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Does the Swiss VET System encourage inequity?

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Introduction

Does the Swiss VET System encourage inequity? We assume that the "dual" VET system develops a specific mode of selection that is different from selection procedures of exclusively school-based programmes[1]. Little is known about this question: If research compares exclusively school-based programmes with company-based "dual" apprenticeships, it mainly does so by focussing on young people's chances to gain access to labour market (BBW, BBT, & BFS, 2001; Gericke, 2003; Hall & Schade, 2005; Imdorf, 2005; Steiner, Böttcher, Prein, & Terpe, 2004; Ulrich, 2004). But little is known about the chances for young people to get *into* one or the other type of upper secondary education and about how the modes of selection applied in the process relate to status-transfer and inequity. However, Hillmert (2004) points out that the type of education someone is trying to enter is related to their freedom of decision: Young people trying to get enroled in an apprenticeship have less possibilities to choose, because the training firm is the one to make the decision. Young people striving for an (exclusively) school-based programme (often) have more possibilities to choose, because terms of admission are more standardized and because (exclusively) school-based programmes are not depending as much on labour market conditions as training firms do. Uhly & Granato (2006) point out that young people with migration background are driven away from apprenticeships. In their paper they find that enrolment in "dually" organized company-based VET (apprenticeships)" of young people with migration background has been decreasing over the past decade and that this decrease can not be explained by the structural change of the labour market. But which factors explain this fact? Why do young people with migration background seem to be driven away from the "dual system"? To get a better understanding we are first going to give a short overview on the Swiss educational system. Then, we are going to present the theoretical background of our research. Afterwards we are going to discuss results from the longitudinal school leavers survey TREE (Transition from Education to Employment) which show that transition patterns vary depending on the type of upper secondary education someone is trying to gain access to.

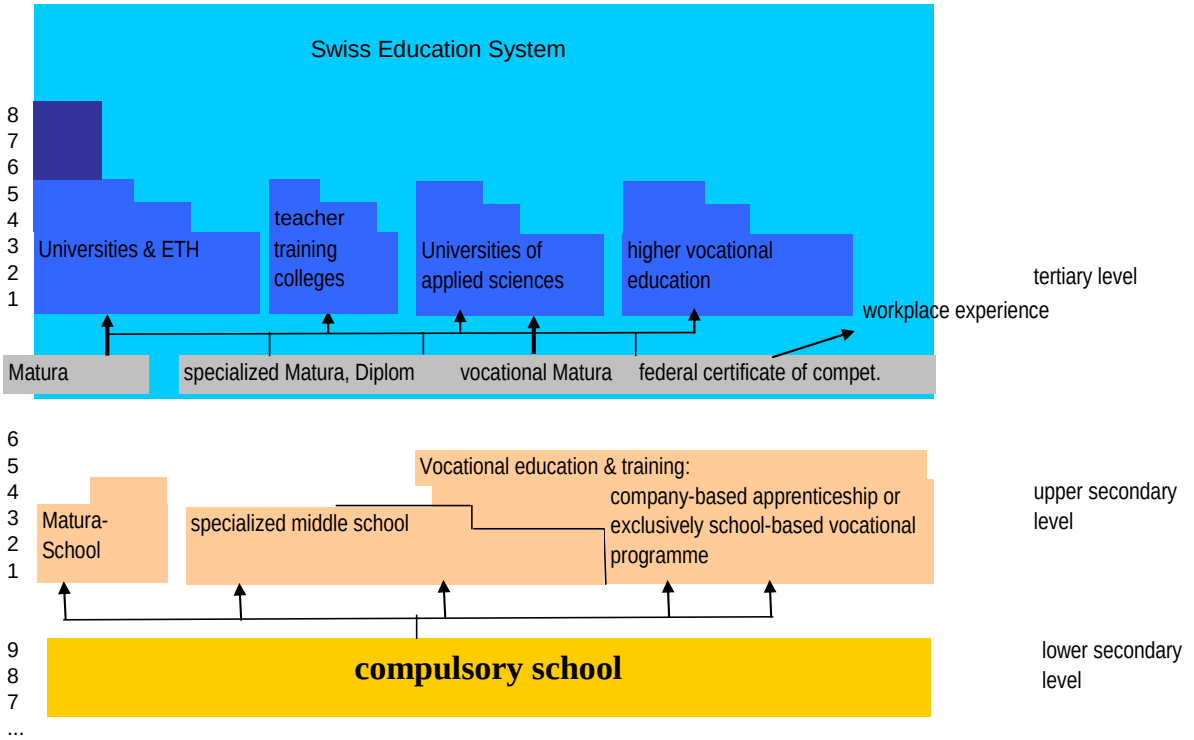
The Swiss Educational System

In Switzerland compulsory school[2] ends after nine years, but continuing education or training on upper secondary level is commonplace. A variety of post-compulsory programmes exist (see also the TIY- Paper of Thomas Meyer). Figure 1 gives an overview on the Swiss educational system:

[1] Both types of education are on the upper secondary level. Company-based apprenticeships are the most important part of the Swiss / German vocational training and education system (VET). This often is called the "dual system". See also next chapter.

[2] Different types of schools exist and the denomination of them varies over the Swiss cantons: In general "Realschulen" are schools that are attended by the weakest pupils (intellectually low demanding). "Sekundarschulen" and „Gymnasien" are intellectually more demanding. „Integrierte Schulen" are integrated Schools.

FIGURE 1: SIMPLIFIED VIEW OF THE SWISS EDUCATION SYSTEM[3]



Two dimensions are important when types of education or training are analysed: The way how they are organised and the content of the programme.

TABLE 1: DIMENSIONS OF UPPER SECONDARY EDUCATION PROGRAMMES

Type of education		Organisation	
		Company-based	Exclusively school-based
Content	General education	-	Matura schools, Specialised middle schools (SMS)
	Vocational education and training	Company-based apprenticeship	Exclusively school-based vocational programmes

General education students are mainly students attending Matura schools[4] (academic track leading to university). Specialised middle schools (SMS) prepare both for direct labour market entry and further vocational training on tertiary level (Universities of Applied Science) i.e. in health, teacher training, communication and information. Towards the end of SMS programmes, vocational training in a specific field is introduced in addition to general education. So even if the SMS are categorised as a general education programme, they are a hybrid between general and vocational education.

[3] According to an official illustration from *The Swiss Education Server* http://www.educa.ch.
[4] A part of the students entered the Matura school before the end of compulsory school ("long-term-gymnasium").

Students that are enroled in vocational education and training (VET) are students in company-based apprenticeships or in exclusively school-based vocational programmes. Around two thirds of the Swiss school leavers enter basic vocational education and training. Only a minority of them is enroled in exclusively school-based vocational programmes, more commonly in the French and Italian speaking part of Switzerland and for a limited number of professions only (commerce, computers). Most students are enroled in apprenticeship. Students in apprenticeships are formally hired and employed/trained by a company, while spending 1-2 days a week in school (vocational college). The mix of school and practical training is claimed to be one of the most important advantages of the VET system (OPET 2005), which also allows for the integration of academically low-achieving youth (depending on the profession). To enter an apprenticeship, young people have to overcome different obstacles: It is commonplace applicants have to apply for an apprenticeship in a company by providing application material, having a job interview (often together with their parents), spending a trial period in the company and undergoing some assessments (Galliker, 2003; Jungo & Zihlmann, 2002; Stalder, 2000). Training companies do not only asses the competencies of the applicant but also the "general impression" that they get from him or her (see Galliker, 2003; Schmid & Storni, 2004). Given the economic pressure of profitability labour market and many of them are not able or willing to compensate for low-achieving or in any other ways "problematical" youths. Therefore the "Habitus" (Bourdieu, 1982) of a person, her or his family background and self- and social competencies get very important for the search of an apprenticeship. Thus, Transition patterns in the dually organized VET system are closely related to ascribed individual and family characteristics as well as to labour market structures. The companies' selection criteria partly violate the meritocratic principles of the Swiss education system as a whole. Another fundamental shortcoming of the dual VET system is that during the last two decades, offer has more and more failed to match demand, leading to a painful shortage of training places and thence to a dramatic competition among the candidates for those places. Nowadays, almost one out of three school leaving VET applicants has to wait at least one year until he or she finds a suitable apprenticeship place (Meyer, 2003).

For school based education, less is known about selection procedures and criteria on national level. However, it can be stated that school based education programmes are more targeted towards academically higher achieving youths. Generally, the programme followed (and the grades obtained) on lower secondary level serve as selection criteria. For academically lower achieving youths many school based programmes, such as the matura schools or the SMS lie out of range. As Feller (2004) states, some school leavers are fed up with school altogether, which rules out exclusively school-based programmes on upper secondary level. We also know that young men are more frequently "tired" of schooling, and that their achievement, skills of and interest in reading are lower (Kampshoff, 2001; OECD/PISA, 2001). For these reasons we act on the assumption that young men are less attracted by exclusively school based programmes.

Up to very recently, the various upper secondary education and training programmes in Switzerland were never analysed synoptically. In this paper, we will intend the chances for

young people to enter an apprenticeship or an exclusively school-based programme. We will seek to find out if transition patterns vary depending on whether they take place in the dual VET system or in exclusively school-based education programmes. And finally, we will discuss if the Swiss VET-System hampers access for women and young people with migration background.

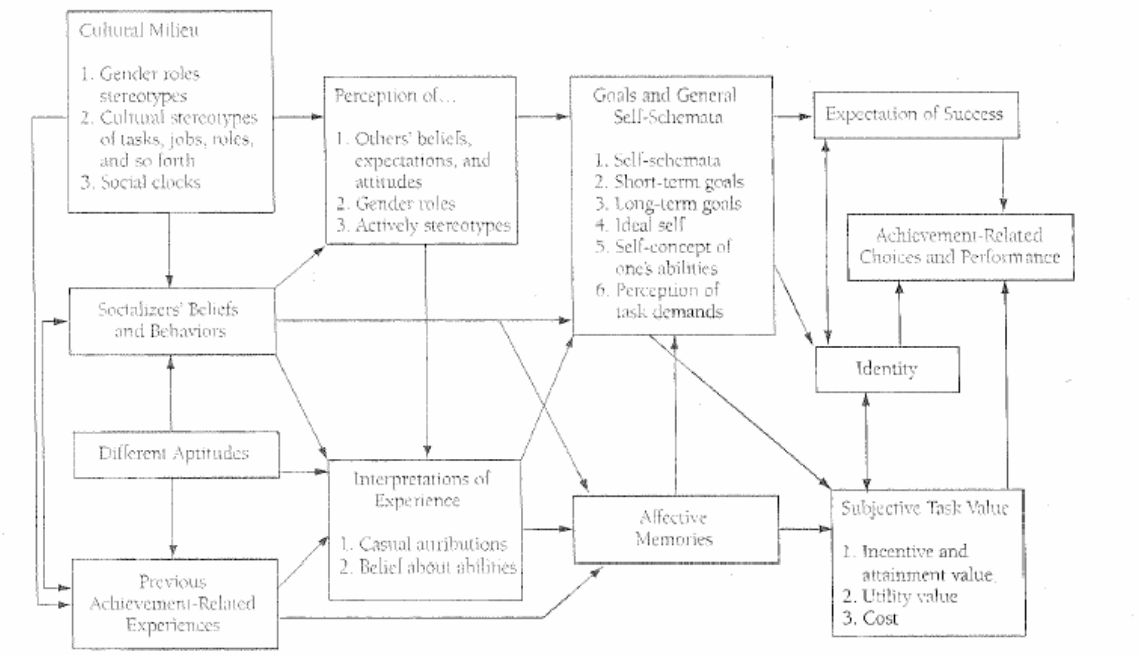
Theoretical background

Little is known about what difference it makes if someone strives to enter an apprenticeship or an exclusively school-based programme. Given the general lack of theory in the field of transition from Education to Employment (Feij, 1998), we have to look for more general explanation models. Our theoretical background is mainly based on two theories: On Bourdieu's (1982) theory of different kinds of resources (Bourdieu & Passeron, 1971; Lamprecht & Stamm, 1996) and on the „Expectancy-Value-Model" that was evaluated by Eccles (2005).

In a sociological perspective, Bourdieu (1982) claims that families have different resources to maintain or to improve their status: economic (money), social (networks) and cultural (certificates, knowledge) capital. He points out that families with large capital have higher aspirations and better chances to realise them. Children living in families with large capital have better learning environments. When they enter primary school they have a winning margin compared to children from families that have fewer resources (Bourdieu & Passeron, 1971). Furthermore they incorporate a specific "habitus" that helps them gain their status. However, not only the extent but also the nature of available resources (How is their everyday-life? Do they take part in cultural activities?) is crucial for status transfer within families. Therefore the family's environment and household-equipment like Number of TV sets, books or mobile phones gets important, because they can be seen as indicators for a specific milieu.

In a psychological perspective Eccles (2005) points out that educational and vocational choices are guided by the individuals' expectations of success (sense of one's competencies) and the importance or value they attach to the options they see as available. She also outlines the relation of these beliefs to cultural norms, experiences, and role schemes, such as those linked to gender, social class, religion or ethnic group. Individuals are also influenced by potential costs of investing time in one activity rather than another. This „Expectancy-Value-Model" (see Figure 2) helps to understand why self-concepts are important for life choices. In that manner Eccles can explain why women and men make different choices even if competencies are equal (Eccles, Vida, & Barber, 2004).

FIGURE 2: EXPECTANCY-VALUE-MODEL OF ACHIEVEMENT-RELATED CHOICES ECCLES (2005)



The arrows in the figure show which indicators influence each other and the direction of influence. The double-headed arrows signify that the indicators influence each other.

We combine both theories to analyse our research- questions "Does the Swiss "dual system" encourage inequity?" In meritocratic societies differences are legitimate if they are based on achievement: If students have better chances to enter an upper secondary programme because they show better competencies or perform better in school, this seems to be "just". But which indicators are suited to measure this performance / competencies? Grades and the school type on lower secondary level are *labels* of achievement, but they cannot be seen as exact measures for achievement itself. The PISA skills assessment would seem to be a more adequate and precise measure for achievement than the mentioned "labels". Therefore, we would expect that if achievement "labels" are more important for the entry in the "dual" system than reading literacy, Swiss VET indeed would encourage inequity.

If the Swiss "dual system" encourages inequity, we would also expect that students with less Bourdieu'ian capital or the "wrong habitus" have more difficulties to enter the "dual system" than in exclusively school-based programmes. Therefore, we expect young people with migration background, coming from families with low economical status and with less cultural capital, as well as and students living in monoparental families to have more problems entering an apprenticeship. We expect the same for that students who attended academically less demanding programmes on lower secondary level ("Realschule") or who show a record of disciplinary problems (truancy, unpunctuality).

On the other hand we expect young women to be more likely to enter exclusively school-based programmes. There are various reasons for this: We assume that young women are guided by gender-specific role-models and self-beliefs (Eccles et al., 2004) that fit to exclusively school-based programmes. We also know that a lot of professions are dominated by males and we know that parents, teachers and (sometimes) training firms etc. discourage young women from entering in these domains.

Data and Methods

To examine our hypothesis based on our research- question we use data from the Swiss TREE-Panel (Transition from Education to Employment). TREE is the first national longitudinal study on school-to-work transitions carried out in Switzerland. The survey's main concerns are the educational and occupational pathways pursued by young people after compulsory school. TREE is based on a sample of 6343 youths who took part in the PISA study (Programme for International Student Assessment) in 2000 (see OECD, 2000a) and completed their compulsory schooling the same year. The sample is representative both on national and on regional levels (German, French and Italian speaking parts of Switzerland) and is able to relate the skills as assessed by PISA to post-compulsory transition patterns. So far, six TREE panels have been carried out in a yearly rhythm (see Figure 3).

FIGURE 3: TREE-SURVEY DESIGN

Year	2000	2001	2002	2003	2004	2005	2006	2007
Age of cohort	16	17	18	19	20	21	22	23
Transition periode	leaving compul-sory school	lower -> upper secondary level upper sec.-> tertiär / labour market						
Design	PISA 2000	TREE: 6 waves realized						1 wave planned
Sample (brutto)		**6'343**	**5'944**	**5'605**	**5'344**	**5'048**	**4'852**	
Received questionaires*	**6'343**	**5'532**	**5'210**	**4'880**	**5'680**	**4'482**	in progress	
Rate of retour/wave		**87%**	**88%**	**87%**	**88%**	**89%**	in progress	
Rate of retour/total			**82%**	**77%**	**74%**	**71%**	in progress	

** since 2005: CATI or Questionaire*

The following analyses include 4814 TREE-participants for which valid data are avaible for a period of 48 months following the end of their compulsory schooling. The cases have been weighted to account for the complex Swiss PISA sampling as well as for TREE sample attrition (see OECD, 2000b; Sacchi, 2004a, 2004b). Students which followed a long-term-gymnasium in spring 2000 or that had been able to enter a 10. year of schooling without any assessments were excluded from analyses.

For this kind of analyses a competing risk model is adequate. An entry in an apprenticeship or an entry in an exclusively school-based programme (Matura- School, Specialized middle school or exclusively school-based vocational programme) is defined as criterion event. Because of the complex seasonal patterns (most post-compulsory educational programmes start in August) we chose to use a semi-parametric model (Cox-Modell, see Blossfeld & Rohwer, 1995, S. 212f.). Because some effects of the covariates also depend– in a complex way – on seasonal variations, it seemed too complicated to estimate a model on a continuous time basis (month per month). Therefore and because those seasonal variations does not seem to be much important, we chose to estimate a 'Discrete Time Proportional Hazards Model' (Jenkins, 1997; Prentice & Gloeckler, 1978). Thus, in our model, the observation period is measured in four spans each including 12 month. In order to explain differences between the

entry in an apprenticeship or in an exclusively school-based programme we estimate a competing-risk- model (Allison, 1984) which analyses the two kinds of entry separately.

Results

As we can see in Table 2, the company-based apprenticeship is the dominant type of post-compulsory education in Switzerland: About 70% of the school- leavers in the year 2000 enrol in this type of programme. Only 23% of this school- leaver- cohort follow an exclusively school- based programme. During the first year after compulsory school, roughly half (48,6%) of this school-leaver cohort enter an apprenticeship, while about one fifth (18,9%) enter an exclusively school based programme. As we can see, the company-based apprenticeship is very often started with a delay. One out of 6 young people start their company-based apprenticeship only in the second year after leaving compulsory school – some even later.

TABLE 2: ENTERING A POST-COMPULSORY EDUCATION PROGRAMME

(row %)	Event: Entry in ...		Total
	Company-based appren-ticeship	Exclusively school-based programme.	
Entry in ... [1]			
the 1st year	48.6	18.9	67.5
the 2nd year	16.3	2.7	18.9
the 3rd year	4.1	0.7	4.8
the 4th year	0.7	0.3	1.0
Entered	69.6	22.7	92.3
Not entered	-	-	7.7 [2]
Sample size [3]	3351	1093	4814

1) based on the four periods (=4 years) starting at the end of compulsory school (May 2000).
2) Incl. 5,4% cases censored because of panel attrition.
3) weighted cases; number of unweighted cases: 2880, 1722, 4814.

Why does one person enter an apprenticeship while another enrols in an exclusively school-based programme? We assumed a rudimental causal relationship of relevant predictors influencing the entry, and we included those factors in our model: In a first step we estimated a model with all ascribed and "family-background"-factors such as sex, migration background and family situation. We assume that theses predictors influence the type of school at lower secondary level and individual characteristics such as self-beliefs and competencies of youths. Therefore the type of lower secondary programme attended is included in a second model. In the third model individual characteristics, lower-secondary school-related context-factors and the laguage region are additionally in. Most predictors are documented by PISA (Adams & Wu, 2002)[5]. Fore more information about predictors we used in the analyses, see also

[5] The PISA-scale ('wealth') for Switzerland (as our re-analyses proofed) doesn't show a one-dimensional structure and insufficient characteristics (cronbachs alpha = .46). Instead of this insufficient scale, we use a factor that includes the numbers of cars, bathrooms, computers and calculators at home (st22q03, st22q04, st22q06, st22q07) (cronbachs alpha = .75).

Appendix Table 4. For reasons of clarity, we will only show the third model (see Table 3). Table 3 shows all predictors with a significant effect ($\alpha \leq 1\%$) in at least one of the estimations. The impact / size of the effects varies with the time elapsed. For interaction-terms see Appendix Table 5.

If we look at the change of the transition- rate over time, we can see a decline over time for company-based apprenticeships. If we look to exclusively school-based programmes, we just see a very slight decline. It seems as if companies are not very likely to take applicants that have a "long break" between compulsory school and application while exclusively school-based programmes seem to be more "tolerant" in this respect.

We also can see that women tend to get enroled much more often in exclusively school-based programmes while men tend to follow company-based apprenticeships. If we look at the interaction with time, we can see that the entry in an apprenticeship (Appendix Table 5) is much more delayed for women than for men. The synopsis shows that the delayed entry of women into a post-compulsory education programme is related to the structure of the apprenticeship market.

If young people do not live together with both of their parents (Situation of family ≠ nuclear family), they tend to enter much more often an exclusively school-based programme und less often apprenticeships. We proceed on the assumption that self-selection-processes are as important as the selection-processes in the market of apprenticeships. It is plausible that companies prefer young people that come from "proper" families so that the company can rely on the family background and doesn't have to face any social problems of the apprentice. Young women living not with both parents have also problems to enter an exclusively school-based programme. Older siblings only help entering an apprenticeship but not entering an exclusively school-based programme.

Furthermore, we can see that the fathers' occupational status influences the two entries in specific ways: On one hand we see that youths with a father with a high status tend to enter an exclusively school-based programmes much more frequently. This might be because children from families with high status tend to have better learning environment and because those families are better suited to support their children during this period. On the other hand we see a complex pattern for the company-based apprenticeship- entries: In the first two years, a high status tends to reduce the chance to get enroled in an apprenticeship. But after that period, the effects of the fathers occupational status is reversed, and youths with a father with a high status are more likely to enter an apprenticeship (Appendix Table 5). We assume that if students are not able to enter directly in a post-compulsory education or training, parents with a high occupational status tend to have a better network, so that the chances to get their children into training are much higher. This is especially plausible for company-based apprenticeships because admission terms of exclusively school-based programmes tend to be more standardized and networks do add specific value.

TABLE 3 PREDICTORS FOR ENTRY IN APPRENTICESHIP OR SCHOOL-BASED PROGRAMME

'Competing Risk Discrete Time Proportional Hazards'-Model	**Company-based apprenticeship**	**Exclusively school-based programme.**
Predictors	Coef. Sig. [1)]	Coef. Sig. [1)]
T1 (1. year after compulsory school)	0.59 +	– 6.23 ****
T2 (2. year after compulsory school)	– 0.13	– 6.67 ****
T3 (3. year after compulsory school)	– 0.91	– 7.06 ****
T4 (4. year after compulsory school)	– 1.76 **	– 6.79 ****
I. Family & Ascribed Predictors		
sex [woman]	– 0.76 ****	0.66 ****
Situation of family. [≠ nuclear family]	– 0.28 ***	0.38 *
Interaction: [≠ nuclear family] * sex[woman]	0.07	– 0.64 ****
Situation of family. [older siblings]	0.13 *	0.03
Occupational status father (Isei)	– 0.01 ***	0.01 ****
Highest education mother		
[none / primary]	– 0.28 +	– 0.01
[compulsory, Missing]	0.06	– 0.08
[higher education]	– 0.17 +	0.39 ****
Highest education father		
[none / primary]	– 0.33 *	– 0.02
[compulsory, Missing]	– 0.09	– 0.24 *
Number of books at home (Ordinal)	– 0.09 ****	0.10 ****
Family wealth (Factor- Scale)	0.13 ****	0.10 +
Number of mobile phones at home (Ordinal)	0.03	– 0.13 ***
Migration background / Generation [no migration background]		
[2. Generation: one parent]	– 0.24 +	0.02
[2. Generation: both parents]	– 0.53 ***	0.38 *
[1. Generation: > 5 years in country]	– 0.60 ****	0.10
[1. Generation ≤ 5 years in country]	– 0.88 *	0.63 +
Interaction: [1. Generation ≤ 5J.] * [woman]	– 1.65 ***	– 0.49
Interaction: [1. Generation ≤ 5J.] * [older siblings]	1.09 ***	– 0.28
Interaction: [2. Gen | 1. Gen. > 5J.] * [education mother: higher]	– 0.10	– 0.41 *
Country of origin father [Swiss]		
[EU+, excl. Southern-European Countries]	0.05	0.29
[Southern-European Countries]	0.18	0.39 *
[the Balkans, Turkey]	0.26	0.45 *
[other countries]	– 0.03	0.47 *
II. School		
Type of school [Sekundarschule]		
[Gymnasium]	0.92 **	0.65
[Realschule]	– 0.19 **	– 0.94 ****
[Integriert]	– 0.18	0.19
III. Individual Characteristics & Linguistic Region		
Mean of grades	0.21 ***	0.35 *
Interaction: mean of grades* type of school [Gymnasium]	– 0.51 ****	0.11
Times absent, punctuality (scale)	– 0.31 ****	0.04
Reading literacy (PISA- scale)	0.00	0.00 ****
Verbal self-concept (corrected PISA- scale)	– 0.06 ***	– 0.01
Cultural activities of youths (scale)	– 0.01	0.10 **
Learning strategy: control (scale)	0.07 +	0.21 ****
Support teacher (scale)	0.01	– 0.11 **
Computer usage and experience (WLE)	0.04	– 0.26 ****
Expected status of occupation with age 30 [lowest Quintil]	0.37 ****	– 1.40 ****
Favourite occupation [age limit[6]]	– 1.42 ****	0.42 ***
Linguistic region		
[French-speaking CH]	– 0.11	1.02 ****
[Italian-speaking CH]	0.09	1.58 ****
parameters of the model		
Log pseudolikelihood	– 4056.2	– 1996.7
Wald χ^2	1206.0	2258.6
(degrees of freedom)	(60)	(48)
Prob > χ^2	0.0000	0.0000

1) level of significance: **** P<.001; *** P<.005; ** P <.01; * P < .05; + P<.10.

[6] occupation with age-restrictive terms of admission min. age must be 18 years old

The economic resources of a family – measured by its wealth– have similar effects: Youths with well-to-do parents tend to have better chances to enter a post-compulsory education. This is true for exclusively school-based programmes – something that can be seen as an effect of the learning surroundings of these children. On the other hand, the effect is stronger for entry in an apprenticeship. We assume that this "wealth" can be seen as a consequence of a job-related success of parents that includes a good social network (similar to the occupational status). Furthermore, wealth also can be seen as an indicator for a "proper family" that seems to be a promise for a smooth training-period.

In regard to parental education, we find that if parents are less educated, their children tend to have more problems entering a post-compulsory education (Hupka, Sacchi, & Stalder, 2006). Looking at exclusively school-based programmes, we find that parental education is mediated by the type of school and by grades (not shown in this model). It is also interesting to note that children with a mother having completed higher education tend to enter more often in exclusively school-based programmes. This is also seen if we analyse the number of books at home which is a typical indicator for cultural capital. We can see that children with a lot of books at home tend to enter exclusively school-based programmes, rather than company-based apprenticeships. We assume that well educated families and well resourced families have higher aspirations for their children and that they have more cultural capital to insert them in post-compulsory educations.

If we take a look at the effect of mobile phones we have to take into account that in the year 2000 mobile phones in Switzerland were new, expensive and prestigious. We can see that youths having many mobile phones at home tend to enter less often in exclusively school-based programmes. (A part of this effect is mediated by the type of lower secondary school – not shown in Table 3). We assume that this is an indicator for a specific milieu where self-portrayal relies more heavily on consumer goods. Youths from that specific milieu seem to enter more often in company-based apprenticeships.

Having a migration- background reduces the chances to enter an apprenticeship, but has little effect on for entry in an exclusively school-based programme. Very important is the period of time that young people live in Switzerland: First-Generation-Migrants having lived in Switzerland for less than five years have the greatest problems, particularly if they are female. However, the lower chances for young female migrants increase over time. Male first-generation- migrants (<5 years in CH) show a different pattern: They have better chances after compulsory school, but after a delay of three years it seems to be *impossible* for them to enter an apprenticeship. We assume that this has to do with a kind of "labelling-process" which is accentuated on the apprenticeship market.

We can also see that older siblings increase the chances of enrolling in company-based apprenticeships, but that they do not help to enter an exclusively school-based programme.

Second-generation-migrants have (at least after two years of compulsory school) very similar chances to get involved in an apprenticeship than Swiss youths. In addition the model shows that the positive effect of mothers higher education is true for Swiss, but not for migrant youths.

Controlling for duration of residence and economic status of the family, the country of origin of migrant youths has no influence on the chances to enter an apprenticeship. But one has to be aware that in a bivariate view migrants (especially from Turkey and the Balkans) have much more lower chances for an entry in an apprenticeship than Swiss Youths. We assume that the lessening of theses differences between Swiss Youths and migrants is due to the effect of the fact how long they have stayed in Switzerland. This time period can be seen as a rough indicator for assimilation: Families that live in Switzerland less than five years had fewer opportunities to learn the language and to get orientated. On the other hand the duration of residence in Switzerland is related to a "migration- cohort" and its image: The migrants that came to Switzerland in the 1960s came from different countries and for different reasons than migrants that immigrated into Switzerland in the 1990s. The first immigration-group (Spanish & Italian immigrants) is now well accepted or even regarded to be very likeable (Stolz, 2001). Other migrant- groups are regarded with more reluctance and less acceptance. As Fibbi et al (2003) demonstrates, some migrant- groups are more discriminated in the labour market than others – we assume that this discrimination also exists in the apprenticeship market for recently immigrated groups. The fact that youths with migration background tend to enter more frequently in exclusively school-based programmes can be seen as an evasive action of migrant youths in reaction to discrimination experiences / difficulties to get an apprenticeship. Another problem might be that the Swiss "dual system" is not very known outside Europe and that immigrants are not familiar with this possibility.

Recapitulating the results from the first block we see that ascribed characteristics and family background are important for the entry in a post-compulsory education programme. We also see that the effects for the exclusively school-based programmes are more mediated by the type of lower secondary school and grades and that the cultural capital is important. We also can see that the entry in an apprenticeship is much more influenced by economic status (wealth, occupation status) - that we assume is closely related to the parental network. Migration background is a disadvantage for some migration- groups and for those that are recently immigrated: This is true for the entry in an apprenticeship, but not for exclusively school-based programmes.

If we take a look at the type of lower secondary level- programmes we can see that students attending "Gymnasium" programmes had much better chances to enter a post-compulsory education programme[7]. On the opposite, we find students from "Realschulen", the academically least demanding lower secondary programmes. These young people have substantial problems getting an apprenticeship – and they also have little chances to enter an exclusively school-based programme. But over time (Appendix Table 5), some of them manage to enter an exclusively school-based programme, mostly thanks to intermediate training years at the interface between lower and upper secondary levels.

If we take a look at individual characteristics and competencies we see that the mean of grades is more important for the entry in an exclusively school-based programme than for the entry in an apprenticeship. An interesting interaction is found between the type of school and

[7] Only significant for entry in an apprenticeship.

the mean of grades: Students from the "Gymnasium" with very good grades have fewer chances to enter company-based apprenticeships. We assume that theses students are not interested in an apprenticeship or / and that companies are afraid that these young people are too "academical" or that they will be bored with the apprenticeship and therefore at risk of dropping out.

Furthermore, we find that attendance and punctuality are very important for the entry in an apprenticeship: Most school reports have comments on these two factors, and training companies seem to check these comments quite carefully. On the other hand, reading literacy skills are important for an entry in an exclusively school-based programme, but not for an apprenticeship. This seems to be plausible assuming that terms of admission for school-based programmes are more standardized and much more associated with verbal tests.

In addition we can see that a strong verbal self-concept can be obstructive for the entry in an apprenticeship. This can be explained with value-expectancy model that claims that a student with a strong self-concept in one domain is pushed away from other domains (Eccles et al., 2004).

We also can see that young people who take part in a lot of activities related to (classical) culture are more likely to enter an exclusively school-based programme. This is also true for young people that apply specific learning strategies ("control strategies"). This can be seen as a confirmation for our hypothesis that students with a lot of cultural capital are more likely to enter exclusively school-based programmes. Otherwise it appears that young people that have been supported very much by their teachers are less likely to enter a school-based programme. We assume that these students are low achieving students that receive more support from their teachers because they need it more. It is very plausible that students in need of much support at the end of compulsory school are not willing to follow another exclusively school-based programme (Berger & Wolf, 1996; Feller, 2004; Reißig, Gaupp, & Lex, 2004).

If someone is experienced in computer usage, he or she is less likely to enter an exclusively school-based programme: An interpretation of this unanticipated result could be that "experience" often means excessive computer-usage (i.e. games). Which in turn might result in bad achievement and accordingly to bad admission tests.

A strong and highly significant effect is found with the expected status of occupation with age 30: Students expecting a low occupational status at the age of 30 are much more likely to enter an apprenticeship. This can be seen as a "sense of one's place" (Juhasz & Mey, 2003), which confirms our hypothesis of intergenerational status- transfer according to Bourdieu's (1982) theory.

VET for some professions has a minimum age of admission: The minimum age to start some VET in the health or social sectors is 18 years. As anticipated, students striving to enter age restricted VET enter with a delay in an apprenticeship. Some of them bridge that age gap by enrolling in school-based programmes (see also Appendix Table 5).

The effect of the linguistic region is as we anticipated: In the French- and Italian-speaking part of Switzerland we have much more entries in exclusively school-based programmes than in the German-speaking part of Switzerland. That can be attributed to the different traditions in the regional education systems.

Recapitulating the results from the third block we see that young people that performed well in school (high grades, good learning strategies, high PISA- literacy competencies) have substantially increased chances to enter an exclusively school-based programme. This is also true for students that have a lot of cultural resources (cultural activities of youths). On the other hand we see that high grades are also (but less) important for the entry in an apprenticeship. In addition we find that low attendance and unpunctuality reduces the chances to enter an apprenticeship. This is also true for a strong verbal concept and a favourite occupation with age-restrictive terms of admission.

If all three blocks are viewed together, it can be seen that access to company-based apprenticeships seems to be more closely associated with on ascribed characteristics and family background (cultural, economic (and social) capital as well as migration background). The type of lower secondary programme attended is a strong label that is important not only for the entry in exclusively school-based programmes, but also for the entry in company-based apprenticeships. Regarding that one of the most important advantages of the "dual-system" is said to be the possibility to integrate low-achieving students, the Swiss VET-System does not seem to meet this demand when we look at our results. Secondly, we have to pay attention to the fact that PISA-literacy-competencies are not important for the entry in company-based apprenticeships. We therefore assume that the achievement label (type of school on lower secondary level) is more important than the achievement itself (measured PISA-scores). If we turn to the third block, we find that achievement indicators and cultural capital are important for entering an exclusively-school-based programme. These factors hardly influence the chances to enter an apprenticeship. Here, disciplinary factors such as attendance or punctuality are at work.

Conclusion

In this paper we analysed (by estimating competing-risk Models) the chances of entering the dual VET-system or exclusively school-based programmes on upper secondary level in Switzerland. Doing so, we used the data of the Swiss TREE- Panel (Transition from Education to Employment). We found that exclusively school based programmes seem to be better suited to integrate school leavers with migration background and young women, whereas young men tend to enrol in company-based apprenticeships. A well-educated family background, good marks and high reading literacy skills also seem to enhance entry into exclusively school-based programmes. On the other hand, entry into Swiss dual VET- System goes along with mostly non-meritocratic "conformist" attributes such as absence of migration or monoparental family background or low absenteeism.

Appendix

TABLE 4: DESCRIPTIVE STATISTICS OF THE PREDICTORS USED IN OUR MODEL

Characteristics of distribution [1]	**distribution**		**mean**[1]	**Standard deviation.** [1]
	% [1]	N [2]		
I: Family & Ascribed Predictors				
sex [woman]	47,6	2624		
Situation of family. [≠ nuclear family]	25,1	1101		
Interaction: [≠ nuclear family] * sex[woman]	53,0	2522		
Situation of family. [older siblings]		/	42.41	15.72
Occupational status father (Isei)	27,6	1456		
Highest education mother	10,7	422		
[none / primary]	38,8	1638		
[compulsory, Missing]	22,8	1298		
[higher education]	55,7	2991		
Highest education father	8,9	366		
[none / primary]	35,3	1457		
[compulsory, Missing]		/	4.33	1.48
Number of books at home (Ordinal)		/	0.15	0.93
Family wealth (Factor-Scale)	56,1	2449		
Number of mobile phones at home (Ordinal)		/	2.52	1.06
Migration background / Generation [no migration background]	61,7	2961		
[2. Generation: one parent]	12,5	660		
[2. Generation: both parents]	10,8	547		
[1. Generation: > 5 years in country]	12,1	534		
[1. Generation ≤ 5 years in country]	2,9	112		
Interaction: [1. Generation ≤ 5J.] * [woman]	69,3	3356		
Interaction: [1. Generation ≤ 5J.] * [older siblings]	3,0	176		
Interaction: [2. Gen | 1. Gen. > 5J.] * [education mother: higher]	11,3	647		
Country of origin father [Swiss]	10,9	358		
[EU+, excl. Southern-European Countries]	5,5	277		
II: School				
Type of school [Sekundarschule]	39,3	1599		
[Gymnasium]	23,2	1608		
[Realschule]	35,0	1365		
[Integriert]	2,4	242		
III. Individual Characteristics & Linguistic Region				
Mean of grades		/	2.60	0.45
Times absent, punctuality (scale)		/	1.45	0.60
Reading literacy (PISA- scale)		/	477.49	94.02
Verbal self-concept (corrected PISA- scale)		/	– 2.85	1.47
Cultural activities of youths (scale)		/	– 0.03	0.93
Learning strategy: control (scale)		/	– 0.13	0.77
Support teacher (scale)		/	0.03	0.93
Computer usage and experience (WLE)		/	0.01	0.78
Expected status of occupation with age 30 [lowest Quintil]	17,4	713		
Favourite occupation [age limit]	6,0	297		
Linguistic region	69,9	2236		
[French-speaking CH]	27,2	2114		
[Italian-speaking CH]	2,8	464		

1) Weighted characteristics of distribution; sample base: N=4814 2) unweighted Number of cases.

TABLE 5: PREDICTORS FOR ENTRY IN APPRENTICESHIP OR SCHOOL-BASED PROGRAMME (CONTINUATION)

'Competing Risk Discrete Time Proportional Hazards'-Modell	**Company-based apprenticeship**		**Exclusively school-based programme**	
Interaction-terms with duration	Coef.	Sig. [1)]	Coef.	Sig. [1)]
Sex [woman] * T2	0.58	****	n. s.	
Sex [woman] * T3/T4	0.83	***	n. s.	
Status Father (Isei) * T2	0.00		n. s.	
Status Father (Isei) * T3/T4	0.02	****	n. s.	
Education Father [non, primary] * T2	n. s.		– 0.31	
Education Father [non, primary] * T3/T4	n. s.		– 3.35	***
Migration-background / Generation [2. Generation, 1 Elternteil] * T2	0.60	***	n. s.	
Migration-background / Generation [2. Generation, 1 Elternteil] * T3/T4	0.35		n. s.	
Migration-background / Generation [2. Generation, beide Eltern] * T2	0.58	*	n. s.	
Migration-background / Generation [2. Generation, beide Eltern] * T3/T4	0.35		n. s.	
Migration-background / Generation [1. Generation ≤ 5J.] * T2	0.63		n. s.	
Migration-background / Generation [1. Generation ≤ 5J.] * T3/T4	– 13.00	****	n. s.	
Migration-background / Generation [1. Gen. ≤ 5J.] * Sex [woman] * T2	0.28		n. s.	
Migration-background / Generation [1. Gen. ≤ 5J.] * Sex [woman] * T3/T4	14.70	****	n. s.	
Type of School [Realschule] * T2	n. s.		0.64	*
Type of School [Realschule] * T3/T4	n. s.		1.77	****
Times absent, Punctuality (Skala) * T2	0.33	**	n. s.	
Times absent, Punctuality (Skala) * T3/T4	0.05		n. s.	
Favourite occupation [age limit] * T2	0.98	****	n. s.	
Favourite occupation [age limit] * T3/T4	1.24	****	n. s.	

1) level of significance: **** P<.001; *** P<.005; ** P <.01; * P < .05; + P<.10; n. s.: tested interaction-term (t2-t4) that do not appear to be significant ($\alpha > 1\%$) and therefore had been excluded.

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