

The institutional dimension of class-based educational decision-making: Evidence from regional variation in Switzerland

Online Appendix / Online-Anhang

Benita Combet

Ludwig-Maximilians Universität München, Institut für Soziologie, Konradstrasse 6, 80801 München, Germany, benita.combet@lmu.de

Content

1. A short introduction to the Swiss education system	2
2. More information on the sample restriction of the cantons	4
3. Operationalization of the various cantonal education systems	6
4. Operationalization of the dependent variable	10
5. Sensitivity analyses	
4.1. Sensitivity analyses with the TIMSS dataset	12
4.2. Comparison of various indicators of social background	13
4.3. Main models with all variables	14
4.4. Main models with interactions between cantons and social class	17
4.5. Jackknife-type sensitivity analyses	18

1. A short introduction to the Swiss education system

Figure A1: Illustration of the Swiss education system

		Canton with long-term Gymnasium (e.g. Lucerne, Zurich)			Canton without long-term Gymnasium (e.g. Argovia, Schwyz)	
grade	13 th	University		Labor market / apprenticeship	University	Labor market / apprenticeship
	12 th	Long-term Gymnasium	Short-term Gymnasium		Short-term Gymnasium	
	11 th					
	10 th					
Compulsory School	9 th	Sekundarschule		Further lower ability tracks	Sekundarschule	Further lower ability track(s)
	8 th	Primary School			Primary School	
	7 th					
	6 th					
	5 th					
	4 th					
	3 th					
	2 nd					
	1 st					

Students enter school at age six in all cantons and compulsory schooling lasts nine years (EDK 1970). Students attend primary school for four to six years, after which they transition to a tracked lower secondary school. “Tracking” in Switzerland generally means¹ that students are allocated to different schools with a distinct curriculum according to their performance level. Two methods exist to assign students to different tracks after primary school: teacher decisions, which are compulsory, and standardized examinations. Most cantons apply teacher decisions, which should be primarily based on the educational performance of students. However, as explicitly mentioned in official regulations (EDK 2007), other factors, such as non-cognitive skills (e.g. self-reliance or the ability to solve problems), as well as the teachers' prognosis for the students' academic future development, are valid criteria. In cases where parents and teachers do not agree on the placement, most cantons offer the possibility of the student taking an additional entrance exam. A minority of cantons tracks their students via both grades and standardized examinations. In these examinations students are tested in their first language (standard German in Swiss German-speaking cantons, French in the French-speaking cantons, etc.), as well as in mathematics. After being assigned to a track, it is still possible for a student to move up to a higher performance track, but only a few students actually do so. More frequently, students whose performance declines are relegated to a lower-ability track (Neuenschwander 2007; but see also Streckeisen et al. 2007). The number of tracks in lower secondary school differs between cantons with a comprehensive school which streams only in certain subjects (e.g. Basel-Stadt, Geneva, Jura, Ticino) and cantons with two to four tracks. The more tracks an education system has, the fewer individuals attend the highest track, which is therefore more elitist. Equally, the fewer tracks an education system has, the more individuals attend the highest track, which is therefore more inclusive (see Gamoran 1992 for a first description of the concept of inclusiveness). Furthermore, we can also distinguish between the type of the highest performance track in the lower secondary school, the *Sekundarschule* (lower secondary school) and the *long-term Baccalaureate school* (an academic upper secondary school). In cantons with both types of *Baccalaureate school*, attending the *long-*

¹ The number of cantons introducing comprehensive school models in which students are only tracked in certain subjects has surged since around 2010. This is of no concern to me because most students in the data transitioned to the lower secondary school before these school reforms took place. To make sure that I do not introduce a bias, I additionally excluded all schools in which these models were tested (see Section 3 for more information).

term Bacculaureate school is more prestigious because there are only a few spots available, which makes it an “elite school”. Therefore, the student composition is more homogeneous and usually students who attend the *long-term Bacculaureate school* do not quit voluntarily after compulsory school has ended. In contrast, the *Sekundarschule* has a more heterogeneous student composition and most students start demanding vocational training in information technology or business administration, while only a small percentage of students decide to continue with the *short-term Bacculaureate school*. It is important to know that for university entry it is irrelevant whether students finish the *long-term Bacculaureate school* or the *short-term Bacculaureate school*, due to an inter-cantonal agreement (EDK 1970). Students who complete *Bacculaureate school* have the possibility to attend tertiary education, which prepares them for professional jobs like being a teacher, lawyer or medical doctor. Finally, it should be mentioned that the vast majority of students pass through the education system in their canton of residence during compulsory schooling. Additionally, in most cantons more than 95% of students attend public schools (Diem & Wolter 2013). Only in the cantons of Basel-Stadt and Geneva, both excluded from the analyses, is the share of students in private schools higher.

References:

Diem, A. & S. C. Wolter, 2013: Who is Afraid of School Choice? *Swiss Journal of Sociology* 39: 57–80.

EDK, 1970: Konkordat über die Schulkoordination, October 29, 1970. [http://edudoc.ch/record/1987/files/1-1d.pdf/](http://edudoc.ch/record/1987/files/1-1d.pdf) Accessed 20.12.2015.

EDK, 2007: Übertritt Primarstufe - Sekundarstufe I. [http://edudoc.ch/record/25410/files/%C3%9CbertrittPrim_sek1.pdf/](http://edudoc.ch/record/25410/files/%C3%9CbertrittPrim_sek1.pdf) Accessed December 20, 2015.

Gamoran, A., 1992: The Variable Effects of High School Tracking. *American Sociological Review* 57: 812–828.

Lane, J.-E., 2001: Introduction. Switzerland and its institutions and behavioural outcomes. *West European Politics* 24: 1–18.

Neuenschwander, M., 2007: Bedingungen und Anpassungsprozesse bei erwartungswidrigen Bildungsverläufen. S. 83–104 in: T. Eckert (Hrsg.), *Übergänge im Bildungswesen*. Münster: Waxmann.

Streckeisen, U.; D. Hänzi & A. Hungerbühler, 2007: *Fördern und Auslesen. Deutungsmuster von Lehrpersonen zu einem beruflichen Dilemma*. Wiesbaden: VS Verlag.

2. More information on the sample restriction of the cantons

Unfortunately twelve out of 25 of the Swiss cantons are excluded in the analyses due to three reasons:

a) The education system of the school does not fit the analyses because it is not an education system with clearly tracked classes.

This is problematic because the educational decision in these systems is either not a final one (this is the case in cooperative or integrated education system, e.g. Geneva) or there is no educational decision at all (this is the case in education systems with no differentiation according to performance, e.g. Ticino and Jura).² It could be well the case that the factors determining the decision differ between these education systems. Due to reasons of unobserved heterogeneity these cantons are therefore excluded from the analyses. This concerns the following cantons: Basel City, Geneva, Jura, Ticino, Valais.

b) No representative sample of schools was drawn.

Unfortunately not every canton agreed to draw a representative sample of schools of the canton. In Pisa 2006 onward they are specifically mentioned, while in PISA 2000 and 2003 we excluded those cantons which did not had every school track sampled. This concerns the following cantons: Appenzell Innerrhoden, Appenzell Ausserrhoden, Obwalden (only in PISA 2003), Glarus, Nidwalden, Obwalden, Schaffhausen (only in PISA 2003), Uri, and Zug.

c) Problems with the sampling procedure.

This concerns the canton of Grison and the canton of Solothurn. The canton of Grison was excluded because most of its high-performance students attend expensive private schools. While these costs are paid by the canton if the students' parents are living in the canton, this is not the case for students from other cantons or even from other countries. They therefore have a very high SES-background. Accordingly, the composition of students is therefore not only dependent from the factors we are interested in in this article, but also highly from the wealth of the students' parents. Not being able to differentiate between students from elsewhere and students from the canton of Grison thus introduces an unobserved bias with which we cannot deal and accordingly, this canton has been dropped from the analyses. The canton of Solothurn was excluded in PISA 2000 because there is no differentiation in the coding between second highest and the highest performance tracks.

Given the exclusion of many of the cantons, there might be a sample selection bias. Additional analyses comparing some features of the cantons between the included and the excluded group of cantons only shows that the included cantons have on average a significant higher population size (t-test, diff: -294.89, $p=0.0247$). However, the excluded cantons do not differ significantly in their mean from the included cantons in other factors like the number of persons living in cities or the agglomeration of the cities (t-test, diff: -9.4%, $p=0.3808$), percentage of migrants living in the canton (t-test, diff: -0.9%, $p=0.7468$), the GDP per person (t-test, diff: 13492, $p=0.2089$), percentage of persons working in the primary sector (t-test, diff: 0.9%, $p=0.4124$), percentage of persons working in the secondary sector (t-test, diff: -0.7%, $p=0.7930$), percentage of persons working in the tertiary sector (t-test, diff: -1.6%, $p=0.6387$), or percentage of persons with a tertiary educational degree (t-test, diff: -0.4%, $p=0.8808$). For further information, see Table WA1.

² While students in a class are homogeneous concerning their scholastic abilities in all subjects they attend in the education system with clear tracking, the opposite is the case in schools with no differentiation according to ability (which is essentially the same system as in primary school where classes are heterogeneous according to scholastic ability). In the cooperative and the integrated education system, attendance in the most important subjects (national language, first foreign language, mathematics) depends on repeatedly evaluated performance. Cooperative and integrated systems differ from each other concerning the main class students attend: in the cooperative system students' class is homogeneous according to scholastic ability while in the integrated system the class is heterogeneous.

Table A1: Characteristics of the Swiss cantons (reference year: 2015)

	Language(s) most often spoken	Population (in 1'000)	Percentage of people living in cities or in its agglomerations	Percentage of migrants	GDP / person	% working in primary sector	% working in secondary sector	% working in tertiary sector	% with tertiary degree (only individuals who are older than 25 years)
Cantons included in the analyses									
Argovia	German	653.7	82.8%	24.2%	61969	3.3%	29.4%	67.3%	30.2%
Appenzell Outer-Rhodes	German	54.5	75.5%	15.7%	56663	6.6%	29.2%	64.2%	29.8%
Basel-Country	German	283.2	95.9%	21.8%	68537	2.3%	26.4%	71.3%	31.5%
Bern	German	1'017.5	73.1%	15.5%	76307	5.5%	21.3%	73.2%	30.1%
Fribourg	French / German	307.5	71.7%	21.9%	58369	6.1%	25.1%	68.7%	28.7%
Lucerne	German	398.8	62.7%	17.9%	65119	5.8%	23.1%	71.1%	30.2%
Neuchâtel	French	178.1	88.8%	25.6%	83835	2.3%	34.0%	63.7%	29.3%
Schaffhausen	German	79.8	88.6%	25.3%	85529	4.2%	29.3%	66.5%	26.7%
Schwyz	German	154.1	80.3%	20.2%	58788	5.6%	26.0%	68.4%	30.1%
Solothurn	German	266.4	84.6%	21.4%	65588	3.0%	28.6%	68.4%	26.0%
St. Gallen	German	499.1	81.3%	23.5%	72624	4.0%	30.1%	65.9%	26.3%
Thurgovia	German	267.4	65.5%	24.2%	60533	6.7%	30.7%	62.6%	27.0%
Vaud	French	773.4	86.9%	33.6%	68084	3.1%	17.1%	79.8%	37.3%
Zurich	German	1'466.6	96.5%	26.1%	96411	1.2%	14.7%	84.1%	39.9%
Summary (modus and arithm. mean)	German: 79% French: 14% Mixed: 7%	457.15	75.3%	22.6%	69883	4.3%	26.1%	69.7%	30.2%
Cantons excluded from the analyses									
Appenzell Inner-Rhodes	German	16.0	0%	10.9%	61067	12.2%	32.3%	55.5%	24.7%
Basel City	German	191.8	98.7%	35.2%	163632	0.1%	19.0%	80.9%	41.3%
Geneva	French	484.7	96.8%	40.7%	102113	0.5%	13.8%	85.7%	43.3%
Glarus	German	40.0	74.3%	23.3%	67379	5.0%	38.2%	56.8%	23.4%
Grison	German	196.6	43.9%	18.3%	70968	5.7%	20.8%	73.5%	26.2%
Jura	French	72.8	52.2%	14.3%	64606	7.3%	38.0%	54.8%	23.5%
Nidwalden	German	42.4	50.1%	13.9%	69559	5.6%	29.7%	64.7%	31.3%
Obwalden	German	37.1	27.2%	14.5%	64253	8.1%	33.3%	58.6%	27.2%
Ticino	Italian	351.9	90.5%	27.7%	82438	1.5%	23.6%	75.0%	30.2%
Uri	German	36.0	87.9%	11.5%	51332	9.0%	29.9%	61.1%	19.2%
Valais	French / German	355.7	73.0%	23.0%	52532	5.5%	22.1%	72.4%	25.7%
Zug	German	122.1	96.7%	27%	150613	1.8%	20.5%	77.7%	42.2%
Summary (modus and arithm. mean)	German: 67% French: 17% Mixed: 8% Italian: 8%	162.26	65.94%	21.7%	83374	5.2%	26.8%	68.1%	29.9%

3. Operationalization of the cantonal education systems

Clustering the cantons according to their stratification characteristics, we can conclude that there are 9 different types of education systems in Switzerland, as can be seen in Table WA2 below. Note that these are the education systems the observed students transitioned into and thus are the ones 2 to 3 years before the PISA survey and one year before the TIMSS survey took place.³ Changes in the institutional design over the years under consideration have been small with the exception of the canton of Thurgovia and the canton of Vaud. Other than this, some cantons introduced a streamed model in either the whole canton (e.g. the canton of Appenzell Outer Rhodes) or at least some communities (e.g. in the canton of Berne). Assuming a different decision-making procedure in face of a more permeable system, those cantons or schools were excluded from the analyses. Other changes include adaptations of the curricula. However, given our focus on the educational transition and not on the educational achievement, these changes are of no interest to us.

In the end, 3 out of 9 education systems are not present in the analyses. Group 8 and 9 have been dropped on purpose because of their comprehensive nature. Group 6 is only present in two small cantons (Obwalden and Nidwalden), which did not partake in drawing a representative sample.

In general, it has to be noted that the information the official documents of the EDK (Swiss conference of the directors of the cantonal education departments) provides, are in some points misleading. First, they sometimes portray the education system of the canton of Bern (german speaking part) and the canton of St. Gallen as having 3 tracks and a long-term Gymnasium. In fact, in both cantons only a minority of communities has 3 tracks and a long-term Gymnasium (e.g. in the canton of Bern the community of Langenthal, in St. Gallen only the city of St. Gallen). Given that these differences are only present in a minority of communities, these schools have been therefore ignored in the analyses. Second, there are some clear mistakes. For example, the canton of Schaffhausen was portrayed to have had a long-term Gymnasium in the school year 1995/1996. However, personal inquiries with the cantonal department for education in Schaffhausen showed that this has never been the case.

³ Therefore, in TIMSS we are interested in the education system of the school year 1994/1995, in PISA 2000 in the education system of 1996/1997 (cantons in which students transitioned from 5th to 6th grade) or 1997/1998 (cantons in which students transitioned from 6th to 7th grade), in PISA 2003 in the education systems of 1999/2000 and 2000/2001, in PISA 2006 in the education systems of 2002/2003 and 2003/2004, in PISA 2009 in the education systems of 2005/2006 and 2006/2007 and in PISA 2012 in the education systems of 2008/2009 and 2009/2010.

Table A2: Description of the education systems in Switzerland

	Canton	Observed in years	Starting of tracking	Number of tracks	Percent attending highest track	Type of highest track	Mode of selection at first transition	Further remarks
Education system 1	Glarus	not in sample	7 th	4		long-term Gymnasium	standardized entry examination in long-term Gymnasium	Excluded due to no representative sampling on cantonal level
	Solothurn	PISA: 2012	7 th	4	13%	long-term Gymnasium	standardized entry examination for long-term Gymnasium	In a minority of communities the transition takes place from 5 th to 6 th grade. Unfortunately these schools could not be excluded because they could not be identified.
	Zurich	PISA: 2000, 2003, 2006, 2009	7 th	4	13%, 13%, 14%, 15%	long-term Gymnasium	standardized entry examination for long-term Gymnasium	In several communities in the Canton of Zurich a cooperative system existed. These schools were excluded in the analyses. Starting with the school year 2007/2008 another reform was introduced in which communities could choose freely if they wanted an education system with 3 or 4 tracks and with a streamed model in the 2 or 3 lower tracks. This reformation does not concern these analyses because they were introduced after the students who were observed in the 2009 (school year 2008/2009) transitioned into the highest track.
Education system 2	Grison	not in sample	7 th	3		long-term Gymnasium	standardized entry examination for long-term Gymnasium	Excluded because many Gymnasiums are private and very expensive. While the Canton of Grison pays the fees for cantonal students, we cannot differentiate between those students from a very high SES background and the students from Grison. Due to this fact chances are high that we would introduce an unobserved bias by including this canton.
	Thurgovia	PISA: 2000	7 th	3	no data available	long-term Gymnasium	standardized entry examination for long-term Gymnasium	Change in the education system in the school year 1997/1998.
Education system 3	Appenzell Inner-Rhodes	not in sample	7 th	3		long-term Gymnasium	teacher decision	Excluded due to no representative sampling on cantonal level
	Lucerne	PISA: 2000, 2003	7 th	3	18%, 18%	long-term Gymnasium	teacher decision	
	Uri	not in sample	7 th	3		long-term Gymnasium	teacher decision	Excluded due to no representative sampling on cantonal level
	Zug	not in sample	7 th	3		long-term Gymnasium	teacher decision	Excluded due to no representative sampling on cantonal level
Education system 4	Argovia	PISA: 2000, 2003, 2006, 2009, 2012	6 th	3	37%, 37%, 37%, 36%, 39%	no long-term Gymnasium	teacher decision	
	Basel-Country	PISA: 2000, 2003, 2006	6 th	3	26%, 26%, 27%	no long-term Gymnasium	teacher decision	
	Vaud	PISA: 2000	6 th	3	37%	no long-term	teacher decision	Change in the education system in the school year 1997/1998

Education system 5	Bern, french speaking part	PISA: 2003, 2006, 2009	7 th	3	35%, 37%, 37%	Gymnasium no long-term Gymnasium	teacher decision	
	Fribourg	PISA: 2000, 2003, 2006, 2009, 2012	7 th	3	33%, 33%, 32%, 36%, 33%	no long-term Gymnasium	teacher decision	
	Neuchâtel	PISA: 2003, 2006, 2009, 2012	7 th	3	42%, 43%, 47%, 48%	no long-term Gymnasium	teacher decision	
	Vaud	PISA: 2003, 2006, 2009, 2012	7 th	3	37%, 36%, 36%, 35%	no long-term Gymnasium	teacher decision	Change in the education system in the school year 1997/1998.
Education system 6	Appenzell Outer-Rhodes	PISA: 2009	7 th	2	65%	no long-term Gymnasium	teacher decision	
	Bern, german speaking part	PISA: 2000, 2003, 2006, 2009, 2012	7 th	2	55%, 55%, 57%, 59%, 61%	no long-term Gymnasium	teacher decision	Some Gymnasiums also offer(ed) a so-called Spez-Sek (Langenthal and Köniz) and therefore in a minority of communes 3 tracks exist with the Spez-Sek being the highest.
	Schaffhausen	PISA: 2006, 2009	7 th	2	56%, 59%	no long-term Gymnasium	teacher decision	
	Schwyz	PISA: 2003	7 th	2	66%	no long-term Gymnasium	teacher decision	There are two private schools who offer a long-term Gymnasium. However, the canton does not subsidize the attendance in contrast to the Canton of Grison.
	St. Gallen	PISA: 2000, 2003, 2006, 2012	7 th	2	63%, 65%, 63%, 65%	no long-term Gymnasium	teacher decision	Only one community, the city of St. Gallen, has a long-term Gymnasium.
	Thurgovia	PISA: 2003, 2006	7 th	2	56%, 54%	no long-term Gymnasium	teacher decision	Change in the education system in the school year 1997/1998.
Education system 7	Nidwalden	not in sample	7 th	2		long-term Gymnasium	teacher decision	Excluded due to no representative sampling on cantonal level Lower track = streamed model (cooperative)
	Obwalden	not in sample	7 th	2		long-term Gymnasium	teacher decision	Excluded due to no representative sampling on cantonal level Lower track = streamed model (cooperative)
Education system 8	Basel City	not in sample	5 th	comprehensive type: streamed model, cooperative system		no long-term Gymnasium	teacher decision	Excluded on purpose due to the streamed nature of the education system
	Geneva	not in sample	7 th	comprehensive type: streamed model, cooperative system		no long-term Gymnasium	teacher decision	Excluded on purpose due to the streamed nature of the education system
	Valais	not in sample	7 th	comprehensive type: streamed model, cooperative system		no long-term Gymnasium	teacher decision	Excluded on purpose due to the streamed nature of the education system

Education system 9	Jura	not in sample	none	comprehensive type: streamed model -> inclusive system		no long-term Gymnasium	teacher decision	Excluded on purpose due to the streamed nature of the education system
	Ticino	not in sample	none	comprehensive type: streamed model -> inclusive system		no long-term Gymnasium	teacher decision	Excluded on purpose due to the streamed nature of the education system

Further notes:

All schools for individuals with intellectual disabilities are excluded.

The portrayed school systems were the ones students encountered the year they transitioned.

PISA 2000: education system of the school year of 1996/1997 (if tracking starts at grade 6 in canton) or 1997/1998 (tracking starts at grade 7).

PISA 2003: education system of the school year of 1999/2000 or 2000/2001.

PISA 2006: education system of the school year of 2002 /2003 or 2003/2004.

PISA 2009: education system of the school year of 2005 /2006 or 2006/2007.

PISA 2012: education system of the school year of 2008 /2009 or 2009/2010.

Cantons which are not used in the analyses: only the education system of the year 2007/2008 is portrayed.

Sources:

Eberle, Franz und Brügggenbrock, Christel (2013): Bildung am Gymnasium. Studien + Berichte 35A. Anhang 1: Kantonstabelle.

EDK, Schweizerische Konferenz der kantonalen Erziehungsdirektoren (various years): Kantonale Schulstrukturen in der Schweiz und im Fürstentum Liechtenstein.

Stand Schuljahr 1988/1989; Stand Schuljahr 1995/1996; Stand Schuljahr 1996/1997; Stand Schuljahr 1997/1998; Stand Schuljahr 2000/2001; Stand Schuljahr 2002/2003; Stand Schuljahr 2007/2008.

EDK, Schweizerische Konferenz der kantonalen Erziehungsdirektoren (Stand 1.8.2000): Grundlegende Informationen zum Bildungswesen.

Regli, Franzisca und Furer, Hans (1996): Schulsysteme der Schweiz. Eine tabellarische Übersicht des Bildungswesens in der Schweiz. 2. aktualisierte und ergänzte Auflage. Schule und Elternhaus Schweiz.

And personal inquiries with the cantonal administrations of education.

4. Operationalization of the dependent variable

In the Table WA3 below the coding of the dependent variable can be seen. All private schools and all schools with streamed classes were dropped. Further, in some cantons the second transition in the Gymnasium already took place before the PISA survey. This is not a problem if only a selected subgroup of students of the high-performing track are eligible to this option (e.g. in the canton of Appenzell Outer Rhodes or Bern) because we get a lower bound estimate. However, in some cantons with a long-term Gymnasium (in our analysis the canton of Lucerne and the canton of Zurich), students from the second-highest performance track can transition to the short-term Gymnasium in case their educational performance is strong enough. Unfortunately, this increases the unobserved heterogeneity. Inter alia for this reason, we did additional sensitivity analyses, described in the next section.

Table WA3: Operationalization of the dependent variable

	TIMSS		PISA			
	1995	2000	2003	2006	2009	2012
Argovia	1 = Bezirksschule 0 = Sekundarschule, Realschule	1 = Bezirksschule 0 = Sekundarschule, Realschule	1 = Bezirksschule 0 = Sekundarschule, Realschule	1 = Bezirksschule 0 = Sekundarschule, Realschule	1 = Bezirksschule 0 = Sekundarschule, Realschule	1 = Bezirksschule 0 = Sekundarschule, Realschule
Appenzell Outer-Rhodes					1 = Short-term Gymnasium (transition in 9 th class, students transitioned from Sekundarschule), Sekundarschule 0 = Realschule	
Basel-Country	1 = Sekundarschule progymnasiale Abteilung 0 = Sekundarschule allg Abteilung, Realschule	1 = Sekundarschule progymnasiale Abteilung 0 = Sekundarschule allg Abteilung, Realschule	1 = Sekundarschule progymnasiale Abteilung 0 = Sekundarschule allg Abteilung, Realschule	1 = Sekundarschule progymnasiale Abteilung 0 = Sekundarschule allg Abteilung, Realschule		
Bern, german speaking part	1 = Sekundarschule 0 = Realschule	1 = (starting 9 th class, students transitioned from Spezsek or Sekundarschule), Speksek, Sekundarschule 0 = Realschule	1 = (starting 9 th class, students transitioned from Spezsek or Sekundarschule), Speksek, Sekundarschule 0 = Realschule	1 = (starting 9 th class, students transitioned from Spezsek or Sekundarschule), Speksek, Sekundarschule 0 = Realschule	1 = (starting 9 th class, students transitioned from Spezsek or Sekundarschule), Speksek, Sekundarschule 0 = Realschule	1 = (starting 9 th class, students transitioned from Spezsek or Sekundarschule), Speksek, Sekundarschule 0 = Realschule
Bern, french speaking part	1 = section préparant aux écoles de maturité 0 = section moderne, section générale		1 = section préparant aux écoles de maturité 0 = section moderne, section générale	1 = section préparant aux écoles de maturité 0 = section moderne, section générale	1 = section préparant aux écoles de maturité 0 = section moderne, section générale	
Fribourg		1 = cycle d'orientation (CO) secteur pré-gymnasiale 0 = CO secteur générale CO secteur pratique	1 = cycle d'orientation (CO) secteur pré-gymnasiale 0 = CO secteur générale CO secteur pratique	1 = cycle d'orientation (CO) secteur pré-gymnasiale 0 = CO secteur générale CO secteur pratique	1 = cycle d'orientation (CO) secteur pré-gymnasiale 0 = CO secteur générale CO secteur pratique	1 = cycle d'orientation (CO) secteur pré-gymnasiale 0 = CO secteur générale CO secteur pratique
Lucerne	1 = Unter-gymnasium 0 = Sekundarschule, Realschule	1 = Gymnasium (latest possibility to transition in the short-term Gymnasium: 8 th class), students transitioned from Sekundarschule), 0 = Sekundarschule, Realschule	1 = Gymnasium (latest possibility to transition in the short-term Gymnasium: 8 th class), students transitioned from Sekundarschule), 0 = Sekundarschule, Realschule			
Neuchâtel			1 = Section pré-gymnasiale	1 = Section de maturité	1 = Section de maturité	1 = Section de maturité

			0 = section moderne, section pre-professionelle	0 = section moderne, section pre-professionelle	0 = section moderne, section pre-professionelle	0 = section moderne, section pre-professionelle
Schaffhausen				1 = Gymnasium (starting 9 th class, students transitioned from Sekundarschule), Sekundarklasse 0 = Realklasse	1 = Gymnasium (starting 9 th class, students transitioned from Sekundarschule), Sekundarklasse 0 = Realklasse	
Schwyz			1 = Gymnasium (starting 9 th class, students transitioned from Sekundarschule), Sekundarschule 0 = Realschule			
Solothurn						1 = Untergymnasium 0 = Bezirksschule, Sekundarschule, Oberschule
St. Gallen	1 = Sekundarschule 0 = Realschule	1 = Gymnasium (starting 9 th class, students transitioned from Sekundarschule) Sekundarschule 0 = Realschule	1 = Gymnasium (starting 9 th class, students transitioned from Sekundarschule), Sekundarschule 0 = Realschule	1 = Gymnasium (starting 9 th class, students transitioned from Sekundarschule), Sekundarschule 0 = Realschule		1 = Gymnasium (starting 9 th class, students transitioned from Sekundarschule), Sekundarschule 0 = Realschule
Thurgovia	1 = Untergymnasium 0 = Sekundarschule, Realschule	1 = Untergymnasium 0 = Sekundarschule, Realschule	1 = Gymnasium (starting 9 th class, students transitioned from Sekundarschule), Sekundarschule 0 = Realschule	1 = Gymnasium (starting 9 th class, students transitioned from Sekundarschule), Sekundarschule 0 = Realschule		
Vaud		1 = division pré-gymnasiale 0 = division supérieure, division terminale à option	1 = division pré-gymnasiale 0 = division supérieure, division terminale à option	1 = division pré-gymnasiale 0 = division supérieure, division terminale à option	1 = division pré-gymnasiale 0 = division supérieure, division terminale à option	1 = division pré-gymnasiale 0 = division supérieure, division terminale à option
Zurich	1 = Langzeitgymnasium, 0 = Sekundarschule, Realschule, Oberschule	1 = Gymnasium (latest possibility to transition to the short-term Gymnasium: 8 th class), students transitioned from Langzeitgymnasium or from Sekundarschule), 0 = Sekundarschule, Realschule, Oberschule	1 = Gymnasium (latest possibility to transition to the short-term Gymnasium: 8 th class), students transitioned from Langzeitgymnasium or from Sekundarschule), 0 = Sekundarschule, Realschule, Oberschule	1 = Gymnasium (latest possibility to transition to the short-term Gymnasium: 8 th class), students transitioned from Langzeitgymnasium or from Sekundarschule), 0 = Sekundarschule, Realschule, Oberschule	1 = Gymnasium (latest possibility to transition to the short-term Gymnasium: 8 th class), students transitioned from Langzeitgymnasium or from Sekundarschule), 0 = Sekundarschule, Realschule, Oberschule	

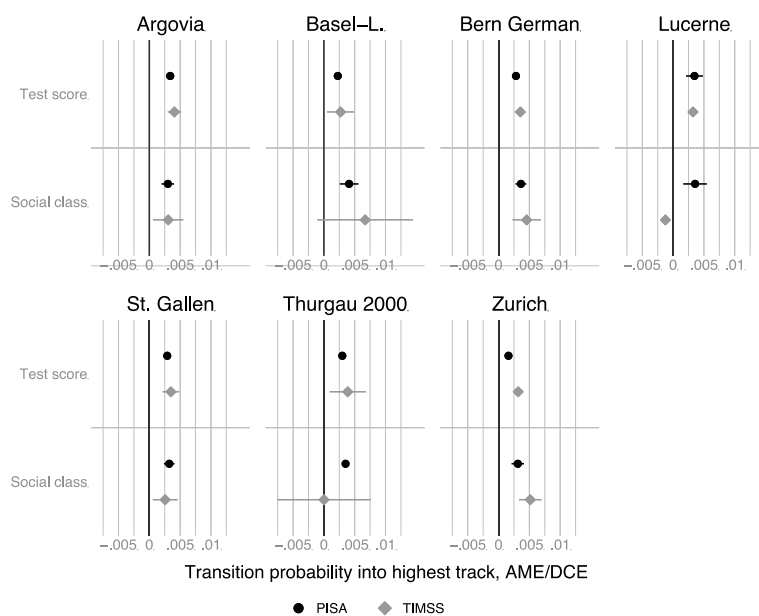
4. Sensitivity analyses

4.1. Sensitivity analyses with the TIMSS dataset

One of the research questions is whether the influence of social background on track allocation differs between educational systems, conditionally on students' performance before the transition. Unfortunately, in the PISA dataset the performance is measured two to three years after the transition from primary to secondary school takes place. The results will thus be biased if students' individual performance increases at a different pace depending on the structure of the education system. I therefore conduct additional sensitivity analyses with the TIMSS 1995 dataset to bolster the usage of the PISA datasets in the light of this disadvantage.

The TIMSS survey has a very similar goal to PISA, namely, to assess whether there are differences between countries concerning students' educational performance (Ramseier et al. 1995). In contrast to PISA, TIMSS assesses the educational performance for several grades simultaneously. It is therefore possible to repeat the analyses with a dataset in which the performance assessment was conducted only half a year after the transition. This is still not ideal but it is also not very likely that being tracked for half a year increases the average performance difference between the tracked groups dramatically. A disadvantage of the TIMSS dataset is that the samples are not representative at the canton level. I am thus only able to use those seven cantons, which have a sample of more than 100 individuals. Further, the class variable in the TIMSS dataset only consists of the variables of parental education and number of books at home, because there was no HISEI measure available. Other than this difference, the operationalization of all other variables is the same.

Figure A2: Comparison of average marginal effects of test score and social background (conditional on performance) between the pooled PISA datasets and the TIMSS dataset

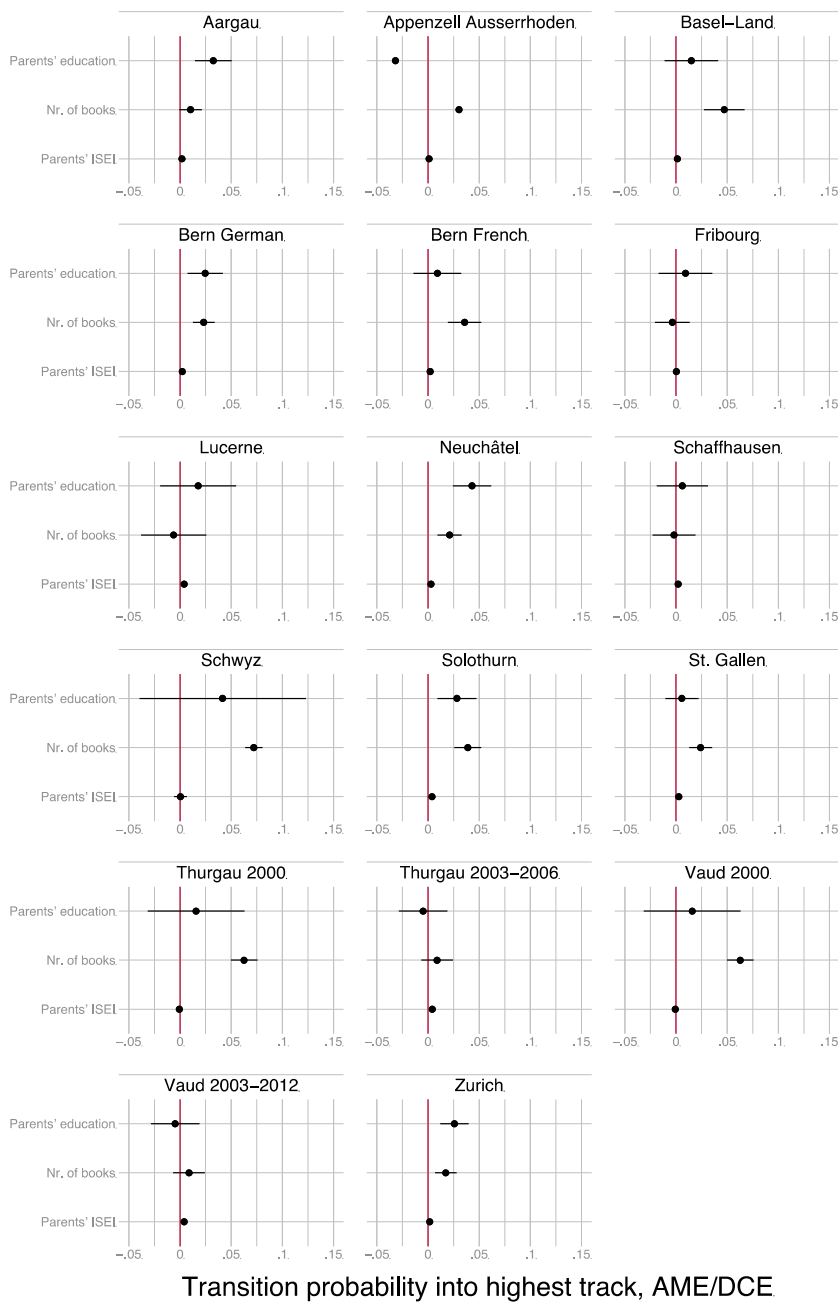


In the sensitivity analyses, I examine whether the effect of the test score and the parental class coefficients differs between the two surveys in the different cantons. If this is not the case, it is possible to use the PISA dataset despite the big time lag between students' transition and the performance assessment. As can be seen in Figure A2, neither the effect of the test score (conditional on social background) nor the effect of social background (conditional on performance) differs dramatically between the pooled PISA datasets and the TIMSS dataset. For both the canton of Bern and the canton of St. Gallen, the effect of performance on the

transition probability is smaller in the PISA dataset (Bern: -0.013, $p = 0.036$; St. Gallen -0.009, $p = 0.049$). If this pattern also applies to the other cantons belonging to the group of the most inclusive education systems, this would imply that we underestimate the size of the primary effect of origin. The effect of social background has a slight tendency to be larger in the PISA dataset in the case of the canton of Thurgau (coefficient difference: 0.032, $p = 0.055$), which also suggests that I underestimate the primary effect of social origin in Education System 2.

4.2. Comparison of various indicators of social background

Figure A3: Comparison of Average Marginal Effects of various indicators of social background



4.3. Main models with all variables

Table A4: Full models with canton-wave dummies, clustered for schools. Dependent variable: Transition into highest track in a canton

	Table 2				Table 3			
	LPM Models		Logit Models		LPM Models		Logit Models	
	(1a)	(1b)	(2a)	(2b)	(1a)	(1b)	(2a)	(2b)
Social class	0.007*** (0.001)	0.001 (0.001)	1.075*** (0.005)	1.046*** (0.006)	0.010*** (0.001)	0.003** (0.001)	1.053*** (0.005)	1.020*** (0.005)
PISA test score		0.003*** (0.000)		1.025*** (0.001)		0.003*** (0.000)		1.025*** (0.001)
Bern german 00 (Ref: Zurich 00)	0.486*** (0.092)	0.340*** (0.077)	668.042*** (747.370)	2973.753*** (3688.340)	0.491*** (0.094)	0.366*** (0.077)	425.856*** (482.420)	2678.663*** (3294.205)
Lucerne 00	0.308 (0.171)	0.035 (0.132)	85.432* (148.420)	36.693* (61.774)	0.069 (0.149)	-0.125 (0.109)	41.001* (65.467)	44.913* (71.548)
Fribourg 00	0.216** (0.078)	-0.069 (0.066)	207.055*** (226.554)	160.306*** (194.383)	0.236** (0.084)	-0.021 (0.070)	117.768*** (132.806)	130.996*** (155.698)
Basel Country 00	0.115 (0.100)	0.053 (0.082)	119.836*** (141.817)	262.660*** (347.347)	0.144 (0.110)	0.102 (0.089)	70.657*** (85.595)	233.581*** (305.798)
St. Gallen 00	0.587*** (0.088)	0.388*** (0.075)	1109.904*** (1228.436)	3472.620*** (4270.166)	0.592*** (0.090)	0.414*** (0.075)	704.783*** (790.080)	3119.780*** (3797.949)
Argovia 00	0.401** (0.135)	0.224* (0.109)	525.855*** (639.338)	1077.537*** (1457.385)	0.430** (0.143)	0.272* (0.115)	310.215*** (384.973)	956.462*** (1281.898)
Thurgovia 00	0.278 (0.142)	0.105 (0.146)	115.849** (189.864)	47.311* (79.174)	0.260 (0.137)	0.186 (0.107)	18.085 (28.751)	24.732 (41.486)
Vaud 00	0.085 (0.125)	-0.108 (0.110)	127.818*** (154.528)	221.940*** (303.589)	0.160 (0.134)	0.065 (0.120)	75.239*** (92.897)	197.193*** (267.013)
Zurich 03	0.167 (0.100)	-0.007 (0.080)	10.208 (12.521)	5.354 (7.286)	0.167 (0.100)	-0.010 (0.080)	10.036 (12.225)	5.331 (7.250)
Berne german 03	0.415*** (0.088)	0.182* (0.075)	437.614*** (484.464)	735.718*** (904.195)	0.419*** (0.090)	0.208** (0.075)	279.892*** (313.699)	662.856*** (806.974)
Lucerne 03	0.371** (0.142)	-0.034 (0.118)	124.010** (185.827)	20.590 (33.976)	0.135 (0.150)	-0.191 (0.117)	59.709** (92.763)	25.084 (41.431)
Schwyz 03	0.499*** (0.127)	0.196* (0.092)	684.790*** (803.859)	786.798*** (995.444)	0.505*** (0.128)	0.223* (0.092)	436.026*** (514.855)	706.586*** (884.171)
Fribourg 03	0.204* (0.081)	-0.114 (0.073)	193.987*** (212.572)	119.597*** (146.395)	0.225* (0.087)	-0.063 (0.076)	110.033*** (124.408)	97.335*** (116.679)
Basel Country 03	0.129 (0.140)	-0.125 (0.119)	128.023*** (184.124)	86.847** (136.942)	0.155 (0.146)	-0.078 (0.124)	75.500** (110.290)	77.038** (120.728)
St. Gallen 03	0.561*** (0.085)	0.252*** (0.072)	966.703*** (1064.208)	1172.768*** (1430.528)	0.567*** (0.087)	0.278*** (0.072)	615.729*** (686.352)	1054.541*** (1273.533)
Argovia 03	0.430*** (0.111)	0.134 (0.093)	606.778*** (708.587)	512.212*** (665.242)	0.460*** (0.120)	0.184 (0.099)	357.726*** (427.809)	454.756*** (585.529)
Thurgovia 03	0.499*** (0.113)	0.203* (0.090)	675.791*** (784.957)	754.528*** (960.755)	0.504*** (0.115)	0.228* (0.090)	431.571*** (507.118)	679.514*** (857.541)
Vaud 03	0.050 (0.093)	-0.159* (0.076)	86.125*** (97.734)	87.389*** (109.065)	0.072 (0.109)	-0.107 (0.087)	48.624*** (55.626)	70.768*** (85.894)

Neuchâtel 03	0.192 [*] (0.079)	-0.026 (0.068)	176.022 ^{***} (193.079)	256.842 ^{***} (312.538)	0.214 [*] (0.086)	0.026 (0.072)	99.673 ^{***} (112.879)	208.811 ^{***} (248.881)
Bern french 03	0.167 [*] (0.084)	-0.006 (0.075)	130.568 ^{***} (142.761)	113.490 ^{***} (138.192)	0.145 (0.084)	-0.076 (0.072)	73.960 ^{***} (83.495)	92.294 ^{***} (110.285)
Zurich 06	0.204 ^{**} (0.063)	0.060 (0.048)	14.346 [*] (15.951)	11.614 [*] (14.189)	0.204 ^{**} (0.063)	0.057 (0.048)	13.892 [*] (15.368)	11.539 [*] (14.099)
Bern german 06	0.419 ^{***} (0.088)	0.221 ^{**} (0.074)	437.719 ^{***} (484.489)	869.226 ^{***} (1066.591)	0.424 ^{***} (0.089)	0.246 ^{***} (0.074)	280.089 ^{***} (313.921)	783.326 ^{***} (952.283)
Fribourg 06	0.171 [*] (0.078)	-0.098 (0.069)	161.933 ^{***} (177.900)	134.744 ^{***} (165.320)	0.193 [*] (0.084)	-0.047 (0.072)	91.755 ^{***} (104.027)	109.518 ^{***} (131.705)
Basel country 06	0.137 (0.090)	-0.041 (0.082)	137.581 ^{***} (155.579)	144.923 ^{***} (185.571)	0.166 (0.100)	0.008 (0.090)	81.077 ^{***} (94.131)	128.786 ^{***} (163.553)
Schaffhausen 06	0.412 ^{***} (0.109)	0.171 (0.087)	411.457 ^{***} (471.021)	644.511 ^{***} (803.621)	0.416 ^{***} (0.110)	0.197 [*] (0.087)	264.303 ^{***} (307.155)	581.398 ^{***} (721.581)
St. Gallen 06	0.526 ^{***} (0.087)	0.284 ^{***} (0.073)	776.193 ^{***} (855.804)	1341.168 ^{***} (1641.469)	0.531 ^{***} (0.088)	0.310 ^{***} (0.073)	494.819 ^{***} (552.578)	1206.486 ^{***} (1461.695)
Argovia 06	0.292 ^{**} (0.106)	0.075 (0.087)	309.375 ^{***} (360.100)	344.695 ^{***} (439.392)	0.320 ^{**} (0.115)	0.123 (0.094)	182.400 ^{***} (217.344)	306.067 ^{***} (386.549)
Thurgovia 06	0.460 ^{***} (0.093)	0.217 ^{**} (0.079)	540.178 ^{***} (601.575)	830.754 ^{***} (1027.847)	0.466 ^{***} (0.095)	0.243 ^{**} (0.080)	345.938 ^{***} (389.900)	748.755 ^{***} (918.104)
Vaud 06	0.049 (0.081)	-0.127 (0.069)	85.242 ^{***} (94.269)	117.811 ^{***} (144.321)	0.071 (0.090)	-0.075 (0.076)	48.130 ^{***} (54.964)	95.405 ^{***} (114.652)
Neuchâtel 06	0.171 [*] (0.082)	0.008 (0.070)	157.408 ^{***} (173.916)	319.866 ^{***} (392.014)	0.193 [*] (0.087)	0.060 (0.073)	89.143 ^{***} (101.703)	259.942 ^{***} (312.949)
Bern french 06	0.147 (0.080)	-0.047 (0.066)	144.548 ^{***} (159.888)	209.072 ^{***} (254.365)	0.168 (0.087)	0.004 (0.071)	81.964 ^{***} (93.354)	170.208 ^{***} (202.876)
Zurich 09	0.198 [*] (0.079)	0.069 (0.059)	12.178 [*] (13.801)	9.257 (11.508)	0.198 [*] (0.079)	0.065 (0.059)	12.048 [*] (13.570)	9.252 (11.496)
Bern german 09	0.478 ^{***} (0.089)	0.272 ^{***} (0.077)	608.040 ^{***} (673.404)	1384.211 ^{***} (1708.992)	0.484 ^{***} (0.091)	0.298 ^{***} (0.077)	388.765 ^{***} (435.790)	1247.015 ^{***} (1524.762)
Fribourg 09	0.163 [*] (0.078)	-0.116 (0.071)	157.185 ^{***} (172.326)	124.192 ^{***} (152.158)	0.185 [*] (0.085)	-0.064 (0.074)	89.028 ^{***} (100.721)	100.912 ^{***} (121.192)
Schaffhausen 09	0.465 ^{***} (0.112)	0.228 ^{**} (0.086)	550.884 ^{***} (640.613)	888.484 ^{***} (1116.101)	0.470 ^{***} (0.113)	0.253 ^{**} (0.086)	353.364 ^{***} (416.975)	801.355 ^{***} (1001.592)
Appenzell Outer Rhodes 09	0.647 ^{***} (0.193)	0.349 [*] (0.146)	1679.082 ^{***} (2918.355)	2134.385 ^{***} (3529.605)	0.652 ^{***} (0.195)	0.373 [*] (0.147)	1073.732 ^{***} (1875.948)	1922.454 ^{***} (3158.760)
Argovia 09	0.304 ^{**} (0.111)	0.085 (0.091)	325.801 ^{***} (379.207)	372.937 ^{***} (475.430)	0.333 ^{**} (0.119)	0.134 (0.097)	192.056 ^{***} (228.930)	331.187 ^{***} (418.346)
Vaud 09	0.080 (0.081)	-0.115 (0.069)	97.925 ^{***} (108.442)	119.440 ^{***} (146.391)	0.101 (0.086)	-0.063 (0.072)	55.311 ^{***} (63.263)	96.798 ^{***} (116.599)
Neuchâtel 09	0.151 (0.078)	-0.026 (0.068)	141.940 ^{***} (155.963)	247.299 ^{***} (301.921)	0.173 [*] (0.085)	0.025 (0.072)	80.395 ^{***} (91.359)	200.970 ^{***} (240.677)
Bern french 09	0.124 (0.077)	-0.068 (0.068)	129.205 ^{***} (141.413)	185.749 ^{***} (226.947)	0.146 (0.084)	-0.017 (0.073)	73.184 ^{***} (82.637)	150.966 ^{***} (180.806)
Bern german 12	0.480 ^{***} (0.098)	0.238 ^{**} (0.080)	672.333 ^{***} (772.872)	1228.456 ^{***} (1541.712)	0.485 ^{***} (0.100)	0.264 ^{**} (0.080)	430.617 ^{***} (500.736)	1107.355 ^{***} (1377.646)
Fribourg 12	0.183 [*] (0.079)	-0.096 (0.068)	175.388 ^{***} (192.318)	142.769 ^{***} (173.866)	0.205 [*] (0.086)	-0.045 (0.072)	99.453 ^{***} (112.507)	116.169 ^{***} (138.608)

Solothurn 12	0.126 [*] (0.054)	0.028 (0.044)	5.890 (7.308)	6.011 (7.981)	0.174 ^{**} (0.062)	0.138 [*] (0.057)	7.695 (9.681)	12.488 (17.060)
St. Gallen 12	0.489 ^{***} (0.089)	0.271 ^{***} (0.075)	637.617 ^{***} (704.960)	1293.906 ^{***} (1590.137)	0.495 ^{***} (0.091)	0.297 ^{***} (0.076)	407.496 ^{***} (456.084)	1165.686 ^{***} (1419.077)
Argovia 12	0.318 [*] (0.124)	0.127 (0.098)	344.155 ^{***} (410.559)	508.317 ^{***} (661.260)	0.348 ^{**} (0.132)	0.177 (0.105)	202.903 ^{***} (247.711)	451.540 ^{***} (582.406)
Vaud 12	0.068 (0.078)	-0.150 [*] (0.068)	93.627 ^{***} (102.687)	102.066 ^{***} (124.465)	0.090 (0.087)	-0.098 (0.074)	52.889 ^{***} (59.730)	82.775 ^{***} (98.837)
Neuchâtel 12	0.158 [*] (0.080)	0.025 (0.070)	148.797 ^{***} (163.582)	393.544 ^{***} (480.673)	0.180 [*] (0.087)	0.077 (0.074)	84.328 ^{***} (95.713)	320.118 ^{***} (383.375)
Education system 2 x social class (Ref: Educ. sys. 1)	-0.001 (0.004)	0.000 (0.004)	0.973 [*] (0.011)	0.984 (0.008)				
Education system 3 x social class	-0.001 (0.003)	0.002 (0.003)	0.980 [*] (0.008)	0.996 (0.010)				
Education system 4 x social class	0.004 ^{**} (0.001)	0.005 ^{***} (0.001)	0.980 ^{***} (0.006)	0.982 ^{**} (0.007)				
Education system 5 x social class	0.003 [*] (0.001)	0.004 ^{**} (0.001)	0.983 ^{***} (0.005)	0.990 (0.006)				
Education system 6 x social class	0.003 [*] (0.001)	0.004 ^{***} (0.001)	0.984 ^{**} (0.005)	0.985 [*] (0.006)				
Number of Tracks x Parental Class					0.000 (0.001)	0.001 [*] (0.001)	1.001 (0.003)	1.007 [*] (0.003)
Late start of tracking x Parental Class (Ref: Early tracking)					0.001 (0.001)	0.002 [*] (0.001)	1.004 (0.004)	1.010 [*] (0.004)
Stand. Test x Parental Class (Ref: Teacher decision)					-0.004 [*] (0.002)	-0.006 ^{***} (0.001)	1.009 (0.008)	1.000 (0.006)
Age in months	-0.086 ^{***} (0.008)	-0.007 (0.006)	0.616 ^{***} (0.025)	0.940 (0.049)	-0.087 ^{***} (0.008)	-0.008 (0.006)	0.616 ^{***} (0.025)	0.940 (0.049)
Sex (Ref: female)	-0.063 ^{***} (0.005)	-0.063 ^{***} (0.005)	0.698 ^{***} (0.021)	0.584 ^{***} (0.025)	-0.087 ^{***} (0.008)	-0.008 (0.006)	0.698 ^{***} (0.021)	0.584 ^{***} (0.025)
School area (Ref: rural area)								
Village in rural area	0.118 ^{***} (0.032)	0.094 ^{***} (0.024)	1.897 ^{***} (0.339)	1.982 ^{***} (0.334)	0.115 ^{***} (0.032)	0.093 ^{***} (0.024)	1.893 ^{***} (0.338)	1.984 ^{***} (0.336)
Outskirts of a town/city	0.188 ^{***} (0.034)	0.160 ^{***} (0.025)	2.803 ^{***} (0.561)	3.431 ^{***} (0.620)	0.187 ^{***} (0.034)	0.159 ^{***} (0.025)	2.797 ^{***} (0.559)	3.435 ^{***} (0.622)
Center of a town/city	0.314 ^{***} (0.048)	0.255 ^{***} (0.037)	5.948 ^{***} (1.696)	7.390 ^{***} (2.106)	0.312 ^{***} (0.048)	0.253 ^{***} (0.037)	5.978 ^{***} (1.704)	7.427 ^{***} (2.123)
Constant	0.780 ^{***} (0.148)	-1.405 ^{***} (0.132)	0.130 (0.166)	0.000 ^{***} (0.000)	0.789 ^{***} (0.148)	-1.424 ^{***} (0.136)	0.217 (0.288)	0.000 ^{***} (0.000)
N	32261	32261	32261	32261	32261	32261	32261	32261
R ² / Pseudo R ²	0.282	0.460	0.240	0.460	0.239	0.460	0.218	0.444

Linear regression models with cluster robust standard errors (linear probability model).

Logit models with cluster robust standard errors. Odds ratios reported

Weighted with the inverse of the cantonal numbers of students on the total number of students in the sample.

Cluster robust standard errors in parentheses (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$)

4.4. Main models with interactions between cantons and social class

Table A5: Full models with canton dummies, clustered for schools. Dependent variable: Transition into highest track in a canton

	LPM Models		Logit Models	
	(1a)	(1b)	(2a)	(2b)
Social class	0.009*** (0.001)	0.001 (0.001)	1.077*** (0.006)	1.049*** (0.007)
PISA test score		0.003*** (0.000)		1.024*** (0.001)
Bern german x social class (Ref: Zurich)	0.002 (0.002)	0.002 (0.002)	0.983** (0.006)	0.982* (0.007)
Lucerne x social class	-0.002 (0.004)	-0.002 (0.004)	0.979* (0.009)	0.994 (0.009)
Schwyz x social class	0.005*** (0.001)	0.005*** (0.001)	1.003 (0.021)	1.007 (0.019)
Fribourg x social class	0.003 (0.001)	0.003 (0.001)	0.981** (0.006)	0.993 (0.008)
Solothurn x social class	-0.005 (0.003)	-0.005 (0.003)	0.994 (0.009)	0.980* (0.009)
Basel Country x social class	0.001 (0.002)	0.001 (0.002)	0.982 (0.009)	0.989 (0.014)
Schaffhausen x social class	0.002 (0.002)	0.002 (0.002)	0.981** (0.007)	0.974*** (0.007)
Appenzell Outer Rhodes x social class	-0.001 (0.005)	-0.001 (0.005)	0.980 (0.013)	0.978** (0.008)
St. Gallen x social class	0.001 (0.001)	0.001 (0.001)	0.979*** (0.006)	0.980** (0.007)
Argovia x social class	0.002 (0.001)	0.002 (0.001)	0.979*** (0.006)	0.977** (0.007)
Thurgovia x social class	0.002 (0.002)	0.002 (0.002)	0.975** (0.009)	0.974** (0.009)
Vaud x social class	0.002 (0.002)	0.002 (0.002)	0.982** (0.007)	0.984* (0.008)
Neuchâtel x social class	0.003* (0.001)	0.003* (0.001)	0.982** (0.006)	0.985* (0.007)
Bern french x social class	0.002 (0.002)	0.002 (0.002)	0.976*** (0.007)	0.978** (0.007)
Constant	0.749*** (0.156)	-1.401*** (0.144)	0.620 (0.528)	0.000*** (0.000)
N	32261	32261	32261	32261
R ² / Pseudo R ²	0.268	0.449	0.224	0.443

Linear regression models with cluster robust standard errors (linear probability model).

Logit models with cluster robust standard errors. Odds ratios reported

Weighted with the inverse of the cantonal numbers of students on the total number of students in the sample.

Cluster robust standard errors in parentheses (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$)

4.5. Jackknife-type sensitivity analyses

Figure A6: LPM model with education system interactions, unconditional on students' performance, based on Model 1a in Table 2

	All cantons	Without Argovia	Without Appenzell Outer Rhodes	Without Basel-Country	Without Bern german speaking part	Without Bern french speaking part	Without Fribourg	Without Lucerne	Without Neu-châtel	Without Schaffhausen	Without Schwyz	Without Solothurn	Without St. Gallen	Without Thurgovia old system	Without Thurgovia new system	Without Vaud	Without Zurich
Parental class	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.008*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.004 (0.002)
Education system 2 x Parental Class ^a	-0.001 (0.004)	-0.001 (0.005)	-0.001 (0.004)	-0.001 (0.004)	-0.001 (0.004)	-0.001 (0.004)	-0.001 (0.004)	-0.001 (0.004)	-0.001 (0.004)	-0.001 (0.004)	-0.001 (0.004)	-0.001 (0.005)	-0.001 (0.004)		-0.001 (0.004)	-0.001 (0.004)	0.003 (0.005)
Education system 3 x Parental class	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)		-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	0.003 (0.004)
Education system 4 x Parental class	0.003* (0.001)	0.002 (0.002)	0.003* (0.001)	0.004** (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.002 (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.003** (0.001)	0.006** (0.002)
Education system 5 x Parental class	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.003* (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004*** (0.001)	0.007** (0.002)
Education system 6 x Parental class	0.003* (0.001)	0.003* (0.001)	0.003** (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.002 (0.001)	0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.003** (0.001)	0.006** (0.002)
Constant	0.780*** (0.148)	0.826*** (0.156)	0.738*** (0.147)	0.786*** (0.147)	0.799*** (0.154)	0.707*** (0.156)	0.676*** (0.154)	0.856*** (0.147)	0.654*** (0.156)	0.774*** (0.151)	0.740*** (0.148)	0.775*** (0.153)	0.804*** (0.156)	0.758*** (0.149)	0.826*** (0.151)	0.789*** (0.159)	1.406*** (0.140)
N	32261	28718	32093	31329	28726	30381	28528	31890	28172	31104	32145	31555	28694	32111	30789	28376	29304
R ²	0.282	0.291	0.277	0.282	0.275	0.290	0.295	0.274	0.291	0.281	0.280	0.274	0.276	0.279	0.283	0.293	0.263

Fixed-effects model with cantonal-wave dummies.

Weighted with the inverse of the cantonal numbers of students on the total number of students in the sample.

Additionally controlled for: age, sex, urbanity of school

Standard errors in parentheses (* p < 0.05, ** p < 0.01, *** p < 0.001)

Reference categories: a: Education system 1

Figure A7: LPM model with education system interactions, conditional on students' performance, based on Model 2a in Table 2

	All cantons	Without Argovia	Without Appenzell Outer Rhodes	Without Basel-Country	Without Bern german speaking part	Without Bern french speaking part	Without Fribourg	Without Lucerne	Without Neu-châtel	Without Schaffhausen	Without Schwyz	Without Solothurn	Without St. Gallen	Without Thurgovia old system	Without Thurgovia new system	Without Vaud	Without Zurich
Parental class	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.000 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	-0.002 (0.002)
PISA test score	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)
Education system 2 x Parental Class ^a	0.000 (0.004)	0.000 (0.004)	0.000 (0.004)	0.000 (0.004)	0.000 (0.004)	0.000 (0.004)	0.000 (0.004)	0.000 (0.004)	0.000 (0.004)	0.000 (0.004)	0.000 (0.004)	-0.000 (0.004)	0.000 (0.004)		0.000 (0.004)	0.000 (0.004)	0.002 (0.004)
Education system 3 x Parental class	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)		0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.001 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.004 (0.003)
Education system 4 x Parental class	0.004** (0.001)	0.003 (0.002)	0.004** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.003* (0.001)	0.004** (0.001)	0.004** (0.001)	0.004** (0.001)	0.004*** (0.001)	0.006** (0.002)
Education system 5 x Parental class	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.006*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.006*** (0.001)	0.008*** (0.002)
Education system 6 x Parental class	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.003** (0.001)	0.003** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.006*** (0.002)
Constant	-1.405*** (0.132)	-1.337*** (0.140)	-1.429*** (0.133)	-1.443*** (0.131)	-1.403*** (0.138)	-1.423*** (0.139)	-1.442*** (0.135)	-1.354*** (0.129)	-1.477*** (0.138)	-1.384*** (0.135)	-1.452*** (0.131)	-1.427*** (0.136)	-1.359*** (0.140)	-1.447*** (0.132)	-1.345*** (0.135)	-1.433*** (0.141)	-1.025*** (0.127)
N	32261	28718	32093	31329	28726	30381	28528	31890	28172	31104	32145	31555	28694	32111	30789	28376	29304
R ²	0.460	0.462	0.455	0.465	0.455	0.466	0.472	0.458	0.468	0.457	0.460	0.456	0.453	0.459	0.459	0.468	0.454

Fixed-effects model with cantonal-wave dummies.

Weighted with the inverse of the cantonal numbers of students on the total number of students in the sample.

Additionally controlled for: age, sex, urbanity of school

Standard errors in parentheses (* p < 0.05, ** p < 0.01, *** p < 0.001)

Reference categories: a: Education system 1

Figure A8: Logit model with education system interactions, unconditional on students' performance, based on Model 1b in Table 2, OR reported

	All cantons	Without Argovia	Without Appenzell Outer Rhodes	Without Basel-Country	Without Bern german speaking part	Without Bern french speaking part	Without Fribourg	Without Lucerne	Without Neu-châtel	Without Schaffhausen	Without Schwyz	Without Solothurn	Without St. Gallen	Without Thurgovia old system	Without Thurgovia new system	Without Vaud	Without Zurich
Parental class	1.075*** (0.005)	1.075*** (0.005)	1.075*** (0.005)	1.075*** (0.005)	1.075*** (0.005)	1.075*** (0.005)	1.075*** (0.005)	1.075*** (0.005)	1.075*** (0.005)	1.075*** (0.005)	1.075*** (0.005)	1.076*** (0.006)	1.075*** (0.005)	1.076*** (0.005)	1.075*** (0.005)	1.075*** (0.005)	1.069*** (0.007)
Education system 2 x Parental Class ^a	0.973* (0.011)	0.974* (0.011)	0.973* (0.011)	0.973* (0.011)	0.974* (0.011)	0.974* (0.011)	0.973* (0.011)	0.974* (0.011)	0.973* (0.011)	0.973* (0.011)	0.973* (0.011)	0.973* (0.011)	0.974* (0.011)		0.973* (0.011)	0.974* (0.011)	0.979 (0.012)
Education system 3 x Parental class	0.980* (0.008)	0.980* (0.008)	0.980* (0.008)	0.981* (0.008)	0.980* (0.008)	0.981* (0.008)	0.980* (0.008)		0.981* (0.008)	0.980* (0.008)	0.980* (0.008)	0.979* (0.009)	0.980* (0.008)	0.980* (0.008)	0.980* (0.008)	0.981* (0.008)	0.986 (0.010)
Education system 4 x Parental class	0.981*** (0.005)	0.981** (0.007)	0.981*** (0.005)	0.979*** (0.005)	0.981*** (0.005)	0.981*** (0.005)	0.981*** (0.005)	0.981*** (0.005)	0.981*** (0.005)	0.981*** (0.005)	0.981*** (0.005)	0.980*** (0.006)	0.981*** (0.005)	0.981*** (0.005)	0.981*** (0.005)	0.981*** (0.005)	0.986 (0.007)
Education system 5 x Parental class	0.982*** (0.005)	0.982*** (0.005)	0.983*** (0.005)	0.983*** (0.005)	0.982*** (0.005)	0.983** (0.005)	0.982** (0.005)	0.982*** (0.005)	0.982** (0.005)	0.982*** (0.005)	0.982*** (0.005)	0.981** (0.006)	0.982*** (0.005)	0.982*** (0.005)	0.982*** (0.005)	0.983*** (0.005)	0.987 (0.007)
Education system 6 x Parental class	0.984** (0.005)	0.984** (0.005)	0.984** (0.005)	0.984** (0.005)	0.984** (0.006)	0.984** (0.005)	0.984** (0.005)	0.984** (0.005)	0.984** (0.005)	0.984** (0.005)	0.982*** (0.005)	0.983** (0.006)	0.985** (0.005)	0.984** (0.005)	0.984** (0.005)	0.985** (0.005)	0.990 (0.007)
Constant	0.130 (0.166)	0.198 (0.260)	0.103 (0.131)	0.133 (0.169)	0.142 (0.185)	0.090 (0.118)	0.080 (0.106)	0.182 (0.229)	0.069* (0.091)	0.129 (0.166)	0.104 (0.132)	0.133 (0.171)	0.150 (0.196)	0.111 (0.143)	0.172 (0.223)	0.125 (0.175)	142.01*** (105.95)
N	32261	28718	32093	31329	28726	30381	28528	31890	28172	31104	32145	31555	28694	32111	30789	28376	29304
McFadden's Pseudo R ²	0.239	0.249	0.236	0.240	0.235	0.248	0.252	0.233	0.249	0.240	0.238	0.232	0.236	0.237	0.241	0.250	0.218

Fixed-effects model with cantonal-wave dummies.

Weighted with the inverse of the cantonal numbers of students on the total number of students in the sample.

Additionally controlled for: age, sex, urbanity of school

Standard errors in parentheses (* p < 0.05, ** p < 0.01, *** p < 0.001)

Reference categories: a: Education system 1

Figure A9: Logit model with education system interactions, conditional on students' performance, based on Model 2b in Table 2, OR reported

	All cantons	Without Argovia	Without Appenzell Outer Rhodes	Without Basel-Country	Without Bern german speaking part	Without Bern french speaking part	Without Fribourg	Without Lucerne	Without Neu-châtel	Without Schaffhausen	Without Schwyz	Without Solothurn	Without St. Gallen	Without Thurgovia old system	Without Thurgovia new system	Without Vaud	Without Zurich
Parental class	1.046*** (0.006)	1.046*** (0.006)	1.046*** (0.006)	1.046*** (0.006)	1.046*** (0.006)	1.046*** (0.006)	1.046*** (0.006)	1.046*** (0.006)	1.046*** (0.006)	1.046*** (0.006)	1.046*** (0.006)	1.049*** (0.007)	1.046*** (0.006)	1.046*** (0.006)	1.046*** (0.006)	1.045*** (0.006)	1.027*** (0.006)
PISA test score	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.026*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)
Education system 2 x Parental Class ^a	0.984 (0.008)	0.984* (0.008)	0.984* (0.008)	0.984 (0.008)	0.984 (0.008)	0.984 (0.008)	0.984 (0.008)	0.984 (0.008)	0.984 (0.008)	0.984* (0.008)	0.984 (0.008)	0.981* (0.009)	0.984* (0.008)		0.984* (0.008)	0.986 (0.008)	1.002 (0.008)
Education system 3 x Parental class	0.996 (0.010)	0.996 (0.009)	0.996 (0.010)	0.997 (0.010)	0.997 (0.010)	0.996 (0.010)	0.996 (0.010)		0.997 (0.010)	0.996 (0.009)	0.996 (0.010)	0.993 (0.010)	0.996 (0.009)	0.996 (0.009)	0.996 (0.009)	0.998 (0.009)	1.014 (0.010)
Education system 4 x Parental class	0.983* (0.007)	0.986 (0.009)	0.983* (0.007)	0.982* (0.007)	0.983* (0.007)	0.983* (0.007)	0.983* (0.007)	0.983* (0.007)	0.983* (0.007)	0.983* (0.007)	0.983* (0.007)	0.980** (0.007)	0.983* (0.007)	0.983* (0.007)	0.983* (0.007)	0.984* (0.007)	1.001 (0.007)
Education system 5 x Parental class	0.990 (0.006)	0.989 (0.006)	0.990 (0.006)	0.990 (0.006)	0.990 (0.006)	0.991 (0.006)	0.986* (0.006)	0.990 (0.006)	0.990 (0.007)	0.990 (0.006)	0.990 (0.006)	0.987 (0.007)	0.990 (0.006)	0.989 (0.006)	0.990 (0.006)	0.992 (0.007)	1.007 (0.007)
Education system 6 x Parental class	0.985* (0.006)	0.985* (0.006)	0.985* (0.006)	0.985* (0.006)	0.985* (0.007)	0.985* (0.006)	0.985* (0.006)	0.985* (0.006)	0.985* (0.006)	0.987* (0.006)	0.983** (0.006)	0.982* (0.007)	0.985* (0.007)	0.985* (0.006)	0.986* (0.006)	0.986* (0.006)	1.003 (0.007)
Constant	0.780*** (0.148)	-1.405*** (0.132)	0.826*** (0.156)	-1.337*** (0.140)	0.738*** (0.147)	-1.429*** (0.133)	0.786*** (0.147)	-1.443*** (0.131)	0.799*** (0.154)	-1.403*** (0.138)	0.707*** (0.156)	-1.423*** (0.139)	0.676*** (0.154)	-1.442*** (0.135)	0.856*** (0.147)	-1.354*** (0.129)	0.654*** (0.156)
N	32261	28718	32093	31329	28726	30381	28528	31890	28172	31104	32145	31555	28694	32111	30789	28376	29304
McFadden's Pseudo R ²	0.460	0.462	0.454	0.466	0.457	0.467	0.473	0.455	0.470	0.457	0.459	0.454	0.455	0.457	0.459	0.469	0.443

Fixed-effects model with cantonal-wave dummies.

Weighted with the inverse of the cantonal numbers of students on the total number of students in the sample.

Additionally controlled for: age, sex, urbanity of school

Standard errors in parentheses (* p < 0.05, ** p < 0.01, *** p < 0.001)

Reference categories: a: Education system 1

Figure A10: LPM model with educational institutions interactions, unconditional on students' performance, based on Model 1b in Table 3

	All cantons	Without Argovia	Without Appenzell Outer Rhodes	Without Basel-Country	Without Bern german speaking part	Without Bern french speaking part	Without Fribourg	Without Lucerne	Without Neu-châtel	Without Schaffhausen	Without Schwyz	Without Solothurn	Without St. Gallen	Without Thurgovia old system	Without Thurgovia new system	Without Vaud	Without Zurich
Parental class	0.010*** (0.001)	0.009*** (0.001)	0.010*** (0.001)	0.010*** (0.001)	0.010*** (0.001)	0.010*** (0.001)	0.010*** (0.001)	0.009*** (0.001)	0.010*** (0.001)	0.010*** (0.001)	0.009*** (0.001)	0.010*** (0.001)	0.010*** (0.001)	0.010*** (0.001)	0.010*** (0.001)	0.010*** (0.001)	0.010*** (0.001)
Number of Tracks x Parental Class	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.001 (0.001)	0.000 (0.001)	0.000 (0.001)	0.001 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)
Late start of tracking x Parental Class ^a	0.001 (0.001)	0.002 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.000 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.000 (0.001)
Stand. Test x Parental Class ^b	-0.004* (0.002)	-0.004* (0.002)	-0.004* (0.002)	-0.004* (0.002)	-0.004* (0.002)	-0.004* (0.002)	-0.003 (0.002)	-0.005** (0.002)	-0.003 (0.002)	-0.004* (0.002)	-0.004* (0.002)	-0.003 (0.002)	-0.004* (0.002)	-0.004* (0.001)	-0.004* (0.002)	-0.004* (0.002)	-0.005 (0.003)
Constant	0.789*** (0.148)	0.830*** (0.155)	0.750*** (0.147)	0.798*** (0.146)	0.809*** (0.154)	0.715*** (0.156)	0.689*** (0.155)	0.844*** (0.146)	0.667*** (0.156)	0.785*** (0.151)	0.748*** (0.147)	0.801*** (0.152)	0.817*** (0.156)	0.764*** (0.150)	0.836*** (0.151)	0.801*** (0.158)	1.417*** (0.139)
N	32261	28718	32093	31329	28726	30381	28528	31890	28172	31104	32145	31555	28694	32111	30789	28376	29304
R ²	0.281	0.290	0.276	0.281	0.275	0.290	0.294	0.274	0.291	0.281	0.279	0.274	0.275	0.278	0.282	0.292	0.262

Fixed-effects model with cantonal-wave dummies.

Weighted with the inverse of the cantonal numbers of students on the total number of students in the sample.

Additionally controlled for: age, sex, urbanity of school

Standard errors in parentheses (* p < 0.05, ** p < 0.01, *** p < 0.001)

Reference categories: a: Early start of tracking; b: Teacher decision

Figure A11: LPM model with educational institutions interactions, conditional on students' performance, based on Model 1a in Table 3

	All cantons	Without Argovia	Without Appenzell Outer Rhodes	Without Basel-Country	Without Bern german speaking part	Without Bern french speaking part	Without Fribourg	Without Lucerne	Without Neu-châtel	Without Schaffhausen	Without Schwyz	Without Solothurn	Without St. Gallen	Without Thurgovia old system	Without Thurgovia new system	Without Vaud	Without Zurich
Parental class	0.003** (0.001)	0.002 (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.003** (0.001)	0.003** (0.001)	0.003*** (0.001)	0.002** (0.001)	0.003** (0.001)	0.003** (0.001)	0.002** (0.001)	0.003** (0.001)	0.003** (0.001)	0.003** (0.001)	0.003** (0.001)	0.003** (0.001)	0.002** (0.001)
PISA test score	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)
Number of Tracks x Parental Class	0.001* (0.001)	0.001* (0.001)	0.001* (0.001)	0.001* (0.001)	0.001 (0.001)	0.001* (0.001)	0.001 (0.001)	0.002** (0.001)	0.001 (0.001)	0.001 (0.001)	0.002* (0.001)	0.001* (0.001)	0.001 (0.001)	0.001* (0.001)	0.001* (0.001)	0.001* (0.001)	0.001* (0.001)
Late start of tracking x Parental Class ^b	0.002* (0.001)	0.003* (0.001)	0.002* (0.001)	0.001* (0.001)	0.002* (0.001)	0.002* (0.001)	0.001 (0.001)	0.002** (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)
Stand. Test x Parental Class	-0.006*** (0.001)	-0.006*** (0.001)	-0.006*** (0.001)	-0.006*** (0.001)	-0.006*** (0.001)	-0.006*** (0.001)	-0.005*** (0.001)	-0.007*** (0.001)	-0.006*** (0.001)	-0.006*** (0.001)	-0.006*** (0.001)	-0.006*** (0.002)	-0.006*** (0.001)	-0.006*** (0.001)	-0.006*** (0.001)	-0.006*** (0.002)	-0.006*** (0.002)
Constant	-1.424*** (0.136)	-1.360*** (0.145)	-1.446*** (0.137)	-1.459*** (0.136)	-1.421*** (0.143)	-1.443*** (0.143)	-1.454*** (0.140)	-1.388*** (0.131)	-1.491*** (0.142)	-1.401*** (0.139)	-1.473*** (0.135)	-1.427*** (0.140)	-1.375*** (0.144)	-1.456*** (0.134)	-1.363*** (0.139)	-1.452*** (0.145)	-1.018*** (0.128)
N	32261	28718	32093	31329	28726	30381	28528	31890	28172	31104	32145	31555	28694	32111	30789	28376	29304
R ²	0.460	0.461	0.454	0.464	0.455	0.466	0.472	0.458	0.468	0.457	0.459	0.456	0.453	0.459	0.459	0.467	0.454

Fixed-effects model with cantonal-wave dummies.

Weighted with the inverse of the cantonal numbers of students on the total number of students in the sample.

Additionally controlled for: age, sex, urbanity of school

Standard errors in parentheses (* p < 0.05, ** p < 0.01, *** p < 0.001)

Reference categories: a: Early start of tracking; b: Teacher decision

Figure A12: Logit model with educational institutions interactions, unconditional on students' performance, based on Model 2b in Table 3, OR reported

	All cantons	Without Argovia	Without Appenzell Outer Rhodes	Without Basel-Country	Without Bern german speaking part	Without Bern french speaking part	Without Fribourg	Without Lucerne	Without Neu-châtel	Without Schaffhausen	Without Schwyz	Without Solothurn	Without St. Gallen	Without Thurgovia old system	Without Thurgovia new system	Without Vaud	Without Zurich
Parental class	1.053*** (0.005)	1.053*** (0.007)	1.053*** (0.005)	1.051*** (0.005)	1.053*** (0.005)	1.052*** (0.005)	1.053*** (0.005)	1.053*** (0.005)	1.053*** (0.005)	1.053*** (0.005)	1.051*** (0.004)	1.053*** (0.005)	1.054*** (0.005)	1.055*** (0.005)	1.053*** (0.005)	1.056*** (0.005)	1.056*** (0.005)
Number of Tracks x Parental Class	1.001 (0.003)	1.001 (0.003)	1.001 (0.003)	1.001 (0.003)	1.001 (0.004)	1.002 (0.003)	1.001 (0.003)	1.001 (0.003)	1.001 (0.004)	1.000 (0.003)	1.002 (0.003)	1.001 (0.003)	1.000 (0.004)	0.998 (0.003)	1.000 (0.003)	1.000 (0.003)	0.998 (0.003)
Late start of tracking x Parental Class ^a	1.004 (0.004)	1.004 (0.006)	1.004 (0.004)	1.005 (0.004)	1.004 (0.004)	1.005 (0.004)	1.004 (0.004)	1.004 (0.004)	1.004 (0.004)	1.004 (0.004)	1.004 (0.004)	1.004 (0.004)	1.004 (0.004)	1.003 (0.004)	1.004 (0.004)	1.001 (0.004)	1.002 (0.004)
Stand. Test x Parental Class ^b	1.009 (0.008)	1.009 (0.009)	1.009 (0.009)	1.009 (0.008)	1.009 (0.009)	1.007 (0.009)	1.008 (0.009)	1.009 (0.009)	1.009 (0.009)	1.009 (0.009)	1.008 (0.008)	1.009 (0.009)	1.010 (0.009)	1.020** (0.007)	1.009 (0.009)	1.010 (0.009)	0.997 (0.010)
Constant	0.217 (0.288)	0.331 (0.450)	0.173 (0.228)	0.219 (0.289)	0.235 (0.318)	0.146 (0.199)	0.133 (0.182)	0.300 (0.392)	0.115 (0.157)	0.216 (0.289)	0.168 (0.222)	0.245 (0.328)	0.253 (0.344)	0.109 (0.140)	0.289 (0.387)	0.214 (0.312)	145.63*** (108.36)
N	32261	28718	32093	31329	28726	30381	28528	31890	28172	31104	32145	31555	28694	32111	30789	28376	29304
McFadden's Pseudo R ²	0.239	0.248	0.235	0.239	0.234	0.247	0.252	0.232	0.248	0.240	0.238	0.232	0.236	0.237	0.241	0.250	0.218

Fixed-effects model with cantonal-wave dummies.

Weighted with the inverse of the cantonal numbers of students on the total number of students in the sample.

Additionally controlled for: age, sex, urbanity of school

Standard errors in parentheses (* p < 0.05, ** p < 0.01, *** p < 0.001)

Reference categories: a: Early start of tracking; b: Teacher decision

Figure A13: LPM model with educational institutions interactions, conditional on students' performance, based on Model 2 in Table 3

	All cantons	Without Argovia	Without Appenzell Outer Rhodes	Without Basel-Country	Without Bern german speaking part	Without Bern french speaking part	Without Fribourg	Without Lucerne	Without Neu-châtel	Without Schaffhausen	Without Schwyz	Without Solothurn	Without St. Gallen	Without Thurgovia old system	Without Thurgovia new system	Without Vaud	Without Zurich
Parental class	1.020*** (0.005)	1.021** (0.008)	1.020*** (0.005)	1.017** (0.005)	1.019*** (0.006)	1.018*** (0.005)	1.022*** (0.005)	1.020*** (0.005)	1.019*** (0.005)	1.021*** (0.005)	1.018*** (0.005)	1.020*** (0.005)	1.020*** (0.005)	1.021*** (0.005)	1.020*** (0.005)	1.021*** (0.005)	1.021*** (0.005)
PISA test score	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.026*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)	1.025*** (0.001)
Number of Tracks x Parental Class	1.007* (0.003)	1.007* (0.003)	1.007 (0.003)	1.007* (0.003)	1.007 (0.004)	1.009* (0.003)	1.005 (0.003)	1.006 (0.003)	1.008* (0.004)	1.005 (0.003)	1.009** (0.003)	1.007* (0.003)	1.007 (0.004)	1.006 (0.003)	1.006 (0.003)	1.007 (0.004)	1.005 (0.003)
Late start of tracking x Parental Class ^a	1.010* (0.004)	1.009 (0.007)	1.010* (0.004)	1.012* (0.005)	1.010* (0.004)	1.012** (0.005)	1.008 (0.004)	1.009* (0.004)	1.011* (0.005)	1.010* (0.004)	1.010* (0.004)	1.009* (0.005)	1.010* (0.004)	1.010* (0.004)	1.010* (0.004)	1.009 (0.005)	1.009* (0.005)
Stand. Test x Parental Class ^b	1.000 (0.006)	1.000 (0.006)	1.000 (0.006)	1.000 (0.006)	1.000 (0.006)	0.997 (0.006)	1.004 (0.006)	1.001 (0.006)	0.999 (0.006)	1.001 (0.006)	0.999 (0.006)	1.001 (0.006)	1.000 (0.006)	1.005 (0.008)	1.001 (0.006)	0.999 (0.006)	0.994 (0.005)
Constant	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
N	32261	28718	32093	31329	28726	30381	28528	31890	28172	31104	32145	31555	28694	32111	30789	28376	29304
R ²	0.460	0.462	0.455	0.466	0.457	0.467	0.473	0.455	0.470	0.457	0.459	0.454	0.455	0.457	0.459	0.469	0.444

Fixed-effects model with cantonal-wave dummies.

Weighted with the inverse of the cantonal numbers of students on the total number of students in the sample.

Additionally controlled for: age, sex, urbanity of school

Standard errors in parentheses (* p < 0.05, ** p < 0.01, *** p < 0.001)

Reference categories: a: Early start of tracking; b: Teacher decision