicators and that level 1 achieves the same on “only” three of the six indicators. This being so, the selected level 2 of BOL appears to be reasonably adequate for the basic qualification, except where an assumption might exist that the basic qualification needs to achieve improvement across all indicators. In that case the basic qualification would need to be positioned at level 3.
Establishing the boundary line for programmes that offer a relatively good start in the labour market in the case of six indicators

<table>
<thead>
<tr>
<th></th>
<th>BOL</th>
<th>BBL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chance of participation in further study</td>
<td>VBO - level 1**</td>
<td>VBO - level 1**</td>
</tr>
<tr>
<td>Chance of finding work</td>
<td>VBO - level 1</td>
<td>Level 1 - level 2</td>
</tr>
<tr>
<td>Chance of a permanent position</td>
<td>Level 2 - level 3**</td>
<td>VBO - level 1**</td>
</tr>
<tr>
<td>Occupational level</td>
<td>Level 1 - level 2**</td>
<td>Level 2 - level 3**</td>
</tr>
<tr>
<td>Chance of a job in own sector</td>
<td>Level 2 - level 3**</td>
<td>Level 1 - level 2*</td>
</tr>
<tr>
<td>Gross hourly wage</td>
<td>VBO - level 1*</td>
<td>VBO - level 1**</td>
</tr>
</tbody>
</table>

** = significant at the 1% level; * = significant at the 5% level.

For BBL, similarly, the most important jumps occur on the transition from VBO to level 1 in three instances (likelihood of participation in further study, chance of a permanent position and gross hourly wage), on transition from level 1 to level 2 in two instances (chance of finding work and chance of finding a job in the individual’s own sector of study), and in the transition from level 2 to level 3 in one instance (occupational level). This means that the situation is comparable to that found within BOL. Programmes at BBL level 2 offer school-leavers relatively good prospects in the labour market where five of the six indicators are concerned. The same is true for only three of the six indicators in the case of level 1 programmes. Here similarly then, it can be concluded that programmes at BBL level 2 appear to be an adequate choice for the basic qualification, unless a requirement were to be set that the basic qualification needs to offer relatively strong improvement across all the indicators. Only in this latter case would the basic qualification need to be set at level 3.

5.4 The value of a basic qualification: differences between years and sectors

5.4.1 Introduction

The conclusion from the above analysis is that level 2 is a reasonably adequate choice for the basic qualification. This level 2 of the qualification structure can be said to generate relatively good yields in the labour market in relation to a large number of the external performance aspects. The question however is whether the conclusions of this study -undertaken in a period of economic boom- hold good in times when things are going less well for the labour mar-
ket. In order to investigate this, the above analysis was repeated, but this time the comparisons were made with a cohort of school-leavers entering the labour market in relatively more adverse circumstances. The earlier analysis was also extended by highlighting differences between programme sectors relative to the value of level 2 programmes (see also School-leavers between education and the labour market (Schoolverlaters tussen onderwijs en arbeidsmarkt), ROA, 2003).

For this purpose school-leavers from reference years 1999 and 2000, the reference years used in the earlier analysis (cohorts leaving school in 1997-1998 and 1998-1999) were compared with school-leavers from reference years 2001 and 2002 (cohorts leaving school in 1999-2000 and 2000-2001). The differences between sectors were then studied by means of comparisons between the agriculture, technology, economic and healthcare sectors. For the purpose of the latter analysis, school-leaver numbers for reference years 1999, 2000, 2001 and 2002 were combined.

In contrast to the initial analysis, account was also taken of the distinction between school-leavers who completed programmes under the old qualifications structure and under the new qualifications structure (pre-WEB versus WEB).

The figures set out in the diagrams below show parameter estimates for the programme levels concerned, VBO serving as a reference category. The figures accordingly show the extent of the deviation with respect to VBO and can be interpreted as the effect of completing a BOL or BBL programme at level 1, 2, 3 or 4.

5.4.2 Differences between years

This section compares the value to school-leavers of programmes that offer relatively favourable labour market perspectives (1990-2000) with the value of programmes that offer relatively less favourable labour market perspectives (2001-2002). Important here is the question of the extent to which the boundary line has shifted and of what the labour market considers more valuable or less valuable at the point at which circumstances in the market change. In other words, whether the differences in yields between sequential programme levels come to show a significant deviation. This investigation was made for the 1990-2000 reference years and for the 2001-2002 reference years. In this way it was possible to indicate whether the increase of a single level (i.e. a single year of additional schooling) provided significantly more or significantly less in the labour market in terms of yield for school-leavers in 1999-2000 and/or in 2001-2002.

Chance of participation in further study

For BOL it emerges that the years 1999-2000 and 2001-2002 follow a similar pattern as regards participation in further studies. In both 1999-2000 and
2001-2002, the biggest jump is made at the transition from VBO to level 1. At the same time, VBO school-leavers participated in further studies more often than did level 1 school-leavers. It also emerges that level 2 and level 3 school-leavers elected to continue their studies more often than did level 1 school-leavers, but less often than VBO school-leavers. Similarly, in BBL the largest increase in participation in further studies is made at the transition from VBO to level 1, whereas level 1 school-leavers elected to continue their studies more often than did VBO school-leavers. There were differences here between 1999-2000 and 2001-2002 however. The difference in participation in further studies between VBO and BBL level 1 was smaller in 2001-2002 than in 1999-2000.

**Chance of finding work**

What about the likelihood of school-leavers finding work? Noteworthy here in the case of BOL is that BOL level 1 school-leavers managed to find significantly less paid work than did VBO school-leavers in 2001-2002. At the same time it appeared that the likelihood of VBO school-leavers finding work was identical to that of BOL level 2 school-leavers. Only at the transition between level 2 and level 3 was there a big jump in the likelihood of finding work in 2001-2002. Seeing that the biggest jump in the likelihood of finding work during 1999-2000 took place at the transition from VBO to level 1 in the case of BOL, the boundary line for programmes that offer a relatively good chance of finding work shifted from level 1 in 1999-2000 to level 3 in 2001-2002. Similarly for BBL, the boundary line for programmes that offer a relatively good likelihood of finding work has shifted over recent years. The biggest jump in the likelihood of finding work took place at the transition from VBO to level 1 in 1999-2000. This was not the case in 2001-2002. The biggest improvement here took place at the transition from level 1 to level 2.

**Chance of a permanent position**

In the case of BOL, the chance of school-leavers finding a permanent position was slightly less for level 1 school-leavers in 2001-2002 than for VBO school-leavers. In 2001-2002, the largest improvement in the chance of finding a permanent position took place at the transition between level 2 and level 3. This was also the case in 1999-2000. This being so, programmes at BOL level 2 seem to resemble level 1 and VBO programmes more than they do level 3 or 4 programmes when it came to the likelihood of finding a permanent job. For BBL, the likelihood of finding a permanent position in increased most strongly at the transition from VBO to level 1 in 1999-2000. By contrast the chance of school-leavers finding a permanent position is more or less the same for VBO and BBL level 1 school-leavers in 2001-2002. The biggest increase in the likelihood of obtaining a permanent position in 2001-2002 took place at the transition from level 2 to level 3.
**Occupational level**

If we take a look at the occupational level reflected by school-leaver jobs, it emerges that there were almost no differences as far as BOL was concerned between 1999-2000 and 2001-2002. The big improvement in occupational level took place on the transition from level 1 to level 2. This being so, there were distinct differences between BOL level 2 school-leavers and BOL level 1/VBO school-leavers.

For BBL, the differences between years occur particularly at level 1. Level 1 school-leavers obtained jobs at a higher occupational level than VBO school-leavers in 1999-2000. In 2001-2002 the occupational level of jobs obtained by level 1 school-leavers is slightly lower. In point of fact the biggest improvement in job occupational level for BBL took place at the transition from level 2 to level 3. This is true for both 1999-2000 and 2001-2002.

**Chance of a job in own sector**

There was also the question of whether school-leavers managed to find jobs that connected with their chosen course of study. In the case of BOL, the biggest improvement in the chance of school-leavers finding a job that connected with their individual course of study was identified at the transition from level 2 to level 3. For 2001-2002, the biggest improvement in the chance of school-leavers finding a job that connected with their individual course of study took place at the transition from level 1 to level 2. This is striking, since it shows a reverse shift in the boundary line from level 3 in 1999-2000 to level 2 in 2001-2002.

For BBL, the biggest improvement in the likelihood of school-leavers finding a job that connected with their individual course of study took place at the transition from level 1 to level 2 in 1999-2000. 1999-2000 differs from 2001-2002 in this respect. In 2001-2002 the likelihood of school-leavers finding a job that connected with their individual course of study increased almost equally level by level for BBL school-leavers, with the biggest improvement taking place at the transition from level 3 to level 4.

**Gross hourly wage**

Finally the wages paid to school-leavers. In the case of BOL, the biggest improvement in the gross hourly wage paid to school-leavers occurred on the transition from VBO to level 1. The biggest jump took place at this point in both 1999-2000 and 2001-2002.

For BBL, the biggest improvement in the gross hourly wage took place on transition from VBO to level 1 in 1999-2000. In 2001-2002 the gross hourly wage paid to school-leavers increased fairly uniformly across all programme levels. The biggest jump here took place from level 3 to level 4. Where BBL was concerned in short, the boundary line for programmes that offer relatively good reimbursement shifted from level 1 in 1999-2000 to level 4 in 2001-2002.
5.4.3 Differences between sectors

In this section the external yields of programmes are mutually compared on a sector by sector basis. Here once again the focus is on the position of the boundary line between what the labour market regards as more valuable or less valuable.

**Chance of participation in further study**

Where BOL is concerned, technical sector level 1 and level 2 school-leavers continue their studies nearly as often as those leaving the VBO technical programme. Similarly in the healthcare sector, level 2 school-leavers show few differences with VBO healthcare school-leavers. In the case of the technical and healthcare sectors, participation in further education courses only declines significantly from the point of transition between level 2 and level 3. For the economics sector by contrast, level 1 school-leavers are much less likely to continue their studies than VBO economics school-leavers. Level 2 school-leavers in the agriculture sector go on to further study less often than VBO agriculture school-leavers.

In the BBL technical and economic sectors, level 1 school-leavers go on to further study less often than do VBO school-leavers in these sectors. The decline in participation in further studies starting at the point of transition between VBO and level 1 is in fact larger for the economics sector than for the technical sector. Level 2 school-leavers in the agriculture and healthcare sectors also participate less often in further studies than do VBO school-leavers in these sectors.

**Chance of finding work**

Where it comes to the likelihood of finding work, the biggest jump in the technical sector occurs at the point of transition from level 1 to level 2. This does not apply to the economics sector. The biggest jump in the likelihood of finding work in this sector takes place at the point of transition from level 2 to level 3. Similarly in the healthcare and agriculture sectors, the biggest improvement in the likelihood of finding work occurs at the point of transition between level 2 and level 3.

For the BBL technical sector, the likelihood of finding work increases significantly at the point of transition from VBO to level 1. The biggest jump in the likelihood of finding work in the economics sector occurs at the point of transition between level 1 and level 2. For both the agriculture and healthcare sectors, the biggest improvement in the likelihood of finding work occurs at the point of transition between level 3 and level 4.

**Chance of a permanent position**

For the technical sector, the likelihood of level 1 school-leavers gaining a permanent job is below that of VBO school-leavers. The likelihood of obtaining a permanent position in the sector increases substantially at the point of transition...
tion from level 1 to level 2. Similarly for the agriculture sector, level 2 school-leavers are more likely to have a permanent position than are VBO agriculture school-leavers. In the economics and healthcare sectors, the biggest improvement in the likelihood of finding a permanent position occurs at the point of transition between level 2 and level 3.

The boundary line between programmes that offer a relatively good chance of finding a permanent position in the BBL economics sector lies at the point of transition between VBO and level 1. Where the agriculture sector is concerned, level 2 school-leavers have a relatively better likelihood of obtaining a permanent position than do VBO agriculture school-leavers. In the technical sector the biggest improvement in the likelihood of obtaining a permanent position occurs at the transition from level 2 to level 3. The equivalent improvement in the healthcare sector is at the point of transition between level 3 and level 4.

**Occupational level**

Within BOL, there are no significant differences between occupational level where VBO and level 1 school-leavers in the technical and economic sectors are concerned. The technical sector then begins to show a significant increase in occupational level at the point of transition between level 1 and level 2. For the economics sector, the biggest occupational level improvements occurs at the point of transition between level 2 and level 3. For the healthcare sector, the occupational level of level 2 school-leavers jobs is significantly higher than for VBO healthcare school-leavers. In the agriculture sector, by contrast, the biggest improvement in occupational level occurs at the point of transition between level 3 and level 4.

It also comes to light that for the BBL technical and economics sectors the biggest improvement in occupational level is made at the point of transition between level 2 and level 3. For the healthcare sector the occupational level for level 2 school-leavers is significantly higher than for VBO healthcare school-leavers. For the agriculture sector the boundary line for programmes that result in a relatively good occupational level lies at the point of transition between levels 3 and 4.

**Chance of a job in own sector**

How great is the likelihood of school-leavers finding a job within their individual course of study? In the technical and economic sectors, BOL level 1 scores no better than VBO where this is concerned. The economic sector then goes on to show a relatively large improvement in the likelihood of gaining a job in the individual’s course of study at the point of transition between level 1 and level 2. This does not apply to the technical sector, where the biggest improvement occurs at the point of transition from level 2 to level 3. For the agriculture and healthcare sectors, the difference between VBO and level 2 is relatively large as regards the likelihood of obtaining a job that connects with the previous course of study. It is here that the biggest improvement takes
place in both of these sectors. Similarly for BBL, level 1 technical and economic school-leavers do no better than VBO school-leavers in these sectors. The technical sector goes on to show a relatively large increase at the point of transition between level 1 and level 2. It is also brought to light that level 2 school-leavers in the healthcare sector find a job that connects with their individual course of study relatively more frequently than VBO healthcare school-leavers. For the economics sector, by contrast, the likelihood of level 2 school-leavers gaining a job within their individual course of study is no different from that of VBO school-leavers in this sector. In the economics sector, the biggest improvement in the likelihood of school-leavers finding a job that connects with their individual course of study occurs at the point of transition between level 2 and level 3. This also applies to the agriculture sector.

**Gross hourly wage**

Finally the gross hourly wage per sector. In the technical and economics sectors, level 1 school-leavers have a significantly higher gross hourly wage than VBO school-leavers. Similarly for the healthcare sector, the point of transition between VBO and level 2 shows the biggest improvement in the gross hourly wage. In the case of agriculture level 2 school-leavers by contrast, the gross hourly wage is the same as for VBO school-leavers. The biggest jump in gross hourly wage in this sector takes place at the point of transition from level 3 to level 4. Striking in the case of BBL is that the gross hourly wage in the sectors gradually increases in line with the increase in programme level. This being so, in the technical and economic sectors the largest increase in gross hourly wage takes place at the point of transition from VBO to level 1. Similarly in the agriculture and healthcare sectors, the biggest improvement in gross hourly wage takes place at the point of transition between VBO and level 2.

### 5.4.4 Conclusion and summary

The conclusion from the earlier analyses was that that the selected level 2 for the basic qualification was reasonably adequate. This section looked into the question of whether the conclusion from this earlier study -which was undertaken in a period of economic boom- is borne out in times when conditions are more difficult in the labour market. The above-mentioned analysis was repeated for this purpose, but in this case compared to a cohort of school-leavers that enter the labour market in relatively more difficult circumstances. A comparison of the external yield of level 2 programmes in the different educational sectors was also made.

Tables 5.3 and 5.4 provided a survey of the most significant results of comparisons made between years. With regard to BOL and BBL, these tables indicate the programme levels within which the largest relative improvement took
place in terms of labour market yields. Also indicated was whether this difference is significant between sequential levels.

### Table 5.3

<table>
<thead>
<tr>
<th>Determining the boundary for BOL programmes that offer a relatively good start in the labour market over different years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BOL</strong></td>
</tr>
<tr>
<td>Participation in further study</td>
</tr>
<tr>
<td>Chance of finding work</td>
</tr>
<tr>
<td>Chance of finding a permanent job</td>
</tr>
<tr>
<td>Occupational level</td>
</tr>
<tr>
<td>Chance of a job in own sector of study</td>
</tr>
<tr>
<td>Gross hourly wage</td>
</tr>
</tbody>
</table>

* = significant difference between sequential levels at the 5% level.

Table 5.3 shows that for BOL in 1999-2000, the boundary line for programmes that provide a relatively large improvement in yields lies between VBO and BOL level 1 in three instances (participation in further studies, likelihood of finding work and gross hourly wage), between BOL level 1 and BOL level 2 in one instance (occupational level) and between BOL level 2 and BOL level 3 in two instances (likelihood of finding a permanent position and likelihood of finding a job within the individual’s own course of study). Only when it came to the likelihood of finding work was the difference between VBO and BOL level 1 insignificant. For BOL in 2001-2002, the boundary line for programmes that provide a relatively large improvement in yields lies between VBO and BOL level 1 in two instances (participation in further studies and gross hourly wage), between BOL level 1 and BOL level 2 in two instances (occupational level and likelihood of finding a job within the individual’s own course of study), and between BOL level 2 and BOL level 3 again in two instances (likelihood of finding work and likelihood of obtaining a permanent job).

It emerges from table 5.4 that for BBL in 1999-2000, the largest improvement occurs at the point of transition between VBO and BBL level 1 in four instances, at the point of transition between BBL level 1 and level 2 in one instance and at the point of transition from BBL level 2 to BBL level 3 in one instance. In 2001-2002 the most significant improvements take place at the point of transition from VBO to BBL level 1 in one instance, at the point of transition between BBL level 1 to BBL level 2 in one instance, at the transition from BBL level 2 to BBL level 3 in two instances and at the transition between BBL level 3 and BBL level 4 in a further two instances.
Determining the boundary line for BBL programmes that offer a relatively good start in the labour market over different years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in further study</td>
<td>VBO - level 1*</td>
<td>VBO - level 1*</td>
</tr>
<tr>
<td>Chance of finding work</td>
<td>VBO - level 1</td>
<td>Level 1 - level 2*</td>
</tr>
<tr>
<td>Chance of a permanent job</td>
<td>VBO - level 1*</td>
<td>Level 2 - level 3*</td>
</tr>
<tr>
<td>Occupational level</td>
<td>Level 2 - level 3*</td>
<td>Level 2 - level 3*</td>
</tr>
<tr>
<td>Chance of a job in own sector of study</td>
<td>Level 1 - level 2*</td>
<td>Level 3 - level 4*</td>
</tr>
<tr>
<td>Gross hourly wage</td>
<td>VBO - level 1*</td>
<td>Level 3 - level 4*</td>
</tr>
</tbody>
</table>

* = significant difference between sequential levels at the 5% level.

What do these results mean for the value of the basic qualification? Where the assumption is adopted that a basic qualification must provide the greatest possible relative improvement with regard to the lower levels over the largest possible number of indicators, BOL level 2 programmes qualify as a basic qualification in 1999-2000. BOL level 2 programmes deliver a relatively large improvement in yields on four of the six indicators in 1999-2000 when compared to the lower programme levels. For some of the indicators, even BOL level 1 programmes deliver a relatively large improvement when compared to VBO. The same applies in 2001-2002. Similarly in 2001-2002, BOL level 2 programmes generate a relatively large improvement in yields when compared to lower-level programmes. Where BOL is concerned therefore, BOL level 2 programmes adequately qualify as a basic qualification for school-leavers in 2001-2002. It can be concluded that BOL level 2 programmes continue to distinguish themselves from lower-level programmes even when labour market circumstances are less favourable.

In the case of BBL, level 2 programmes delivered a relatively large improvement in yields on five of the six indicators when compared to lower-level programmes over 1999-2000. In 2001-2002 however, this applied to only two of the six indicators (participation in further study and likelihood of finding work). It can therefore be concluded that in the case of BBL the boundary line between programmes that offer a relatively good start in the labour market is less well-established than for BOL. This boundary line shifts towards programmes at a higher level during a period of economic decline.
### Table 5.5

**Determining the boundary line for BOL programmes that offer a relatively good start in the labour market for each of the sectors**

<table>
<thead>
<tr>
<th>BOL</th>
<th>Agriculture</th>
<th>Technical</th>
<th>Economics</th>
<th>Healthcare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in further study</td>
<td>VBO - level 2*</td>
<td>Level 2 - level 3*</td>
<td>VBO - level 1*</td>
<td>Level 2 - level 3*</td>
</tr>
<tr>
<td>Chance of work</td>
<td>Level 2 - level 3*</td>
<td>Level 1 - level 2*</td>
<td>Level 2 - level 3</td>
<td>Level 2 - level 3*</td>
</tr>
<tr>
<td>Chance of permanent job</td>
<td>VBO - level 2</td>
<td>Level 1 - level 2*</td>
<td>Level 2 - level 3*</td>
<td>Level 2 - level 3*</td>
</tr>
<tr>
<td>Occupational level</td>
<td>Level 3 - level 4*</td>
<td>Level 1 - level 2*</td>
<td>Level 2 - level 3*</td>
<td>VBO - level 2*</td>
</tr>
<tr>
<td>Chance of job in own sector</td>
<td>VBO - level 2</td>
<td>Level 2 - level 3*</td>
<td>Level 1 - level 2*</td>
<td>VBO - level 2*</td>
</tr>
<tr>
<td>Gross hourly wage</td>
<td>Level 3 - level 4*</td>
<td>VBO - level 1</td>
<td>VBO - level 1*</td>
<td>VBO - level 2*</td>
</tr>
</tbody>
</table>

* = significant difference between sequential levels at the 5% level;
** = figures for level 1 are not available for the agriculture and healthcare sectors.

Tables 5.5 and 5.6 show the most significant results of the comparison between the sectors. Looking at the programme levels at which the largest relative improvement in yields takes place, it is clear that for the technical sector, BOL level 2 programmes deliver a relatively large improvement on four of the six indicators when compared to lower level programmes in this sector. This means that BOL level 2 programmes reasonably qualify as a basic qualification in the technical sector. This is true only to a slightly less extent for the agriculture, economics and healthcare sectors at BOL level 2. Programmes at BOL level 2 in these sectors deliver relatively good yields on three of the six indicators when compared to lower level programmes.

It is clear from table 5.6 that BBL level 2 programmes in the technical, economics and healthcare sectors deliver a substantial improvement in yields when compared to the lower level programmes in these sectors. BBL level 2 programmes are reasonably adequate as a basic qualification in these sectors. In the case of the agriculture sector, BBL level 2 programmes deliver a relative improvement when compared to the lower level programmes in this sector on three of the six indicators. This means that BBL level 2 programmes in the agriculture sector qualify as a basic qualification to a slightly less extent than BBL level 2 programmes in the other sectors.
Table 5.6  Determining the boundary line for BBL programmes that offer a relatively good start in the labour market for each of the sectors**

<table>
<thead>
<tr>
<th>BBL</th>
<th>Agriculture</th>
<th>Technical</th>
<th>Economics</th>
<th>Healthcare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in further study</td>
<td>VBO - level 2*</td>
<td>VBO - level 1*</td>
<td>VBO - level 1*</td>
<td>VBO - level 2*</td>
</tr>
<tr>
<td>Chance of work</td>
<td>Level 3 - level 4</td>
<td>VBO - level 1</td>
<td>Level 1 - level 2</td>
<td>Level 3 - level 4</td>
</tr>
<tr>
<td>Chance of permanent job</td>
<td>VBO - level 2*</td>
<td>Level 2 - level 3*</td>
<td>VBO - level 1*</td>
<td>Level 3 - level 4*</td>
</tr>
<tr>
<td>Occupational level</td>
<td>Level 3 - level 4*</td>
<td>Level 2 - level 3*</td>
<td>Level 2 - level 3*</td>
<td>VBO - level 2*</td>
</tr>
<tr>
<td>Chance of job in own sector</td>
<td>Level 2 - level 3*</td>
<td>Level 1 - level 2*</td>
<td>Level 2 - level 3*</td>
<td>VBO - level 2*</td>
</tr>
<tr>
<td>Gross hourly wage</td>
<td>VBO - level 2*</td>
<td>VBO - level 1*</td>
<td>VBO - level 1*</td>
<td>VBO - level 2*</td>
</tr>
</tbody>
</table>

* = significant difference between sequential levels at the 5% level;
** = figures for level 1 are not available for the agriculture and healthcare sectors.

So far, in determining the level of a basic qualification only the programme level attainments of school-leavers have been taken into account. The details given above show that the sectors differ slightly from each other with respect to the boundary lines of programmes that offer a relatively good start in the labour market. It would probably be a good idea to take into account programme sectors in which school-leavers have studied when determining programmes that offer an adequate basic qualification in the future.

5.5  The value of a basic qualification from an international perspective

5.5.1  Introduction

This section studies the value of the Dutch basic qualification from an international perspective. An empirical check is made for this purpose on the extent to which the external yield of ISCED 3C programmes differs between the Netherlands and certain other European countries, including France and the United Kingdom. Comparison with these countries is particularly
interesting, since programmes at the ISCED 3C short level in these two countries -in contrast to the situation in the Netherlands- are in fact regarded as level completion by the OECD. The points of reference for Dutch programmes at ISCED level 3C short are the foreign programmes at ISCED level 3C short, which means that comparison also took place with other programmes at ISCED 3 level (3A, 3B and 3C long) and with programmes at ISCED 2 level. The following two research questions were formulated:

1. What is the value of Dutch ISCED 3C short programmes in terms of qualification for further study and opportunities in the labour market when compared to foreign ISCED 3C short programmes?
2. How does this value relate that of other programmes at ISCED 3 level (3A, 3B and 3C long) on the one hand, and programmes at ISCED level 2 on the other?

Where application of these ISCED levels to the Dutch programmes is concerned, reference is made to table 5.7. This table shows how Dutch education system programmes are categorised in the ISCED 1997 (see Bernelot Moens (2000) for more details).

<table>
<thead>
<tr>
<th>ISCED 1997 level</th>
<th>Description</th>
<th>Dutch equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISCED 2</td>
<td>Lower secondary education</td>
<td>HAVO (years 1-3); VWO (years 1-3); MAVO; VBO; BOL/BBL level 1</td>
</tr>
<tr>
<td>ISCED 3C short</td>
<td>Upper secondary education, not designed to lead to tertiary education, &gt; 3 years</td>
<td>BOL/BBL level 2</td>
</tr>
<tr>
<td>ISCED 3C long</td>
<td>Upper secondary education, not designed to lead to tertiary education, &gt; 3 years</td>
<td>BOL/BBL level 3</td>
</tr>
<tr>
<td>ISCED 3B</td>
<td>Upper secondary education, designed to give access to short, practically oriented tertiary education</td>
<td>N/A.</td>
</tr>
<tr>
<td>ISCED 3A</td>
<td>Upper secondary education, designed to give access to tertiary education</td>
<td>HAVO (years 4-5); VWO (years 4-6); BOL/BBL level 4</td>
</tr>
</tbody>
</table>
Use was made of the European Union Labour Force Survey (EU LFS), compiled in 2000, in answering the research questions. This combined database -made available by Eurostat- contains data from part of the original, National Labour Force Surveys (LFS) -known in the Netherlands as the Enquête Beroepsbevolking (EBB)- held annually in the fifteen member states of the European Union. Only data relating to the Netherlands (NL), France (FR), the United Kingdom (UK), Greece (GR), Spain (ES) and Italy (IT) is drawn on for the purpose of the present analysis. The reason for this is that no distinction exists or is made at the ISCED 3C short programme level in the remaining member states. The section of the overall population aged 15-64 who have completed a programme at the ISCED 2-3 level is given. The number of individuals covered by this category is also given. In the Netherlands, for example, 5.9% of those aged 15-64 are in possession of a diploma at the ISCED 3C short level, corresponding to 628,000 individuals.

<table>
<thead>
<tr>
<th>Programme level</th>
<th>NL</th>
<th>FR</th>
<th>UK</th>
<th>GR</th>
<th>ES</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISCED 2</td>
<td>24.2%</td>
<td>23.5%</td>
<td>18.5%</td>
<td>15.1%</td>
<td>25.7%</td>
<td>23.5%</td>
</tr>
<tr>
<td></td>
<td>2,566</td>
<td>8,847</td>
<td>6,110</td>
<td>1,036</td>
<td>6,597</td>
<td>8,847</td>
</tr>
<tr>
<td>ISCED 3C short</td>
<td>5.9%</td>
<td>26.8%</td>
<td>16.9%</td>
<td>2.5%</td>
<td>0.2%</td>
<td>8.2%</td>
</tr>
<tr>
<td></td>
<td>628</td>
<td>10,105</td>
<td>5,586</td>
<td>170</td>
<td>47</td>
<td>3,099</td>
</tr>
<tr>
<td>ISCED 3C long</td>
<td>16.6%</td>
<td>N/A</td>
<td>14.2%</td>
<td>6.8%</td>
<td>0.1%</td>
<td>2.0%</td>
</tr>
<tr>
<td></td>
<td>1,768</td>
<td>4,698</td>
<td>466</td>
<td>28</td>
<td>256</td>
<td></td>
</tr>
<tr>
<td>ISCED 3B</td>
<td>N/A</td>
<td>1.6%</td>
<td>N/A</td>
<td>2.2%</td>
<td>5.7%</td>
<td>0.4%</td>
</tr>
<tr>
<td></td>
<td>599</td>
<td>148</td>
<td>1,469</td>
<td>158</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISCED 3A</td>
<td>19.3%</td>
<td>11.5%</td>
<td>25.1%</td>
<td>26.1%</td>
<td>13.8%</td>
<td>26.1%</td>
</tr>
<tr>
<td></td>
<td>2,055</td>
<td>4,337</td>
<td>8,317</td>
<td>1,790</td>
<td>3,551</td>
<td>9,826</td>
</tr>
</tbody>
</table>

Source: Eurostat, EU LFS 2000, own calculations.

In order to adequately determine the value of a basic qualification during the transition from school to work, the analysis limits itself to the 15-24 age group. The following aspects of the external yield of programmes are analysed:
- participation in further studies;
- participation in the labour force;
- paid work;
- permanent work;
- full-time work;
- occupational prestige.

In the case of participation in further studies the focus is on educational activities (both initial programmes and supplementary schooling) that took place in the four weeks prior to the date of the interview. This indicator therefore identifies those for whom the highest level of educational attainment achieved so far does not amount to terminal education. Participation in the labour force is determined on the basis of a slightly modified ILO definition (ILO, 1990). All persons who at the time of interview should strictly speaking belong to the labour force, but who are currently participating in an initial educational programme are excluded from the labour force statistics. The remaining indicators relate to the members of the labour force actually in employment. These are individuals who had performed at least one hour of paid work during the week of the interview and individuals who had not worked in that particular week but who did have a paid job from which they were on leave during the week concerned. The duration of the contract of employment was measured by making a distinction between permanent and temporary work. Permanent work related to a contract for an indefinite period of time. The contrast between full-time and part-time work was also analysed. This distinction was based on the interviewee’s assessment and not on the actual number of hours worked each week. Finally, there was an assessment of the occupational prestige that had been gained. Occupations are categorised according to the ISCO’88 classification (ILO, 1990). The degree of occupational prestige was determined by use of the ISEI (Ganzeboom, De Graaf & Treiman, 1992; Ganzeboom & Treiman, 1996). Based on this widely used instrument that measures social status, scores are allocated to job titles (using three figure information from the ISCO’88 classification), according to a scale starting at 16 for the lowest status occupations and ending at 90 for the highest status occupations.

The empirical analysis begins with a description of the above aspects of the external yield of programmes in the various countries, focusing on absolute differences. Next to be determined are the differences in the external yield of programmes from country to country, with individual characteristics being taken into account. It is quite possible that differences encountered in the position of programmes are caused by variations between the structure of programmes with respect to age and gender. With this in mind, the differences between programmes were analysed again, but this time corrected for age and gender. The parameter estimates give logodds ratios for the programme levels concerned, the ISCED 3C short level serving as the reference category in all
cases. The figures show the deviation with respect to this programme level and can be interpreted as relative likelihoods. A logodds ratio greater than 0 for a particular programme level indicates a greater likelihood than that pertaining to the reference category (i.e. ISCED 3C short), a logodds ratio less than 0 indicates a smaller likelihood and a logodds of exactly 0 implies that the likelihood that relates to a particular programme level is identical to that of the reference category. In the analysis of occupational prestige achieved, the parameter estimates do not indicate logodds, but non-standardised regression coefficients instead. These can be interpreted as estimated differences between the programmes as to occupational prestige achieved.

In order to assess the differences according to their statistical significance, the number of respondents in each country were put on a par and re-weighted to produce the equivalent of 5,000 respondents for each country. This avoided any distortion due to unequal sample sizes between the various countries.

5.5.3 Results

Participation in further education
It can be seen from figure 5.27 that there are significant differences between programme levels where it comes to going on to further studies.

Figure 5.27
Likelihood of participation in further education, 15-24-year-olds, percentages

Source: Eurostat, EU LFS 2000, own calculations.
A major section of the 15-24-year-old group with a diploma at the ISCED 2 level goes on to a further programme of study. This is a secondary vocational education programme in the majority of cases. There are one or two differences to be noted between countries however. In France, Greece and the Netherlands, the ISCED 2 level does not amount to terminal education for approximately 80% of young people, while the corresponding percentage in the United Kingdom and Italy is around 60%. In Spain, less than half of young people with a diploma at the ISCED 2 level go on to further study. Participation in further education among young people completing an ISCED 3C short programme appears to be much lower. The participation level in the Netherlands, France and the United Kingdom is approximately 40%. This share is considerably lower in the southern European countries involved, with Greece accounting for by far the lowest figure (8%). Participation in further education among young people completing an ISCED 3C long programme is significantly higher. The Netherlands is an exception to this rule, where the percentage of young people going on to further study is slightly lower in the case of ISCED 3C long programmes than for ISCED 3C short programmes. The difference is not large however (40% - 37% = 3%). Even participation in further education among young people completing an ISCED 3B programme is considerably higher than for the ISCED 3C short programmes. In Greece and Italy, participation in further study among young people completing an ISCED 3B programme is even higher than those completing an ISCED 3C long. Participation in further education among young people completing an ISCED 3A programme is at approximately the same level as for those completing a programme at the ISCED 2 level in all countries. It relates to access to higher education in this instance however.

Table 5.9

<table>
<thead>
<tr>
<th>Programme level</th>
<th>NL</th>
<th>FR</th>
<th>UK</th>
<th>GR</th>
<th>ES</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISCED 2</td>
<td>0.70**</td>
<td>0.76***</td>
<td>0.41**</td>
<td>2.93***</td>
<td>0.46</td>
<td>1.16***</td>
</tr>
<tr>
<td>ISCED 3C short</td>
<td>0.00</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>ISCED 3C long</td>
<td>0.05</td>
<td>N/A</td>
<td>0.85***</td>
<td>0.87</td>
<td>1.68</td>
<td>1.68***</td>
</tr>
<tr>
<td>ISCED 3B</td>
<td>N/A</td>
<td>0.39*</td>
<td>N/A</td>
<td>1.55**</td>
<td>0.98</td>
<td>2.62**</td>
</tr>
<tr>
<td>ISCED 3A</td>
<td>1.52**</td>
<td>2.36***</td>
<td>1.48**</td>
<td>3.55***</td>
<td>3.25***</td>
<td>2.63***</td>
</tr>
</tbody>
</table>

*a = corrected statistically for age and gender;
* = p < 0.05; ** = p < 0.01 (test of differences with respect to ISCED 3C short, per country);
### = p < 0.01 (test of differences with respect to the Netherlands, per programme level).
Source: Eurostat, EU LEFS 2000, own calculations.
The above findings are analysed further in table 5.9 with the aid of multivariate analysis techniques. The results confirm the earlier differences found between programme levels and countries regarding the likelihood of participation in further education. In all of the countries, with the single exception of Spain, the relative likelihood of going on to further education among 15-24-year-olds completing a programme at the ISCED 2 level is significantly higher than for those who complete an ISCED 3C short programme. The fact that no significant effect has been found in the case of Spain is linked to the small number of individuals in that country who complete a programme at the ISCED 3C short level (the reference category). The estimated logodds ratio for the Netherlands is 0.70. The corresponding logodds ratio for Greece, Italy and France is significantly higher, which implies that the relative likelihood of going on to further study in the case of those completing an ISCED level 2 programme in these countries is greater than that for the Netherlands. When it comes to the ISCED 3C long, the number of young people completing a programme at this level going on to further study in the United Kingdom and Italy is higher than among those completing an ISCED 3C short programme. This also means that the estimated logodds ratio for both of these countries is significantly higher than for the Netherlands. One or two significant differences are also present when it comes to ISCED 3B programmes. In Italy, Greece and France, participation in further study among young people with a diploma at this programme level is higher than among their counterparts with a qualification at the ISCED 3C short level. The findings in relation to the ISCED 3A also show that participation in further study among those completing a programme at this level is significantly higher than among those at the ISCED 3C short level. This is true in all of the countries studied. It is also the case however that the estimated logodds ratios for Greece, Spain, Italy and France are significantly higher than the corresponding estimate for the Netherlands.

**Labour force participation**

Figure 5.28 shows the extent to which participation in the labour force among young people differs between programme levels and countries.

This indicator is more or less the mirror image of the rate of participation in further education. This being so, it emerges from figure 5.28 that that the degree of participation is lowest by far among those completing only the ISCED 2 level. There is considerable variation between countries however. Labour force participation is lowest in France and Greece, where it amounts to 17%. The highest rate of participation is in Spain, which has a share of 52%. Labour market participation by those completing an ISCED 3C short programme is significantly higher. This percentage is highest in Greece (88%) and lowest in France (62%). Labour force participation by individuals completing an ISCED 3C long programme differs little from that of those completing an ISCED 3C short programme.
The first participation rate is slightly higher in the Netherlands and Greece and lower in Spain, Italy and the United Kingdom. Labour market participation by those completing an ISCED 3B programme is considerably lower than participation by those completing an ISCED 3C short. France is an exception to this rule, where the percentage of those with an ISCED 3B is 11% higher (73% as compared to 62%). Labour market participation by individuals completing an ISCED 3A programme is considerably lower than for those completing ISCED 3C (short or long) or ISCED 3B programmes in nearly all countries. Only in the United Kingdom is labour market participation at a more or less comparable level.

The above findings are tested again in table 5.10, once more with the aid of multivariate analysis. As was to be expected based on figure 5.28, participation in the labour force among those completing a programme at the ISCED 2 level is significantly lower than among those with an ISCED 3C short. The effect is again insignificant where Spain is concerned. It also emerges from table 5.10 that the relatively low labour market participation by those completing an ISCED 2 programme in Greece is significantly lower than in the Netherlands.
Table 5.10 further shows that in Italy the relative likelihood of labour force participation is significantly lower among those with a diploma at the ISCED 3C long level than for those completing an ISCED 3C short programme. The relevant logodds ratio is -0.94. Also in Italy, as in Spain, the relative likelihood of labour force participation is significantly lower among those with a diploma at the ISCED 3B level. Where the ISCED 3A level is concerned, finally, the labour market participation of young people completing a programme at this level is significantly lower among the countries studied than the labour market participation of those completing a programme at the ISCED 3C short level. The effect in the United Kingdom is not significant, although the logodds ratio points in the anticipated direction. The estimated logodds ratio for that country accordingly deviates significantly from the corresponding logodds ratio for the Netherlands. This is also the case for Spain, but the logodds ratio here is significantly higher than that of the Netherlands.

**Paid work**

Figure 5.29 shows the likelihood of finding paid work for young people who belong to the labour force, broken down according to programme level and countries.
The figures do not show an unequivocal picture where the differences between programme levels are concerned. In the United Kingdom for instance the likelihood of finding paid work is greater for those with a higher level of educational attainment. In Greece by contrast we see a negative correlation between the likelihood of finding paid work and the highest level of educational attainment. In the Netherlands there appears to be no connection whatever between the likelihood of finding paid work and the highest level of educational attainment. The main striking feature in Spain is that the likelihood of young people finding paid work after completing an ISCED 3C programme is considerably greater than for young people completing any other programme. Where differences that exist between countries in the likelihood of finding paid work are concerned, it emerged that the labour market situation in the Netherlands is the most favourable at the present time. Regardless of the level of educational attainment, individuals in the Netherlands had the highest chance of obtaining paid work. Taking the ISCED 3C as an example, 95% of individuals in the Netherlands who have completed this level are in paid work, as compared to 71% in Greece.
Table 5.11 Relative likelihood of finding paid work, 15-24-year-olds, logodds ratios\(^a\)

<table>
<thead>
<tr>
<th>Programme level</th>
<th>NL</th>
<th>FR</th>
<th>UK</th>
<th>GR</th>
<th>ES</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISCED 2</td>
<td>0.17</td>
<td>-0.76***</td>
<td>-0.48**</td>
<td>0.50**</td>
<td>0.36</td>
<td>-0.33**</td>
</tr>
<tr>
<td>ISCED 3C short</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>ISCED 3C long</td>
<td>2.12**</td>
<td>N/A</td>
<td>0.78**</td>
<td>0.26**</td>
<td>1.41</td>
<td>-0.46***</td>
</tr>
<tr>
<td>ISCED 3B</td>
<td>N/A</td>
<td>0.41**</td>
<td>N/A</td>
<td>0.10</td>
<td>0.42</td>
<td>-0.91*</td>
</tr>
<tr>
<td>ISCED 3A</td>
<td>0.56</td>
<td>0.23*</td>
<td>1.08**</td>
<td>0.06</td>
<td>0.43</td>
<td>-0.44***</td>
</tr>
</tbody>
</table>

\(^a\) = corrected statistically for age and gender;  
* = p < 0.05; ** = p < 0.01 (test of differences with respect to ISCED 3C short; per country);  
# = p < 0.05; ## = p < 0.01 (test of differences with respect to the Netherlands, per programme level).

Source: Eurostat, EU LFS 2000, own calculations.

Table 5.11 shows that in France, the United Kingdom and Italy, the relative likelihood of individuals who have completed a programme at the ISCED 2 level finding paid work is significantly lower than for individuals completing a programme at the ISCED 3C short level. In Greece by contrast the relative likelihood of those with an ISCED level 2 finding paid work is significantly higher. Where the ISCED 3C long programmes are concerned, it emerges that in the Netherlands and the United Kingdom the relative likelihood of young people with this level of education finding paid work is significantly higher than for those with ISCED 3C short qualifications. However, the absolute differences are only small (see figure 5.29). In Italy by contrast, young people completing a programme at the ISCED 3C long level have a smaller relative likelihood of finding paid work than those with ISCED 3C short qualifications. This being so, the effect in Italy deviates significantly from the corresponding effect in the Netherlands. Where the ISCED 3B is concerned, in France the relative likelihood of those who have completed this level finding paid work is higher than for those with an ISCED 3C short. In Italy it is precisely the other way round. Finally, with regard to the ISCED 3A it needs to be pointed out that in the United Kingdom and France, the relative likelihood of young people who have completed this level finding paid work is significantly higher than for those completing an ISCED 3C short, while in Italy the relative likelihood of paid work for young people with an ISCED 3A is significantly lower. This relative likelihood of finding paid work moreover deviates significantly from the corresponding relative likelihood of doing so in the Netherlands.
Permanent work

Figure 5.30 looks into the likelihood of finding permanent work. The figure shows that -as in the case of the likelihood of finding paid work- there is no clear pattern to be observed between programme levels.

In the Netherlands, young people completing a programme at the ISCED 3C long level have the best likelihood of finding a permanent job. In France, those with ISCED 3B are those who most often find a permanent position. In Spain it is young people with ISCED 3A who have the highest likelihood of finding a permanent job. In Italy it is young people with ISCED 2 qualifications. In the United Kingdom and Greece finally, young people completing a programme at ISCED 3C short level have the best chance of finding a permanent job. If we look at the differences between countries as to the likelihood of finding a permanent job, it is immediately apparent that young people in Spain -regardless of their educational level- have the least likelihood of finding paid work. Young people in the United Kingdom have the best likelihood of finding permanent jobs.
When account is taken of age and gender differences in the composition of the samples, it emerges that in both France and the United Kingdom the relative likelihood of finding permanent work for individuals who have completed a programme at the ISCED 2 level is significantly lower than for those completing a programme at the ISCED 3C short level (see table 5.12).

### Table 5.12

<table>
<thead>
<tr>
<th>Programme level</th>
<th>NL</th>
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<tbody>
<tr>
<td>ISCED 2</td>
<td>-0.06</td>
<td>-0.29**</td>
<td>-0.47**</td>
<td>-0.17</td>
<td>0.95**</td>
<td>0.13</td>
</tr>
<tr>
<td>ISCED 3A</td>
<td>-0.34*</td>
<td>-0.36*</td>
<td>-0.38*</td>
<td>-0.33*</td>
<td>1.09**</td>
<td>-0.72**</td>
</tr>
<tr>
<td>ISCED 3C short</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>ISCED 3C long</td>
<td>0.33*</td>
<td>N/A</td>
<td>-0.02</td>
<td>-0.38***</td>
<td>0.15</td>
<td>-1.06***</td>
</tr>
<tr>
<td>ISCED 3B</td>
<td>N/A</td>
<td>-0.01</td>
<td>N/A</td>
<td>-0.29</td>
<td>0.98*</td>
<td>-1.29**</td>
</tr>
</tbody>
</table>

*a* = corrected statistically for age and gender;

* = p < 0.05; ** = p < 0.01 (test of differences with respect to ISCED 3C short; per country);

# = p < 0.05; ## = p < 0.01 (test of differences with respect to the Netherlands, per programme level).

Source: Eurostat, EU LFS 2000, own calculations.

This is in sharp contrast to Italy, where the relative likelihood of finding permanent work for those with ISCED 2 qualifications is greater. The estimated logodds ratio moreover deviates significantly from the corresponding estimate for the Netherlands. Where the ISCED 3C long is concerned it emerges that this programme level offers a higher relative likelihood of finding permanent work in the Netherlands, while the same programme level in Greece and Italy leads to a lower relative likelihood of finding permanent work. The effect found in these two countries accordingly differs significantly from the corresponding effect in the Netherlands. When it comes to the ISCED 3B, Spanish young people completing a programme at this level have a higher relative likelihood of finding permanent work than those completing a programme at the ISCED 3C short level. In Italy it is precisely the other way round. When it comes to the ISCED 3A, we find in all the countries studied that young people who have completed a programme at this level have a significantly lower relative likelihood of finding permanent work than their contemporaries with an ISCED 3C short. The single exception to this rule is Spain where, paradoxically, young people who have completed a programme at ISCED 3A level have a significantly higher relative likelihood of finding a permanent position.
Full-time work

Figure 5.31 shows the likelihood of obtaining full-time work.

Likelihood of finding full-time work, 15-24-year-olds, percentages

Once again, the task of systematising the differences between programme levels in the different countries is not an easy one. One pattern that can be discerned to some extent is that in a number of countries, young people completing programmes at the ISCED 2 or ISCED 3A level are slightly less often to be found working part-time than their contemporaries who have completed a different programme level. This may have to do with the fact that the latter group of students is the one that most often goes on to further study (see figure 5.27), and this stands in the way of a full-time job. Where the differences between the countries are concerned, it emerges that most of the full-time working found in the study occurs in the southern European countries of Greece, Spain and Italy. Approximately 90% of employed young people in these countries have a full-time job. In the Netherlands, France and the United Kingdom by contrast, the proportion of young people working full-time is considerably lower, at approximately 75%.
Relative likelihood of finding full-time work, 15-24-year-olds, logodds ratios\(^a\)

<table>
<thead>
<tr>
<th>Programme level</th>
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<th>GR</th>
<th>ES</th>
<th>IT</th>
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<tbody>
<tr>
<td>ISCED 2</td>
<td>-0.04</td>
<td>-0.41**</td>
<td>-0.97****</td>
<td>-0.70</td>
<td>0.48</td>
<td>-0.04</td>
</tr>
<tr>
<td>ISCED 3C short</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>ISCED 3C long</td>
<td>0.73**</td>
<td>N/A</td>
<td>-0.76****</td>
<td>-0.62*</td>
<td>-0.00</td>
<td>-0.62***</td>
</tr>
<tr>
<td>ISCED 3B</td>
<td>N/A</td>
<td>0.42**</td>
<td>N/A</td>
<td>-0.68</td>
<td>0.38</td>
<td>-2.12**</td>
</tr>
<tr>
<td>ISCED 3A</td>
<td>-0.13</td>
<td>0.20</td>
<td>-0.81****</td>
<td>-0.75*</td>
<td>-0.19</td>
<td>-0.44***</td>
</tr>
</tbody>
</table>

\(^a\) = corrected statistically for age and gender;  
* = \(p < 0.05\); ** = \(p < 0.01\) (test of differences with respect to ISCED 3C short; per country);  
# = \(p < 0.05\); ## = \(p < 0.01\) (test of differences with respect to the Netherlands, per programme level).  
Source: Eurostat, EU LFS 2000, own calculations.

It emerges from table 5.13 that -when compared to the other aspects of the external use of programmes being studied here- only one or two significant differences exist between programme levels when it comes to the relative likelihood of finding full-time work. Firstly we find at the ISCED 2 level that individuals who have completed this programme level in France and the United Kingdom are significantly less often in full-time work than those completing a programme at ISCED 3C short level. The estimated logodds ratio for the United Kingdom thereby deviates significantly from that for the Netherlands. Where ISCED 3C long is concerned, young people who have completed this programme in the Netherlands are more often in full-time work than those completing an ISCED 3C short. In the United Kingdom and Italy by contrast it is precisely the opposite is that is true. When it comes to ISCED 3B, we note that young people who have completed this level in France have a relatively higher likelihood of finding full-time work than those completing an ISCED 3C short, while in Italy it is young people with an ISCED 3B who have a relatively lower likelihood of finding full-time work. Where the ISCED 3A is concerned finally, it emerges that in Greece, the United Kingdom and Italy, the relative likelihood of young people who have completed this programme level finding full-time work is lower than for those completing an ISCED 3C short. The logodds ratio for the last two countries named deviates significantly from that for the Netherlands.

**Occupational prestige**

The occupational prestige achieved is investigated as the final aspect of the external yield generated by programmes. Figure 5.32 presents the results of this analysis.
It is clear from the graph that in general terms the educational attainment level of individuals correlates positively with the degree of occupational prestige they achieve. The differences between programme levels in this respect are fairly large at the start of the occupational career. In the Netherlands for instance the average level of occupational prestige achieved by 15-24-year-olds who have completed an ISCED 2 programme amounts to 36 status points on a scale running from 16 to 90, while the average level of occupational prestige achieved by those completing an ISCED 3A programme amounts to 42 status points. There are also some striking differences between countries as regards programme levels. It emerges for instance that in the Netherlands young people in employment who have completed a programme at the ISCED 2 level achieve the highest level of occupational prestige - with, as mentioned, 36 status points, while those completing corresponding programmes in Spain achieve only the lowest level of occupational prestige (i.e. 31 status points).

A similar difference applies to the ISCED 3C short. A programme of this type in the Netherlands delivers most in terms of occupational prestige (37 status points), while the same programme level in Spain delivers the least (32 status points). The highest level of occupational prestige for an ISCED 3C long programme is achieved in Italy; the lowest in the United Kingdom and the Netherlands. In the case of the ISCED 3B, this level is worth most in France...
and least in Spain and Italy. Finally, an ISCED 3A programme in Italy delivers most in terms of occupational prestige, the same programme delivers the least occupational prestige in Greece and Spain.

### Table 5.14

<table>
<thead>
<tr>
<th>Programme level</th>
<th>NL</th>
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<th>UK</th>
<th>GR</th>
<th>ES</th>
<th>IT</th>
</tr>
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<tbody>
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<td>ISCED 2</td>
<td>-0.56</td>
<td>-0.84*</td>
<td>-2.61***</td>
<td>-2.09**</td>
<td>-1.22</td>
<td>-1.60**</td>
</tr>
<tr>
<td>ISCED 3C short</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>ISCED 3C long</td>
<td>1.49*</td>
<td>N/A</td>
<td>3.08***</td>
<td>7.34***</td>
<td>7.20*</td>
<td>9.45***</td>
</tr>
<tr>
<td>ISCED 3B</td>
<td>N/A</td>
<td>4.76**</td>
<td>N/A</td>
<td>1.63*</td>
<td>2.04</td>
<td>-1.11</td>
</tr>
<tr>
<td>ISCED 3A</td>
<td>5.04**</td>
<td>5.27**</td>
<td>5.42**</td>
<td>2.75***</td>
<td>5.21**</td>
<td>7.83***</td>
</tr>
</tbody>
</table>

\(a = \) corrected statistically for age and gender;  
* = \(p < 0.05\); ** = \(p < 0.01\) (test of differences with respect to ISCED 3C short; per country);  
# = \(p < 0.05\); ## = \(p < 0.01\) (test of differences with respect to the Netherlands, per programme level).  

Source: Eurostat, EU LFS 2000, own calculations.

To conclude, table 5.14 reveals the differences in levels of occupational prestige achieved between programme levels and countries, following correction for differences in age and gender. It emerges from these results that the level of occupational prestige that attaches to individuals completing a programme at a maximum level of ISCED 2 in all of the countries -except for the Netherlands and Spain- is significantly lower than for those completing a programme at the ISCED 3C short level. In the case of the United Kingdom the estimated difference is -2.61 status points. This being the case, the difference is significantly higher than the estimated difference in the Netherlands.

Individuals who have completed an ISCED 3C long programme by contrast achieve a significantly higher level of occupational prestige than those completing an ISCED 3C short. This is true for all countries that offer this programme level. The estimated difference in the Netherlands is 1.49 status points. The difference is significantly higher however in Italy, Greece and the United Kingdom. Differences between ISCED 3B and ISCED 3C short are only significant for France and Greece. Employed young people in France who have completed a programme at the ISCED 3B gain nearly five status points more than those completing an ISCED 3C short. Where the ISCED 3A is concerned, individuals who have completed this programme level achieve a higher level of occupational prestige than individuals completing an ISCED 3C short in all of the countries studied. The estimated difference in Italy is significantly higher than in the Netherlands.
5.5.4 Summary and conclusion

In order to determine the value of the Dutch basic qualification, an international comparison of the (labour market) position of young people who have completed a programme at the ISCED 3C short level has been undertaken in this section. An empirically based investigation has been made of the extent to which the external yield generated by ISCED 3C short programmes differs between the Netherlands and some other European countries, including France and the United Kingdom. Data from the 2000 European Union Labour Force Survey (EU LFS) was used for this purpose. This comparison produced a number of interesting findings, the results of which are summarised in table 5.15. The table shows the programme levels between which a relatively robust improvement occurs in the diverse aspects associated with the external yields generated. The analysis results from tables 5.9 to 5.14 inclusive were adopted as the basic premise for this analysis. Question marks appear in the columns where inconsistent patterns emerge (e.g. relative deterioration in labour market position associated with an increase in programme level).

It can be concluded from table 5.15 that when it comes to the question of the programme levels that lead to the labour market, most of the differences occur between the ISCED 2 and ISCED 3C short levels. This holds true first of all for participation in further education. ISCED 2 does not constitute terminal education in the countries studied, while ISCED 3C short on the other hand can (largely) be regarded as amounting to terminal education. It is likely that the United Kingdom occupies an exceptional position where this is concerned. The boundary line there lies more between ISCED 3C short and ISCED 3C long. On the other hand, participation in the labour force among young people completing an ISCED 2 in the United Kingdom is a great deal lower than for those completing an ISCED 3C short level programme. This applies equally well to all the other countries studied.

When it comes to occupational prestige achieved, the largest differences are to be found between the ISCED 3C short and ISCED 3C long levels. Young people completing a programme at the ISCED 3C short level achieved lower occupational prestige than those completing a programme at the ISCED 3C long level. Although in most of the countries -with the exception of the Netherlands and Spain- there is a difference in the level of occupational prestige achieved between young people completing ISCED 2 and ISCED 3C short, this difference -with the probable exception of the United Kingdom- is significantly less than the difference between the ISCED 3C short and ISCED 3C long levels. In the case of France, -where there is no ISCED 3C long- the corresponding distinction takes place between the ISCED 3C short and ISCED 3B levels.
Determining the boundary line at which relatively robust improvements occur, based on the six external yield aspects studied, per country

<table>
<thead>
<tr>
<th></th>
<th>NL</th>
<th>FR</th>
<th>UK</th>
<th>GR</th>
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<th>IT</th>
</tr>
</thead>
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<tr>
<td>Participation in further education</td>
<td>2 vs. 3C short**</td>
<td>2 vs. 3C short**</td>
<td>3C long**</td>
<td>2 vs. 3C short**</td>
<td>3C short vs. 3A</td>
<td>3C long**</td>
</tr>
<tr>
<td>Participation in the labour force</td>
<td>2 vs. 3C short**</td>
<td>2 vs. 3C short**</td>
<td>3C short**</td>
<td>2 vs. 3C short**</td>
<td>2 vs. 3C short**</td>
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</tr>
<tr>
<td>Paid work</td>
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<td>2 vs. 3C short**</td>
<td>3C short vs. 3C long**</td>
<td>?</td>
<td>3C short vs. ?</td>
<td></td>
</tr>
<tr>
<td>Permanent work</td>
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<td>2 vs. 3C short**</td>
<td>2 vs. ?</td>
<td>?</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>Full-time work</td>
<td>3C short vs. 3C long**</td>
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<td>2 vs. ?</td>
<td>?</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>Occupational prestige</td>
<td>3C short vs. 3C long*</td>
<td>3C short vs. 3B**</td>
<td>3C short vs. 3C long**</td>
<td>3C short vs. 3C long*</td>
<td>3C short vs. 3C long**</td>
<td></td>
</tr>
</tbody>
</table>

* = p < 0.05; ** = p < 0.01; ? = differences between programme levels inconsistent or too negligible.

Source: Eurostat, EU LFS 2000, own calculations.

As regards the other aspects of the external yield of programmes (chances of paid work, permanent work and full-time work), there are different outcomes for each country. In both France and the United Kingdom there is a relatively strong improvement between ISCED 2 and ISCED 3C short. For the Netherlands by contrast it quite clearly emerges that the boundary line lies between ISCED 3C short and ISCED 3C long. Programmes at the ISCED 3C level in the Netherlands produce relatively less favourable likelihoods of obtaining paid work, permanent work and full-time work than do programmes at the ISCED 3C long level. It is pointed out however that seen in absolute terms, the chances of Dutch school-leavers at ISCED 2 and ISCED 3C short level finding paid work are considerably higher than for those who complete higher-level programmes abroad. The pattern for the remaining countries (Italy, Greece and Spain) is inconsistent to the point where no clear line of demarcation can be drawn.
What can be concluded as regards the value of the Dutch basic qualification from an international perspective based on these findings? The results presented in this chapter show that when it comes to preparation for the labour market, the largest differences occur between the ISCED 2 and ISCED 3C short programme levels. This being so, the Netherlands appears to be marching nicely in step with other European countries. When we look at occupational prestige, the biggest differences manifest themselves between the ISCED 3C short and ISCED 3C long levels. Here similarly, the Dutch situation does not diverge significantly from that of other countries. When it comes to the likelihood of finding paid work, permanent work and full-time work however, it turns out that even as regards these labour market outcomes, the boundary line for the Netherlands in particular falls between ISCED 3C short and ISCED 3C long. In the Dutch situation in other words, a programme at the ISCED 3C short level certainly prepares young people for the labour market, though whether it actually renders them ready to enter the labour market adequately well-equipped is a question that remains open. Whatever the case may be, the relative improvement to be gained by following a programme at the ISCED 3C short level in the Netherlands is slightly disappointing.

This statement appears to be at variance with the findings from the previous section. In the final section (5.6) we will give extensive attention to the differences between the types of analyses used and their interpretation. For the moment though we content ourselves with two marginal notes on the current analysis. Firstly, it is possible that specific findings for the Netherlands have to do with the fact that in this country a relatively large number of school-leavers who have completed a programme at the (ISCED 2 or) ISCED 3C short level are still following a modern apprenticeship programme, which means that they are more likely to be working part time and have only a temporary contract of employment for this reason. An attempt has been made to take this into account in the analysis by excluding from the labour force statistics at the time of interview all persons who ought to belong to it strictly speaking, but are currently participating in an initial programme. It is doubtful however whether the content details used in the modern apprenticeship system can be regarded as qualifying as initial education in all cases. Secondly, the absolute figures show a more positive picture as regards the Netherlands. Thanks to the current high level of economic activity in the Netherlands for instance, the level of opportunity open to young people completing a programme at the ISCED 3C short level is higher than in other countries. Currently also, they achieve the highest level of occupational prestige as compared to their peers in the other countries.
5.6 Conclusions and comments

5.6.1 The main findings

An important policy aim of the Dutch government is to have as many young people as possible achieve a so-called basic qualification, i.e. complete a programme of education at a minimum of level 2 of the qualifications structure. The assumption behind this aim is that this educational level is the minimum necessary in order to function well in the labour market. Although this constitutes one of the most important objectives in educational policy aimed at school-leavers in lower secondary education, relatively little is known about the issues at stake in an empirical sense. No systematic records are kept of how many young people in a given cohort of school-leavers actually obtain a basic qualification for instance, and little is known regarding the external yield of the basic qualification as compared to other programme levels.

In this report the external yields of programmes at level 2 of BOL and BBL are compared to programmes that in terms of level are immediately below them (level 1 and VBO) and immediately above them (levels 3 and 4). An international comparison is also made, looking into the question of the position of programmes at ISCED 3C short level as compared to ISCED 2 level on the one hand and the other programmes at level 3 (3A, 3B and 3C long) on the other hand.

The analysis focuses on the question of whether the relationship between programme level and yields proceeds in a monotonous way, as some theories predict, or whether there are particular discontinuities. This distinction is important, since it may contribute to answering the question of what programme level ought to bear the title of basic qualification. If the relationship between number of years of schooling and yields proceeds on a monotonous basis, social considerations will need to be decisive in the question of the programme level that must be regarded as the minimum in order to allow individuals to function well in the labour market. These considerations cannot be derived from the empirics directly. If however the relationship proceeds on a discontinuous basis, a possible boundary line could be set at the programme level where the relative improvement due to a single year of additional schooling is greatest.* Segmentation theories and institutional theories in particular offer explanations pointing to the possible existence of such discontinuities. A consequence of the minimum youth wage for instance might be that school-leavers need to have a minimum level of education in order to guarantee a level of productivity that corresponds to this minimum wage. Another

* This of course is without prejudice to the idea that the basic qualification might come to be defined at a different level based on social considerations.
possible cause for discontinuity may lie in the segmentation of the labour market on the basis of qualification requirements. From the point of view of the segmented labour market a minimum qualification level is necessary in order to gain access to the specific trade or professional submarkets. School-leavers not in possession of this minimum qualification have no option but to take recourse to secondary segment jobs: low-level jobs with poor primary and secondary working conditions.

Two kinds of data sources were used for the analysis: the ROA’s School-leaver questionnaires and the European Union Labour Force Surveys (EU LFS). The first of these data sources made it possible to survey the labour market situation of school-leavers at a very detailed level. The great advantage here lay particularly in the options the programme classifications used in the school-leaver study offered for the precise operationalising of policy relevant levels and the number of indicators available for mapping out the labour market position of school-leavers. Sampling arrangements moreover were geared directly to an analysis of the position of school-leavers. The advantage of the second data source was the international benchmarking option it offered.

The main conclusions from both of these analyses can be summarised as follows:

1 In the Dutch situation there is an important distinction between VBO on the one hand and BOL/BBL level 1 on the other hand when it comes to the question of what must be regarded as terminal education. We see a comparable distinction in the EU countries studied, where ISCED 2 is not regarded as terminal education but ISCED 3C short is (to an important extent). Moreover, participation in the labour force is much higher in the case of those who have completed ISCED 3C short level programmes than for ISCED 2. In this sense it can be said that programmes at level 1 and the ISCED 3C short programmes (also) prepare participants for the labour market, though that is not to say that they prepare participants adequately for entry to this market.

2 When it comes to the likelihood of finding paid work, permanent work and full-time work, there are differences in outcomes between the two types of analysis. If we concentrate on the international comparison we are struck first of all by the wide divergences in outcomes between countries. In the case of France and the United Kingdom, it seems that the boundary line must be drawn between the ISCED 2 level and ISCED 3C short, though it needs to be pointed out here that evidence for this is given for only two of the three indicators. In the case of the Netherlands, all three indicators point to a demarcation between the ISCED 3C short level and ISCED 3C long. The pattern in the other countries is inconsistent to the point that no clear line of demarcation can be found.
3 Analysis of the Dutch school-leavers data shows that the biggest differences between programme levels when it comes to the likelihood of finding paid work occur between VBO and level 1 in the case of BOL and between level 1 and level 2 for the BBL. The differences are not significant in either case however. Significant differences are to be found though when we consider the likelihood of obtaining a permanent contract of employment. The biggest distinction here for BOL programmes lies between levels 2 and 3 and for BBL programmes between VBO and level 1.

4 The school-leavers data also lends itself to being used for analyses in which the qualitative connection between educational programme and occupation has central focus. This kind of analysis concerns itself with the occupational level of the jobs gained and with the connection the job bears to school-leavers’ individual courses of study. The picture obtained here is a fairly mixed one. Where it comes to job occupational levels, the boundary line for BOL lies between levels 1 and 2, but for BBL between levels 2 and 3. The position is exactly the reverse for the alignment between job and individual course of study, although it needs to be noted that the difference between levels 2 and 3 is just as great as between levels 1 and 2 (albeit this last distinction is not significant).

5 When it comes to remuneration, it emerges that Dutch school-leavers achieve the greatest relative improvement on transition from VBO to level 1. This applies to both BOL and BBL. Comparable details are not available from the international data.

6 In the analysis of occupational prestige acquired, the countries studied show a clear difference between programmes at the ISCED 3C short and 3C long levels. Young people completing a programme at the latter level achieve a higher level of occupational prestige on average.

7 The analyses were carried out for the reference years 1999 and 2000, a period of economic boom. In order to check whether the conclusions stand up under relatively less favourable economic circumstances, the analyses were repeated for the reference years 2001 and 2002. For BOL level 2 programmes it was found that these continued to function as a reasonably adequate basic qualification for school-leavers. In the case of the BBL programmes it was found that the boundary line between programmes that offer a relatively good start in the labour market had shifted towards programmes at a higher level.

8 The sector differences among level 2 programmes are not large. The BOL technical programmes at level 2 offer slightly better perspectives than the corresponding programmes in the other sectors. The BBL level
2 agriculture programme offers poorer perspectives than the corresponding programmes in the other sectors.

5.6.2 Differences in outcomes

One problematic fact is that both of the analyses point partly in different directions. If we concentrate on the EU LFS data, we are forced to conclude that for the Netherlands the biggest relative improvement is to be found in the transition from ISCED 3C short to ISCED 3C long. If we look at the Dutch school-leavers data however, it appears that the biggest relative improvement is to be found at the transition from level 2 (i.e. ISCED 2) to level 3 (i.e. ISCED 3C short) of the qualifications structure. How can these differences be explained? In outline there are three important causes: differences in the nature of the indicators, differences in reference year and differences in sample design.

The Dutch school-leavers data comprises more and better indicators for the labour market position of school-leavers than the EU LFS data. In particular, indicators such as likelihood of finding paid work, occupational level of the job, alignment with individual course of study and pay qualify as good indicators for the value of a programme (ROA, 2002). It is known that school-leavers work full-time as a rule, except when following a programme in the modern apprenticeship system. In that case they work part time by definition (ROA, 2002). It is also known that temporary appointments need not always indicate an inferior labour market position. Jobs that are combined with an educational programme (e.g. modern apprenticeships, research assistants, trainees), frequently have a temporary character, i.e. for the duration of the programme. Occupational prestige on the other hand does provide a good indication of the general social evaluation of occupations, though this evaluation need not correspond one-to-one with an occupation’s economic appraisal in the labour market. It is therefore hardly surprising that the largest distinction is found between levels 3C short and 3C long, given that this point also marks the boundary line between typical blue and white collar occupations. There is no reason to imply from this however that a programme aimed at skilled blue collar groups is deficient in producing a good basic qualification. The second cause of the difference between the two types of analyses may lie in the reference year discrepancy. The school-leaver data refers to the surveys carried out in 1999 and 2000. The sample consists of school-leavers who have already been in the labour market for approximately eighteen months. Thus, the data covers a period ranging from roughly 1998 to 2000. The EU LFS data relates to the 2000 survey. The sample taken from the analysis consists of school-leavers aged 15 to 24. Depending on the programme studied, these could have gained work experience of up to a maximum of eight years. This being so, the analysis covers a period that runs roughly from 1992 to 2000,
with an emphasis on the second half of this period. The period concerned experienced strong dynamism in labour market conditions for school-leavers, characterised by a dramatic increase in unemployment up to 1996, followed by a sharp fall up to 2000. It is possible that the analysis relating to the school-leaver data provides too rosy a picture, particularly as regards the least well-trained. It might be that in a period of economic decline, the line of demarcation between relatively well performing and relatively poorly performing programmes shifts upwards. This is precisely what would be predicted by the screening theory (see section 5.2). The analyses that make use of the EU LFS data seem to be pointing in this direction, but these differences could also be explained as due to differences in the sample design (see below).

Analyses conducted later for the 2001 and 2002 reference years do not show this trait in the case of BOL level 2 programmes, though they do to a certain extent for the BBL level 2 programmes.

As indicated above, the difference between the two analyses can also be explained by differences in sample design. In the one case a cohort of school-leavers is analysed that shows differences in level of educational attainment and age but not in work experience. An attempt was made to estimate the “pure” educational effect by correcting for age. In the case of the other analysis an age group is analysed (15-24-year-olds), that differs not only in level of educational attainment but also -by definition- in work experience. The least well educated in this body of school-leavers are the ones with the most work experience. They compensate for part of the deficit they suffer with respect to those with better qualifications in the group by this extra work experience. It can be graphically represented in the following way.

Figure 5.33 gives a hypothetical example of the effects of programmes 1, 2 and 3 on earnings. It is assumed that school-leavers completing programme 1 have more work experience than school-leavers completing programmes 2 and 3. Without correction for work experience, it would appear that the biggest relative improvement is to be found on transition from programme 2 to programme 3. If we look at the differences that arise once correction for work experience has been made however, it emerges that the biggest improvement is to be achieved at the transition of programme 1 to programme 2. An effect such as this also appears to occur in the analysis based on the EU LFS data. It is true that here an attempt was made to correct for age (20-24 versus 15-19) by introducing a dummy variable into the multivariate analysis, though perhaps this was insufficiently precise. This is indicated by the fact that a comparable analysis of the entire labour force (see Appendix II) provides a different picture. The advantage of an analysis that includes the whole of the labour force is that the effect of work experience on the different programmes is broadly speaking identical in magnitude. What emerges from this analysis though is that when all is said and done, the boundary line still needs to be placed between ISCED 2 and ISCED 3C short in the majority of cases.
5.6.3 Conclusions

As stated earlier, the policy of having as many young people as possible complete a programme at a level that in the Dutch context is designated by the term basic qualification is based on social considerations as well as on empirical grounds. Nothing is said regarding social considerations in this report. On empirical grounds however we can conclude that on the basis of the Dutch school-leavers analysis, the findings for a large number of the indicators -though not all- show that level 2 of the qualifications structure generates relatively good yields in the labour market. It even emerges that for a number of the indicators, a programme at level 1 already provides a significant improvement with respect to VBO. This being the case, the selection of level 2 as the basic qualification level appears to be reasonably adequate.

An important reservation needs to be made regarding this conclusion however. The central analyses presented in this chapter relate to the labour market situation for Dutch school-leavers at the end of the years 1999 and 2000, a period in which the labour market was under extreme pressure. As a result of this pressure there was a shift in the evaluation of programmes and in the boundary line separating what the labour market valued and what it did not.

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Figure 5.33 Hypothetical effects of programmes and work experience on earnings

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<tr>
<th>Programme</th>
<th>Earnings</th>
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<tr>
<td>1</td>
<td>40</td>
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<td>2</td>
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<td>3</td>
<td>60</td>
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value. It is quite possible that this boundary line has the habit of shifting
towards higher level programmes in periods of economic decline. This is what
is predicted by the queue theory (Thurow, 1975). A repeat of the analysis for
the reference years 2000 and 2002 confirmed this picture to some extent for
BBL programmes at level 2, although it certainly did not do the same for
BOL programmes.
The outcomes in the international study give occasion for regarding pro-
grammes at the ISCED 3C short level as constituting terminal education in
any case and as having an important allocation function towards the labour
market. Whether these programmes also adequately equip school-leavers to
function well in the labour market is an open question however. Where France
and the United Kingdom are concerned the answer to this question appears
to be cautiously affirmative. For the Netherlands the answer appears to be
negative rather than positive, though there are some reasons to doubt this.
Apart from that, a danger seems to lurk in the use of homogenous age groups
if it is not possible to take account of work experience. In the absence of a
good indicator for this, it ought to be possible to work using an approximating
approach to an age relevant cohort of school-leavers. A method of this kind
is used in Müller et al. (2003). The study construes an age relevant age
delineation for each ISCED level from country to country based on the usual
school leaving age for that particular ISCED level in the country concerned.

The theoretical implications of the analyses seem to point in the direction of
the segmentation theory. The discontinuities actually encountered preclude an
explanation based on institutional wage moulding. The consequence of the
minimum youth wage system after all is that the differences at the bottom end
become smaller instead of larger. The analyses show however that the biggest
discontinuities are to be found at the bottom of the wage structure between
VBO and level 1. The findings on the other hand are in line with what would
be predicted based on the segmentation theory. Those leaving VBO and partly
also level 1 of secondary vocational education are largely assigned to jobs in
the secondary segment for which few if any specific skills are needed. This
manifests itself in fewer chances of finding work, less job security and poorer
working conditions. Programmes at level 2 and above offer school-leavers
access to jobs in occupation specific submarkets and the internal labour
markets. This goes hand-in-hand with higher pay, more job security, and in
greater importance being attached to the level and direction of the programme
studied.