

# After *Abitur*, first an apprenticeship and then university?

Why German *Abitur* holders are taking vocational training in the financial services sector

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## SUMMARY

**In the financial services sector in Germany the proportion of trainees qualified to go on to university is particularly high. But what induces school leavers not to go (straight) to university? A written survey of over 500 trainees in the banking and insurance sectors examined the motivations for the choice of educational pathway. Only some of the motivations cited in academic debate were mentioned by the trainees surveyed. For those surveyed who were from the financial sector it was not possible to confirm that trainees qualified to go on to university performed relatively poorly at school. Nor was it possible to discover any particularly marked risk aversion. It was more the case that the persons surveyed saw benefits in doing an apprenticeship to keep all their options open and to achieve a good combination of theory and practice. However, those questioned who had no intention of going on to university chose continuing training primarily because, besides being practice oriented, it offers a fast path to affluence and good career prospects.**

## Keywords

Apprenticeships, Germany, *Abitur* holders [university matriculation certificate holder], school leavers, double qualification, transition

## The problem

For many years, transition research has occupied an important position in various academic disciplines, such as labour market research, educational science and even sociology (see, for example, Stern, Wagner, 1999; Ryan, 2001; Behrens, Evans, 2002; Heinz, 1999; OECD, 2000; Descy, Tessaring, 2002, pp. 395-411; Pilz, 2004). There should be no dispute as to the special significance of the transition from school to the labour market, both for the young persons concerned and their parents as well as for the institutions concerned and for the economy and society as a whole.

In the case of Germany, the transition problem can result from defining the terms 'educational system' and 'employment system'. Reference to a transition model is recommended for this purpose. In the past, Germany ideo-typically had a two-stage education system, which preceded the employment system (Mertens, 1976, p. 399). The first stage comprises general education and the second stage comprises initial training. This produces two thresholds at which transition problems can arise. However, such a transition model is increasingly obsolete. Dietrich (2001, p. 422) has the following criticism: 'The theoretical context of the two-threshold model is proving limited in a number of respects. Transition problems in the labour market are only incompletely depicted. [...] The transition from general education in school to gainful employment cannot be adequately portrayed by the threshold concept and the linear transition event it implicitly accepts, and in empirical terms it proves to be a quantitatively significant special case' (1).

One example of a non-linear education pathway, which is also of international interest, is the group of young people in Germany who, after obtaining the *Abitur* (university matriculation certificate), do not go on directly to university (2) but want to do training in the dual system (for full details, see for example BMBF, 1996, 1997; Sauter, Schmidt, 2002; Lipsmeier, 1994; Deißinger, 1996 and Baethge, 2003)

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(1) Different educational paths can also be found in the study presented here (see details below). For example, only 56 % of those questioned entered the dual system directly after the end of school. At 31 %, military or civilian service represents the most common intermediate step (this figure is as high as 70 % with reference only to the men).

(2) Against the background of the key questions (see below), no distinction is made here between those entitled to enter university and those entitled to enter *Fachhochschule* (universities of applied science).

and may also go on to university afterwards<sup>(3)</sup>. The special focus on this group is due to the fact that, firstly, the presence of *Abitur* holders in the dual system is not a short-term phenomenon (see, for example, BMBW, 1993, p. 162) and, secondly, the group cannot be ignored owing to its size. The absolute figures for those entering training with the *Abitur*, at 80 519 in 2003, 79 000 in 2002, 88 000 in 2001 and 96 900 in 2000 (BMBF, 2005a, p. 91; 2004, p. 76; 2003, p. 83; 2002a, p. 95), are considerable in total. The proportion of all new trainees with the *Abitur* currently stands at 14.3 %, which has remained relatively constant, within a band of fluctuation, over a relatively long period (BMBF, 2005a, p. 91). However, it is not only within the dual system that the group of *Abitur* holders constitutes far more than just a special case. Students who have already completed vocational training are also materially significant within German universities. In 2003 they accounted for 22 % of all those starting university studies (BMBF, 2005b, p. 170)<sup>(4)</sup>.

If the group of *Abitur* holders proceeding directly to vocational training in Germany is significant, the central question that follows is: what motivates *Abitur* holders not to go to university at all or not immediately after finishing school?

While such behaviour may at first sight appear to be incomprehensible and/or its motivations unclear, the fact is that the existing right to enter academic education is not being exercised (immediately), which is unusual to such a marked degree, particularly in international terms<sup>(5)</sup>. In particular, the additive double qualification<sup>(6)</sup> of apprenticeship plus subsequent university studies is described as, among other things, a waste of time and income for the young individual, a misallocation of educational resources and a misdirection

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<sup>(3)</sup> With regard to the European dimension, the focus on *Abitur* students in occupational training may provide substantial impetus for the efforts of various countries to achieve equivalence between general education and vocational training (see, for example, Lasonen/Young 1998; Pilz 2003).

<sup>(4)</sup> It must, however, be borne in mind that, in addition to the *Abitur* students who have slotted in an apprenticeship before university, this group also contains persons starting university who first completed an apprenticeship and then became entitled to enter university by following a school-based educational pathway.

<sup>(5)</sup> For reasons of space, it is not possible here to discuss in greater detail the depiction of similar double qualification trends in other European countries (on this, see for example Manning 2001).

<sup>(6)</sup> Additive double qualifications are characterised by a number of qualification courses completed separately in terms of time and content. On the other hand, in the case of integrated double qualifications, time and content components are combined (see, in detail, Pilz 2003). No account is taken here of integrated double qualifications.

of educational policy because less well-performing school leavers are forced out of the limited training places by the *Abitur* holders (see, for example, Büchel, Helberger, 1995, p. 40 et seq.; Ryan, 2001, p. 77). This impression is strengthened by the fact that in Germany it is generally possible to enter university on the basis of the *Abitur* without any great difficulty and up to now no course fees, or only low course fees by international standards, are charged at the almost exclusively State-financed universities.

## Central research questions

Research on the subject outlined is relatively limited in Germany. On the basis of a thorough search of the academic literature, four explanatory models can be generated:

- As a first approach to explaining the educational behaviour, it is assumed that trainees who are entitled to enter university have performed relatively poorly at school and therefore starting university studies holds little promise. This argument is repeatedly put forward (on this discussion see also Lewin, Minks, Uhde, 1996, p. 436 et seq.) at both national and international level (see O.V., 2001).
- The basis for the second assumption is that the group of double qualifiers (apprenticeship plus university studies) is highly risk averse as regards not only success in studies but also the transition to the employment system, and that this group would therefore either start a training course exclusively, or else as an initial step (see, for example, Büchel, Helberger, 1995). In this sense, vocational training, which provides good prospects for entering the labour market later on, is seen as a safety net (Shavit, Müller, 2000, p. 446 et seq.).
- The third hypothesis is again directed at the double qualifiers, and in this case at the aspect of interest in the content and the practical experience conveyed by apprenticeship. It is assumed that an apprenticeship is attractive to *Abitur* holders particularly because it provides important practical experience initially, which can then possibly be supplemented by predominantly theoretical topics at university (Lewin, Minks, Uhde, 1996, p. 432). In this context, it can also be assumed that the apprenticeship is useful for vocational guidance and at the same time keeps all education options open (Greuling, Behrens, Pilz, 2007).

- As a fourth assumption, it is noted that the members of the subgroup of trainees who are entitled to go to university but who do not aspire to university studies assume that initial training extended by corresponding continuing training will give them a faster career than university studies will (Krekel, Ulrich, 1996).

In addition to those frequently mentioned aspects, other potential justification models for behaviour in choosing education could be discerned and accordingly taken into account in the survey. Financing, opportunities for mobility and study, as well as parents' educational background and social position, are cited as factors influencing behaviour in choosing education (see, for example, Lewin, Minks, Uhde, 1996, pp. 435-38 and Büchel, Helberger, 1995, p. 35 et seq.)<sup>(7)</sup>.

## Sample and method

The training of *Abitur* holders in the dual system is concentrated on a few occupations and predominantly on the commercial/administrative sector. Thus, 50.7 % of all trainees entitled to pursue university studies are trained in only ten different occupations. Consistently over many years, the highest proportions of *Abitur* holders have been trained in banking (*Bankkaufmann*) and insurance (*Versicherungskaufmann*). Industrial management (*Industriekaufmann*) is another quantitatively significant training occupation, but because of its generally broad distribution, *Abitur* holders make up only 40 % of the total. In all other training occupations, particularly craft occupations, there are only small numbers of *Abitur* holders. Only IT (*Fachinformatiker*) and hotel management (*Hotelfachmann*) differ from the traditional field of management/administration in having a considerable proportion of *Abitur* holders (BMBF, 2004, p. 77 and 2005a, p. 91 et seq.)<sup>(8)</sup>.

It was therefore banking trainees who were chosen as the investigation group because, with 8 143 new trainees entitled to

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(7) The influence of the parents' educational level on educational behaviour, which had been established in other investigations, to the effect that those with dual qualifications tended to come from parental homes with no academic background (see Lewin/Minks/Uhde 1996, p. 435 et seq. and Büchel/Helberger 1995, p. 35 et seq.), was not the direct subject of the investigation in this case. However, it is apparent from the data obtained for dual qualifiers that a (subjectively perceived) influence by parents on the decision on educational options made by the persons questioned tends not to occur.

(8) The commercial and administrative sector also predominates among those commencing studies who have previously undergone training (BMBF 2005b, p. 171).

go to university, it was the most significant training occupation in absolute numbers in 2002, and with 55 % of new trainees being *Abitur* holders, it was one of the most important training occupations for *Abitur* holders <sup>(9)</sup>. Although the training occupation *Versicherungskaufmann/-frau* was substantially smaller in absolute numbers in 2002 with 2 891 new trainees entitled to pursue university studies, it too had one of the highest proportions of new trainees who were *Abitur* holders, 52.4 % (BMBF, 2004, p. 77), and it was therefore also included in the investigation group <sup>(10)</sup>. Another reason for focusing on the financial sector was its relatively balanced sex ratio and highly uniform training quality, leading to largely identical opportunities in terms of subsequent career decisions for those who complete their training (see Jacob, 2004, p. 213).

A total of 551 trainees from the banking and insurance sector who had first acquired an entitlement to enter university were questioned in the period 2002/2003, the emphasis being on trainees in the second half of their training course. Results capable of analysis were provided by 517 questionnaires, of which 440 came from the Greater Hanover area and the remainder from three other regions in Germany <sup>(11)</sup>. Altogether, 320 of those questioned came from the banking sector, corresponding to about 1.3 % of the total number of trainees with *Abitur* in this sector in the whole of Germany, and to about 2.7 % in relation to the last training year investigated. It was possible to assign 198 trainees with the *Abitur* to the insurance industry, corresponding to about 2.5 % of the total number of trainees with the *Abitur* in this sector in the whole of Germany and about 6.1 % in relation to the last training year investigated (see BMBF, 2005a). Of the 517 persons, 453 stated that they had not ruled out subsequent university studies at the start of training (see details below). At the time of the survey 46 % of those questioned were

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<sup>(9)</sup> The significance of the internal company programmes for dual qualification, which are well known in the banking sector (training course plus financed course of study followed by return to the company), was taken into account in the investigation but did not play a particularly large role (see below).

<sup>(10)</sup> In spite of the focusing on dominant occupations, the results obtained cannot automatically be generalised in respect of trainees in all occupations requiring training who are qualified to go to university, as different reasons (e.g. taking over the parental business) could be highly relevant in, for example, the crafts sector. In order to clarify this, it is necessary for there to be greater differentiation in the research approaches.

<sup>(11)</sup> With regard to the relevant year for the start of the training course, 2000, a sample was therefore obtained that was 0.53 % of the basic total. Consequently, the findings, for this statistical reason also, are not representative of all trainees entitled to go to university.

aged from 18 to 21, 49 % were aged from 22 to 25 and the rest were older. At 57 % of the total sample, women were in a slight majority in the survey.

The anonymous survey was carried out in vocational schools by means of questionnaires, using mostly closed questions. In addition to asking about personal details and study plans, a four-point scale was used with regard to the motivation for the choice of educational pathway (see below for details of all questions asked about reasons). For each individual item, the subject was required to state the level of agreement or disagreement. Because of the lack of appropriate questionnaires specific to the target groups (as an exception, see Halbig, 1990), independent operationalisation was undertaken on the basis of the four central research questions (see above). Reference to the items used by HIS (Hochschulinformationssystem GmbH) (Heine, 2002, p. 28) to investigate the motivations for the choice of university studies or training proved helpful in some sub-areas, as did the partial opportunity to adapt corresponding questions from the area of research into choice of occupation (see, for example, Bußhoff, 1984) <sup>(12)</sup>. To increase the validity of the data obtained, a corresponding preliminary test was carried out with just under 50 school children <sup>(13)</sup>.

## Results

The evaluation of the questionnaires revealed that the average *Abitur* mark was 2.69 <sup>(14)</sup>. By comparison, according to official statistics, the average *Abitur* mark of all *Abitur* holders was about 2.5 (see Heinen, 2002, p. 20). Accordingly, with regard to the first question, *Abitur* holders in apprenticeships had on average somewhat poorer school results from their previous general education, but only to a slight extent (for similar findings, see Lewin, Minks, Uhde, 1996, p. 436).

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<sup>(12)</sup> However, because of the different level of complexity (see the four questions central to the research) no direct recourse to empirical works on motivation theories was possible.

<sup>(13)</sup> The individual tasks were discussed with the participants after the test had been taken, and problems in understanding the test were discovered. In a further stage, the subsequently modified test was submitted to two researchers who were empirically active in the field of research into occupational aspirations, and their suggestions were incorporated.

<sup>(14)</sup> In Germany, the scale of marks runs from 1 to 6, with 1 representing the best mark and 6 representing the worst mark.

Analysis of the *Abitur* performances in different types of company (see Table 1) reveals above-average results in the savings bank/regional bank sector, followed respectively by the cooperative banks and corporate banks. In the insurance sector, by contrast, the marks are generally worse on average. Within this group, the insurance brokers, with an average of 2.74, stand out slightly. However, this involves only five people.

Table 1. **Average *Abitur* marks by type of company**

Type of company	Mean figure	No	Standard deviation
Savings bank, regional bank	2.55	84	.4800
Cooperative bank (e.g. credit unions)	2.58	49	.5257
Corporate bank/major bank	2.58	140	.5147
Post Office bank	2.66	15	.5627
Other banks (e.g. private banks)	2.60	32	.4938
Insurance (primary insurers) – office staff	2.88	133	.4150
Insurance (primary insurers) – sales staff	2.85	47	.4903
Agency business	2.84	9	.5897
Reinsurers	2.80	3	.3464
Insurance brokers	2.74	5	.4615
<b>Total</b>	2.69	517	.5005

As already mentioned, 453 trainees (87.6 %) did not rule out going on to university subsequently, while 64 trainees had already rejected this option at the start of the training course. An evaluation of the *Abitur* results in relation to the decision in favour of or against university studies shows that those who ruled out going on to university had a mark of 2.71, which is slightly below the average. Those who did not exclude university studies had a mark of 2.69, in other words above average. This shows only a slight correlation of 0.016 as measured by eta. Consequently, no further significant differences can be ascertained in this case. In total, 86 % of the female trainees do not, before commencing their training, rule out university studies. In contrast, the corresponding figure for their male colleagues is 89.8 %.

The average *Abitur* mark of the female trainees who do not rule out university studies is 2.62, which is slightly below the gender-specific average of 2.63. In the case of the female trainees who do rule out university studies, the average is 2.67. In the case of

the male trainees who have not ruled out going on to university the average is 2.77. For those who have ruled out university studies, the figure is 2.78.

A slight correlation therefore emerges between above average *Abitur* results and the tendency for trainees, prior to training, not to rule out university studies <sup>(15)</sup>. At the same time, the data for this study demonstrate that, at the start of the training, women are more likely than men to rule out university studies (14 % of the female trainees and 10.2 % of the male trainees rule out university studies).

The replies given by the persons surveyed who had not yet ruled out university studies at the start of their apprenticeship concerning their motivations for starting vocational training are set out below and ordered by level of agreement (see Table 2) <sup>(16)</sup>.

In first place comes the belief, on the part of those questioned who had the option to pursue university studies, that the combination of training and university studies gives them better career prospects. In second place comes the possibility, through training, of keeping all options open in terms of subsequent university studies, followed by the wish to gain practical experience first and the desire to earn some money. All other options encounter far less strong agreement. The questions about not having a place at university and not wanting to leave the home town were disagreed with most strongly.

The risk aversion hypothesised in the second central research question is not clearly apparent, as there was a tendency to disagree with the relevant question (see No 6 in Table 2).

However, the data supports the third assumption: the combination of training and university studies in particular is regarded as a better career prospect than university studies alone. At the same time, still having the option to go on to university is considered to be a clear advantage, and emphasis is placed on the acquisition of work experience and practical insight into an occupational field, which provides guidance <sup>(17)</sup>.

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<sup>(15)</sup> A more precise statistical investigation by means of a multivariate procedure could corroborate this tendency both in the case of women and in the case of men.

<sup>(16)</sup> The reliability of the variables was tested statistically and can be regarded as given (Cronbach's Alpha 0.678).

<sup>(17)</sup> It is interesting that only 9.5 % of those questioned in this group stated that they saw further company training with the additional acquisition of an academic qualification within an internal company qualification plan as being an option. The investigation was, however, unable to determine whether such programmes were not offered by the companies or were not accepted by the trainees. Nevertheless, in view of the findings that have been obtained, such programmes could acquire particular significance in order to ensure that the younger staff members in the companies are highly qualified.

**Table 2. Strength of the motivations of the trainees who had the option to pursue university studies (double qualifiers) for choosing training (ordered by level of agreement)**

Position	Motivations	Mean values of the answer categories
1	A training course in combination with university studies offers better career prospects than just university studies.	1.65
2	I want to keep all my options open. After all, I can still decide in favour of university studies.	1.70
3	After school, I want some practical knowledge of the world of employment first.	1.83
4	I'd like to earn some money first.	1.98
5	I didn't know what I should study. By giving me insight into an area of employment, the training therefore offers me guidance.	2.94
6	I am unsure whether I can manage university studies. Doing a training course first provides security in case I break off university studies.	3.05
7	I (or my parents) cannot at present finance university studies.	3.49
8	The company providing my training has offered me a combination of training and sponsored university studies.	3.67
9	Although I would have preferred university studies straight away, my parents recommended doing the training course to me.	3.73
10	I didn't know what I wanted to do. I applied for university studies and also for a training course. The matter was decided by chance (e.g. because I was accepted first by the company providing the training).	3.77
11	I felt I was still too young for university studies.	3.79
12	In order to go to university, I would have had to leave my home town. I did not want to do that yet.	3.85
13	I did not receive a university place immediately and I do not want to be left with nothing to do.	3.86

Key: Answer categories 1 = complete agreement, 2 = partial agreement, 3 = partial disagreement, 4 = complete disagreement

Thus, the data relating to the outstanding importance of practical experience obtained here in respect of a particular target group confirms the findings of other investigations (see, for example, Bausch, 1997, p. 15 and Lewin, Minks, Uhde, 1996, p. 437).

A gender-specific differentiation (see Table 3) demonstrates, by comparing the items with which there is particular agreement, that typically the differences regarding the motivations for ruling out subsequent university studies are small <sup>(18)</sup>.

**Table 3. Differences in key motivations for trainees with the option to go on to university, by gender**

Position and answer category	Gender (mean values)		
	Female	Male	Overall
1 Combination of improved job opportunities	1.66	1.65	1.65
2 Keep all options open	1.64	1.78	1.70
3 Gain practical experience first	1.75	1.92	1.83
4 Earn some money first	1.88	2.09	1.98

Key: Answer categories 1 = complete agreement, 2 = partial agreement, 3 = partial disagreement, 4 = complete disagreement.  
The mean values of the answer categories are shown in ascending order.

The same applies to the distinction between banking and insurance trainees (see Table 4). The higher level of agreement (lower mean value) expressed by trainees in the insurance industry with the motivation of wanting to earn some money first may be due to the fact that in the insurance sector, unlike the banking sector, it is usually possible to earn a higher income owing to the commission payments made on top of the training salary.

**Table 4. Differences in key motivations for trainees with the option to go on to university, by training occupation**

Position and answer category	Gender (mean values)		
	Female	Male	Overall
1 Combination of improved job opportunities	1.62	1.71	1.65
2 Keep all options open	1.75	1.63	1.70
3 Gain practical experience first	1.84	1.80	1.83
4 Earn some money first	2.05	1.85	1.98

Key: Answer categories 1 = complete agreement, 2 = partial agreement, 3 = partial disagreement, 4 = complete disagreement.  
The mean values of the answer categories are shown in ascending order.

<sup>(18)</sup> Further statistical investigations have produced no significant differences between the results obtained from Hanover and the control regions.

In the case of the group of persons questioned who had already ruled out university studies at the start of their apprenticeship, the answers can also be ordered according to the level of agreement (see Figure 2).

**Figure 2. Strength of the motivations of the trainees with no option to pursue university studies for choosing training (ordered by level of agreement)**

Position	Motivations	Mean values of the answer categories
1	I want to earn a lot of money as quickly as possible and achieve a high standard of living.	1.76
2	I am more practically oriented. University studies are not for me.	1.93
3	I think that I can make a career for myself more quickly with the training course and corresponding continuing training than through university studies.	2.17
4	It is not possible for me personally to finance university studies.	2.84
5	I think that I would be too old for the labour market after university studies.	2.85
6	I cannot find a subject to study which accords with my interests.	3.12
7	My professional prospects are predetermined even without university studies (e.g. in the family firm or similar).	3.21
8	I do not have the time for lengthy university studies (e.g. because of family).	3.23
9	I am afraid that my performance will not be sufficient to complete university studies.	3.25
10	In order to study at university, I would have to leave my home town. I do not want to do that.	3.40

Key: Answer categories 1 = complete agreement, 2 = partial agreement, 3 = partial disagreement, 4 = complete disagreement.

In the case of trainees who do not have the option of pursuing university studies, it is the motivation of earning a lot of money as quickly as possible and achieving a high standard of living which is strongest, followed by a somewhat practice-oriented assessment of themselves and better career prospects as a result of the adopted qualification route. All the other specimen answers lag far behind in terms of agreement. The strongest rejection is attained by the

aspect of leaving one's home town, as in the case of the group of those wanting to study.

Willingness to relocate therefore does not play a major role in deciding against university studies per se or in deciding to do a training course beforehand.

A possible lack of ability, entailing the risk of dropping out of university, is also rejected by those who do not wish to go on to university.

With regard to the fourth central research question, it can be said that those questioned who did not intend to pursue university studies consider that they will realise their career opportunities faster through relevant continuing training than by going to university <sup>(19)</sup>.

Here too it is demonstrated, by comparing the items with which there is particular agreement, that gender-specific differences and deviations in relation to the training occupation are somewhat marginal (see Table 5 and Table 6) <sup>(20)</sup>.

The stronger motivation among men to earn money and the career guidance through continuing training and practical orientation in insurance companies can again be explained, at least in part, by the job profiles in the insurance sector: it is particularly men who work here as sales representatives and they are paid by results, at least in part, by means of the signing-up bonuses. Careers in the sales force of insurance companies are also very much dependent on success in arranging insurance products, which also requires in particular the specific product knowledge conveyed in continuing training.

**Table 5. Differences in the key motivation among trainees with no option to pursue university studies, by gender**

Position and answer category	Gender (mean values)		
	Female	Male	Total
1 To earn money quickly in order to achieve a high standard of living	1.83	1.65	1.77
2 Rather practically oriented	1.93	1.96	1.94
3 Faster career through continuing training	2.32	1.91	2.17

<sup>(19)</sup> It could also be relevant in this respect that the banking and insurance industry in Germany, through its respective associations, possesses developed and recognised continuing training systems, e.g. in the field of specialist training (Brötzig; Dorsch-Schweizer; Haipeter 2006).

<sup>(20)</sup> No significant regional differences were to be found in this case either. The degree of reliability of the variables in this case, however, is smaller compared to the findings for those with double qualifications (Cronbach's Alpha 0.452).

**Table 6. Differences in the central motivations among trainees who did not have the option to pursue university studies, in terms of the training occupation**

Position and answer category	Occupation providing training (mean values)		
	Banking	Insurance	Total
1 To earn money quickly in order to achieve a high standard of living	1.79	1.73	1.77
2 Rather practically oriented	2.03	1.81	1.94
3 Faster career through continuing training	2.29	2.00	2.17

## Discussion of the results

In contrast with the need for security as a decisive motivation for a double qualification, which has been found in other studies (see, for example, Krekel, Ulrich, 1996, p. 6 and Lewin, Minks, Uhde, 1996, p. 437), strong risk aversion was not found in the present investigation of training occupations in the banking and insurance system. It is rather the case that both the double qualifiers and also the *Abitur* holders who do not intend to go on to university are distinguished by their single-mindedness in planning their careers. Those questioned who did not intend to pursue university studies in particular aim to achieve a high income and career prospects through a combination of apprenticeship and continuing training. In the case of those who are doubly qualified, monetary aspects also play a role but in a different respect: for future students (who would then normally have only a low regular income or none at all) the relatively small training salary, by comparison with the regular income, could be quite attractive for a limited period <sup>(21)</sup>. The optimisation of career prospects is also very important for double qualifiers. For this group, optimisation is intended to be through the acquisition of practical experience as a basis and as orientation

<sup>(21)</sup> Educational studies show that a dual qualification strategy is not worthwhile in relation to lifetime income (see, for example, Jansen 1997; Büchel/Helberger 1995, p. 39). In relation to all German trainees in the dual system, it can be interpreted as rational to do without income that is immediately available as unskilled labour, firstly because access to permanent employment without completing a training course has become increasingly difficult in recent years in Germany and secondly because doing without income now is more than compensated for by the prospect of a substantially higher and more permanent salary as skilled labour, which is normally protected by collective bargaining.

for subsequent university studies. Contrary to this assumption, however, academic findings show that there is little or no difference between those with a double qualification and university graduates with no training in terms of the risk of unemployment, the position held in the employment system and the pay received (Bellmann et al., 1996; Büchel, 1997; Bausch, 1997; Büchel, Helberger, 1995; Lewin, Minks, Uhde, 1996, p. 437).

Relevance to practice in training also plays an important part for those who do not wish to go to university. However, whereas for the double qualifiers practical experience serves as a basis for theory, for those who do not wish to go to university it is the congruence of individual inclination in the form of practical ability and the practical training that is of central importance.

To conclude, if these findings are considered against the background of the shaping of initial vocational training in Germany and are placed in the European context, the stratification in the dual system forms a central element.

The concept of stratification, firstly, delineates the segmentation of an educational system (Shavit, Müller, 2000, p. 443 et seq.; Descy, Tessaring, 2002, pp. 395-411) and, secondly, can also be used to describe the options for allocating merits in the educational system and/or the employment system through particular educational pathways (see Blossfeld, 1994; Alexander, Pilz, 2004, pp. 750-753). It is apparent in the latter function that, particularly in the financial services sector, career advancement in combination with a correspondingly high salary and demanding work are certainly obtained through the dual system, even if key positions in this sector also tend to be reserved for university graduates (Herget, 1996; Krekel, Ulrich, 1996).

The learning of theory and practice within the dual system forms an important basis for this. The assumption of demanding work, as laid down in the training regulations, such as detailed advice to customers about financial investment, is theoretically reflected and underpinned at a correspondingly demanding level in the academic context (Ettmann, Wurm, 2002; Böhner, Straka, 2005). Individual training components can even lead either to a credit at the universities (e.g. bookkeeping) or else constitute a good base for the expansion of specialist knowledge.

In this connection, the thesis frequently put forward by the OECD that the proportion of students in Germany is too small by international standards (see EDK et al., 2003) should also be

qualified. Comparative studies tend to show that training in the German dual system is very demanding and sometimes reaches the academic level in a number of other countries (for example, see, in general, Richter, 1996; Steedman, 1998, pp. 84-92 and, specifically for the commercial sector, Fulst-Blei, 2003).

With regard to the European dimension, the debate about *Abitur* holders in the dual system ultimately opens up another perspective that is relevant for the future. In December 2004, the education ministers of 32 European countries decided to establish a European qualifications framework (EQF) which, as a meta-framework, is intended to make the national qualification frameworks compatible with one another. At present, eight different stages are planned, each stage being defined by the three learning outcome areas of knowledge, skills and personal and job-related competences, together with additional notes (Sellin, 2005, pp. 11-18). In Germany, the discussion about the design of a national qualifications framework is very passionate at present (see, for example, Principal Committee of the German Federal Institute for Vocational Training (BIBB), 2005; Sellin, 2005). Overall, no completely positive assessment of the developments can be found (see Drexel, 2005). In particular, it should be noted that the monolithic dual system, without any gradation and without different access levels, would be much more strongly affected by a differentiated EQF than a system which is already flexibly designed with gradations exists, for example, in the UK in the module design (see Severing, 2005, p. 11 et seq.). Consequently, it would be necessary to discuss whether and how the various training occupations covered by the German Vocational Training Law (*Berufsbildungsgesetz*) should be allocated to different levels. Any such allocation would take up and formally establish existing differences in the dual system with regard to the characterisation of 'training occupations for *Abitur* holders' on the one hand, and 'training occupations requiring secondary school education', on the other (see BMBF, 2005a, pp. 88-93). It would also be conceivable in this connection to differentiate a training occupation at different level stages, as has been done for example with the British NVQ/SVQ sector (SQA, 2005; Pilz, 2002a, 2002b). In addition to various reservations relating to education policy, formal legal problems and friction relating to collective bargaining, the development of allocation criteria on the basis of which the level-specific allocation of corresponding competence elements from the training regulations and the framework curricula can be undertaken might also represent a particular challenge (Breuer, 2005).

Finally, from a European perspective, one can also ask how the two other German-speaking countries with a long training tradition deal with *Abitur* holders. The *Berufsmaturität* (vocational matriculation examination) in Switzerland and the *berufsbildende höhere Schulen* (vocational upper secondary schools) in Austria very successfully offer an inclusive combination of final apprenticeship qualification (*Lehrabschluss*) and university entrance qualification in a unitary educational pathway (Seitz, Metzger, Kobler, 2004; Archan, Mayr, 2006). In Germany, on the other hand, inclusive double qualifications to obtain the *Abitur* and an apprenticeship qualification at the same time exist only in negligible special forms (Pilz, 2003). However, forms linking vocational training and university studies for young people who are already qualified to enter university are more developed in Germany. For example, the *Berufsakademie* (college of advanced vocational studies) offers the possibility of linking university studies and apprenticeship (Deißinger, 2000), and many combined qualification programmes exist for *Abitur* holders, organised for example by finance companies (see Brötz, Dorsch-Schweizer, Haipeter, 2006, pp. 64-68) <sup>(22)</sup>.

With this in mind, there are certainly lessons to be learned from the experiences of other European countries so that German students who are intending to pursue university studies and are at the same time practice-oriented can also have an attractive choice which would have advantages over the status quo from the point of view of the individual and the economics of education.

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<sup>(22)</sup> However, in the investigation which has been presented, a qualification path of this kind could be found only in fewer than 10 % of those questioned (see Table 2, item 8).

## Bibliography

- Alexander, Peter-Jörg; Pilz, Matthias. Die Frage der Gleichwertigkeit von allgemeiner und beruflicher Bildung in Japan und Deutschland im Vergleich [The question of the equivalence of general education and occupational training in Japan and Germany by comparison]. *Zeitschrift für Pädagogik*, 50<sup>th</sup> year, 2004, Vol. 5, p. 748-769.
- Baethge, Martin. Das berufliche Bildungswesen in Deutschland am Beginn des 21. Jahrhunderts [The vocational training system in Germany at the start of the 21st century]. In Cortina, Kai et al. (eds). *Das Bildungswesen in der Bundesrepublik Deutschland: Strukturen und Entwicklungen im Überblick, vollständig überarbeitete und erweiterte Neuauflage* [The educational system in the Federal Republic of Germany: survey of structures and developments, completely revised and extended new edition]. Reinbek: Rowohlt-Verlag, 2003, p. 525-580.
- Bausch, Thomas. Beruflicher Erfolg von erwerbstätigen Abiturienten mit Lehrabschluß [Vocational success of *Abitur* students who have a training qualification and are gainfully employed]. *Berufsbildung in Wissenschaft und Praxis*, 26<sup>th</sup> year, 1997, Vol. 4, p. 10-16.
- Behrens, Martina; Evans, Karen. Taking control of their lives? A comparison of the experiences of unemployed young adults (18-25) in England and the new Germany. *Comparative Education*, Vol. 38, No 1, 2002, p. 17-37.
- Bellmann, Lutz et al. Auswirkungen einer zusätzlichen Lehre auf die Beschäftigungschancen von Universitätsabsolventen – Eine Forschungsnotiz aus Sicht des IAB [Impact of an additional training course on the employment prospects of university graduates - a research note from the point of view of the IAB]. *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung*, 29<sup>th</sup> year, Vol. 3, 1996, p. 428-430.
- BMBF (Federal Ministry for Education and Research). *Vocational training in Germany*. Bonn, 1996.
- BMBF. *Vocational training in the dual system in the Federal Republic of Germany*. Bonn, 1997.
- BMBF. *Berufsbildungsbericht 2002* [Vocational Training Report, 2002]. Bonn, 2002a.
- BMBF. *Grund- und Strukturdaten 2001/2002* [Basic and Structural Data 2001/2002]. Bonn, 2002b.
- BMBF. *Berufsbildungsbericht 2003* [Vocational Training Report, 2003]. Bonn, 2003.

- BMBF. *Berufsbildungsbericht 2004* [Vocational Training Report, 2004]. Bonn, Berlin, 2004.
- BMBF. *Berufsbildungsbericht 2005* [Vocational Training Report, 2005]. Bonn, Berlin, 2005a.
- BMBF. *Grund- und Strukturdaten 2005* [Basic and Structural Data 2005]. Bonn, Berlin, 2005b.
- BMBW (Federal Ministry for Education and Science *Berufsbildungsbericht 1993* [Vocational Training Report, 1993]. Bad Honnef, 1993.
- Böhner, Markus; Straka, Gerald. Bankwirtschaftliche Kompetenz – Konzept und standardisierte Erfassung [Banking business skills – concept and standardised measurement]. *bwp@*, No 8, 2005. Available from Internet: <http://www.bwpat.de> [cited 25.5.2009].
- Breuer, Klaus. *Bericht zum Projekt Handlungskompetenz in Aus-bildungsordnungen und in KMK-Rahmenlehrplänen für das Bundesministerium für Bildung und Forschung* [Report on the project relating to competence to act in training regulations and in KMK framework curricula for the Federal Ministry for Education and Research]. Mainz, 2005.
- Brötz, Rainer; Dorsch-Schweizer, Marlies; Haipeter, Thomas. *Berufsausbildung in der Bankenbranche vor neuen Herausforderungen* [Vocational training in the banking sector faced with new challenges] (BIBB Publication series). BIBB: Bonn, 2006.
- Büchel, Felix. Berufseinmündung und erste Karrierephase von Akademikern mit einer beruflichen Zusatzqualifikation – Ein Beitrag zur bildungspolitischen Kontroverse ‘HIS versus Büchel/Helberger’ [Career crossroads and first career phase of graduates with an additional vocational qualification – a contribution to the ‘HIS v. Büchel/Helberger educational policy controversy’]. *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung*, 1997, 30th year, Vol. 3, p. 620-634.
- Büchel, Felix; Helberger, Christof. Bildungsnachfrage als Versicherungsstrategie – Der Effekt eines zusätzlich erworbenen Lehrabschlusses auf die beruflichen Startchancen von Hochschulabsolventen [Demand for education as an insurance strategy - the effect of an additionally acquired training qualification on the starting career prospects of university graduates]. *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung*, 1995, 28th year, Vol. 1, p. 32-42.

- Bußhoff, Ludger. *Berufswahl – Theorien und ihre Bedeutung für die Praxis der Berufsberatung* [Theories on choice of career and their significance for practical careers advice]. Stuttgart: Kohlhammer, 1984.
- Canning, Roy. Vocational education and training in Scotland – emerging models of apprenticeship. In Deißinger, Thomas (ed.). *Berufliche Bildung zwischen nationaler Tradition und globaler Entwicklung – Beiträge zur vergleichenden Berufsbildungsforschung* [Vocational training between national tradition and global development – contributions to comparative vocational training research]. Baden-Baden: NOMOS, 2001, p. 159-180.
- Cedefop; Archan, Sabine; Mayr, Thomas. *Berufsbildung in Österreich – Kurzbeschreibung* [Vocational training in Austria – a short description]. Luxembourg: Publications Office, 2006. (Cedefop Panorama series, 124).
- Cedefop; Blossfeld, Hans-Pete. Different systems of vocational training and transitions from school to career – the German dual system in cross-national comparison. In Cedefop (ed.), *The Determinants of Transitions in Youth*. Berlin: Cedefop, 1994, p. 26-36 (Cedefop Panorama series).
- Cedefop; Descy, Pascaline; Tessaring, Manfred. *Kompetent für die Zukunft – Ausbildung und Lernen in Europa: Zweiter Bericht zur Berufsbildungsforschung in Europa-Synthesebericht* [Competent for the future – training and learning in Europe: second report on vocational training research in Europe – summarising report]. Luxembourg: Publications Office, 2002. (Cedefop Reference series, 5).
- Deißinger, Thomas. Germany's Vocational Training Act: its function as an instrument of quality control within a tradition-based vocational training system. *Oxford Review of Education*, 1996, Vol. 22, No 3, p. 317-336.
- Deißinger, Thomas. *Beruflichkeit als „organisierendes Prinzip“ der deutschen Berufsbildung* [Career orientation as an 'organising principle' of German vocational training]. (Industrial Pedagogical Forum, Vol. 4), Markt Schwaben, 1998.
- Deißinger, Thomas. The German 'philosophy' of linking academic and work-based learning in higher education: the case of the 'vocational academies'. *Journal of Vocational Education and Training*, 2000, Vol. 52, No 4, p. 605-626.

- Dietrich, Hans. Wege aus der Jugendarbeitslosigkeit – Von Arbeitslosigkeit in die Maßnahme? [Ways out of youth unemployment – from unemployment to action?] *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung*, 2001, 34th year, Vol. 4, p. 419-439.
- Drexel, Ingrid. *Das Duale System und Europa: Ein Gutachten im Auftrag von ver.di und IG Metall* [The dual system and Europe: a report on behalf of ver.di and IG Metall]. Berlin, Frankfurt a.M., 2005.
- EDK et al. Joint press release on the OECD study 'Bildung auf einen Blick' [Education at a glance] dated 17.09.2003. Berne, Vienna, Munich, Stuttgart, Wiesbaden, 2003.
- Ettmann, Bernd; Wurm, Gregor. Der Banklehrplan in der Unterrichtspraxis – Ein Erfahrungsbericht aus NRW [The bank curriculum in teaching practice - an empirical report from NRW]. *Wirtschaft und Erziehung*, 2002, 54th year, Vol. 4, p. 114-119.
- Foskett, Nicholas; Hesketh, Antony. Constructing choice in contiguous and parallel markets: institutional and school leavers' responses to the new post-16 marketplace. *Oxford Review of Education*, 1997, Vol. 23, No 3, p. 299-319.
- Fulst-Blei, Stefan. Im Spannungsfeld von Modularisierung und Europäisierung: Die deutsche duale Berufsausbildung im Test – Ein deutsch-englischer Leistungsvergleich [In the modularisation and Europeanisation field of conflict: German dual vocational training tested – a comparison of German and English performance]. (Industrial Pedagogical Studies on Individual and Collective Development, Volume 3). Munich, Mering, 2003.
- Greuling, Oliver; Behrens, Martina; Pilz, Matthias. Taking a straight forward detour: learning and labour market participation in the German apprenticeship system. *Journal of Vocational Education and Training*, 2008, Vol. 60, No 1, March 2008, p. 93–104.
- Halbig, Heinz Ludwig. *Die kaufmännische Ausbildung von Abiturienten im dualen System unter Berücksichtigung von Berufswahl, Erwerbstätigkeit, Weiterbildung und Studium* [Commercial training for those who have passed the Abitur in the dual system with regard to choice of career, gainful employment, further training and study]. Baltmannsweiler: Pädagogischer Verlag Burgbücherei Schneider, 1990.

- Principal Committee of the BIBB. Europäischer Qualifikationsrahmen (EQF) – Stellungnahme des Hauptausschusses des Bundesinstituts für Berufsbildung (Pressemitteilung 47/2005) [European Qualification Framework (EQF) – observations of the Principal Committee of the Federal Institute for Vocational Training (Press release 47/2005)]. BIBB: Bonn, 2005.
- Heine, Christoph. *HIS Ergebnisspiegel* [HIS Results of findings]. Hanover: HIS, 2002.
- Heinz, Walter (ed.). *From education to work: cross-national perspectives*. Cambridge, New York, Melbourne: Cambridge University Press, 1999.
- Hergel, Hermann. Abiturienten mit Lehrabschluß – Perspektiven und Aufstiegschancen in der Einschätzung der Unternehmen [People who hold the *Abitur* and training qualifications - perspectives and prospects of advancement as assessed by Companies]. *Berufsbildung in Wissenschaft und Praxis*, 1996, 25th year, Vol. 4, p. 11-17.
- Jacob, Martina. *Mehrfachausbildungen in Deutschland – Karriere, Collage, Kompensation?* [Multiple specialist training in Germany – career, college, compensation?] Wiesbaden: VS Verlag für Sozialwissenschaften, 2004.
- Jansen, Rolf. Eine Modellrechnung über das Lebenseinkommen bei unterschiedlichen Berufsbildungsabschlüssen [A model calculation of lifetime income with different vocational training qualifications]. *Berufsbildung in Wissenschaft und Praxis*, 1997, 26th year, Vol. 5, p. 17-21.
- Krekel, Elisabeth M.; Ulrich, Joachim Gerd. Qualifizierungs- und Berufschancen von Nachwuchskräften mit Studienberechtigung [Qualification and career opportunities for young employees entitled to pursue a course of study]. *Berufsbildung in Wissenschaft und Praxis*, 1996, 25th year, Vol. 4, p. 5-10.
- Lasonen, Johanna; Young, Michael (eds). *Strategies for achieving parity of esteem in European upper secondary education – Final Report*. Jyväskylä: University of Jyväskylä, 1998.
- Lewin, Karl; Minks, Karl-Heinz; Uhde, Sönke. *Abitur – Berufsausbildung – Studium: Zur Strategie der Doppelqualifizierung von Abiturienten*. [Abitur – vocational training – study: regarding Abitur students' strategy of double qualification]. *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung*, 1996, 29th year, Vol. 3, p. 431-454.

- Lipsmeier, Antonius. The historical context of the vocational training system – Important reforms and debates on vocational training policy since enactment of the vocational training act. In OECD (ed.). *Vocational training in Germany: modernisation and responsiveness*. Paris: OECD, 1994, p. 11-26.
- Manning, Sabine. What can we learn from the use of qualifications with a dual orientation across Europe? *European Journal of Vocational Training*, 2001, No 23, p. 45-52.
- Mayer, Karl Ulrich. Das Hochschulwesen [The university system]. In Cortina, Kai et al. (eds). *Das Bildungswesen in der Bundesrepublik Deutschland: Strukturen und Entwicklungen im Überblick* [The education system in the Federal Republic of Germany: survey of structures and developments] [Completely revised and extended new edition]. Reinbek: Rowohlt Taschenbuch Verlag, 2003, p. 581-624.
- Mertens, Dieter. Beziehungen zwischen Qualifikation und Arbeitsmarkt (2x4 Problembereiche). [Relationships between qualifications and the employment market (2x4 problem areas)]. In Schläffke, Wilfried (ed.). *Jugendarbeitslosigkeit - Unlösbare Aufgabe für das Bildungs- und Beschäftigungssystem* [Youth unemployment – insoluble task for the education and employment system], Cologne, 1976. Reprinted Buttler, Friedrich; Reyher, Lutz (eds). *Wirtschaft-Arbeit-Beruf-Bildung*, [Industry–Work–Career–Education], Dieter Mertens: Schriften und Vorträge 1968 bis 1987 [Writings and Lectures 1968 to 1987]. *Beiträge zur Arbeitsmarkt- und Berufsforschung*, 110. Nuremberg: Institut für Arbeitsmarkt- und Berufsforschung, p. 399-411.
- OECD. *From initial education to working life – making transitions work*. Paris: OECD, 2000.
- O.V. Report of Seminar Sessions/Discussions held at the conference ‘In Control of their Lives? Comparing the views, values and experiences of 18-25 year olds in Derby, Hanover and Leipzig’ in Derby on 20/21 April 2001.
- Pilz, Matthias. Modernisierung der beruflichen Bildung zwischen Modul- und Berufskonzept [Modernisation of vocational training between the module concept and the vocational concept]. *Europäische Zeitschrift für Berufsbildung*, 2002a, No 25, p. 30-36.
- Pilz, Matthias. Modularisation in the Scottish education system: a view from the outside. *Scottish Educational Review*, 2002b, Vol. 34, No 2, p. 163-174.

- Pilz, Matthias. Wege zur Erreichung der Gleichwertigkeit von allgemeiner und beruflicher Bildung -Deutsche Ansatzpunkte und schottische Erfahrungsbeispiele [Ways to achieve equivalence between general education and vocational training – German approaches and Scottish empirical examples]. *Zeitschrift für Berufs- und Wirtschaftspädagogik*, 2003, Vol. 99, No 3, p. 390-416 [Erratum to the article in Vol. 4, p. 635].
- Pilz, Matthias. Die Übergangsproblematik im Kontext beruflicher Erstausbildung in Deutschland [The transitional problem in the context of initial vocational training in Germany]. *Bildung und Erziehung*, 2004, Vol. 2, p. 175-194.
- Richter, Ansgar. Qualitativer und quantitativer Vergleich von Berufsbildungsabschlüssen in Großbritannien und Deutschland [Qualitative and quantitative comparison of vocational training qualifications in the UK and Germany]. *Berufsbildung in Wissenschaft und Praxis*, 1996, 25th year, Vol. 6, p. 35-42.
- Ryan, Paul. The school-to-work transition: a cross-national perspective. *Journal of Economic Literature*, 2001, Vol. 39, p. 34-92.
- Sauter, Edgar; Schmidt, Jürgen. *Training standards in Germany – The development of new vocational education and training (VET) standards*. Bonn: BIBB, 2002.
- Schmidt, Klaus-Dieter. *Arbeitsmarkt und Bildungspolitik* [Employment market and education policy] [Institute for the Global Economy, Kiel Studies No 187], Tübingen, 1984.
- Seitz, Hans; Metzger, Christoph; Kobler, Christoph. Vocational education in Switzerland –characteristics, challenges and strategies: some reflections on structures, transitions, supply and demand, and normative aspects. *bwp@*, 2004, No 7. Available from Internet: <http://www.bwpat.de/> [cited 25.5.2009].
- Sellin, Burkart. Europäischer Qualifikationsrahmen (EQF) – ein gemeinsames Bezugssystem für Bildung und Lernen in Europa [European Qualifications Framework (EQF) – a common reference system for education and learning in Europe]. *bwp@*, 2005, No 8. Available from Internet: [www.bwpat.de](http://www.bwpat.de/) [cited 25.5.2009].
- Severing, Eckart. *Europäisierung der beruflichen Bildung? Die Diskussion in Deutschland* [Europeanisation of vocational training? The discussion in Germany]. (Research Institute for Industrial Training, documentation of the conference of German-speaking vocational training research institutes, IAB 2005), Nuremberg, 2005.

- Shavit, Yossi; Müller, Walter. Vocational secondary education, tracking, and social stratification. In Hallinan, Maureen T. (ed.). *Handbook of Sociology of Education*. New York: Kluwer Academic/Plenum, Publishers, et al., 2000, p. 437-452.
- SQA [Scottish Qualifications Authority]. SVQ Update June 2005. Glasgow, Dalkeith: SQA, 2005.
- Steedman, Hilary. A decade of skill formation in Britain and Germany. *Journal of Education and Work*, 1998, Vol. 11, No 1, p. 77-94.
- Stern, David; Wagner, Daniel A. (eds). *International perspectives on the school-to-work-transition*. Cresskill, N.J.: Hampton Press, 1999.