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# SAFE MOBILITY: UNIVERSITY AFTER TECHNICAL COLLEGE PATHWAY

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# SAFE MOBILITY: UNIVERSITY AFTER TECHNICAL COLLEGE PATHWAY<sup>4</sup>

This paper presents the professional college system as a social mobility channel providing maximum benefit with minimum risk. The analysis of institutional features and changes forming this channel in Russia in the last 15 years has been conducted. An institutional context for the emergence of a social group using "university after the college" pathway is described. Group members take an intermediate position between students reproducing a professional worker status and students reproducing a highly qualified professional status. They also have average school results. An analysis of parents' and students' perceptions of the motives of the choice, benefits, costs, and risks of the educational pathway demonstrates the importance of local context. An alternative educational pathway is less typical for the rural population because of structural constraints; compared to metropolises, in rural areas this choice is typical for higher status groups. A comparison of technical college systems in different countries confirmed that technical colleges in Germany provide social reproduction whereas in Russia and the USA, they operate as a channel of upward social mobility.

#### JEL Classification: I21, D81.

Keywords: persistent inequality, vocational education, institutional context, mobility, relative risk aversion.

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#### Introduction

In post-soviet society there is no stable stratification and accordingly no certain mobility channels. In spite of this, studies devoted to the differentiation and mobility processes in the Russian education system are particularly relevant.

In Russia, most research into inequality in education deals with higher education access (Abankina et al., 2012; Konstantinovsky, 2010; Rozshina, 2005). Entering university after high school is the most popular track in Russia recently. In 2010, 73% of school graduates proceeded to universities/colleges whereas 24% decided to get a vocational education (Andruzshak, Prudnikova, Shugal', 2012). This means that higher education is the most popular educational pathway, although it requires large investments from parents. Among all the educational costs of families, 56% accounted for higher education and only 8% for vocational education in 2010 (ibid, p. 6). The 'High School-Vocational School' track and the 'High School- Technical College' track are the least popular and thus the least studied.

In the context of increasing demand for higher education, it is important to study withintrack differentiation to explain social reproduction through the education system. The above statistics take into account only high school graduates (11th graders), but one usually proceeds to a vocational track after the 9<sup>th</sup> grade. There are no regular statistics about such education pathways on the country-wide level.

In our paper, we consider the 'university after technical college' pathway popular enough to be studied and view it as a remarkable channel of social mobility. We base our insight on Breen and Goldthorpe's theory explaining education choices through the motive of relative risk aversion (Breen, Goldthorpe, 1997; Breen, Werfhorst, & Jæger, 2014).

We firstly present the history of the emergence of this educational track as a response to the social economic and demographic changes, resulting in the changes of institutional contexts. Secondly, we give a detailed description of the social group choosing this risk-aversion strategy in getting higher education as well as their logic of estimation of the gains, costs, and risks of the selected path. We'll show the significance of the formation of this new educational path for the entire education system and one particular social group.

#### Vocational education: institutional context and individual choice

The idea of social status reproduction through educational institutions is prevalent and basic in education sociology research papers. A great deal of mechanisms and barriers are described which consolidate the inequality both in the education system itself and in a wider context at an institutional level. The educational expansion that actively progressed over the entire 20<sup>th</sup> century has resulted in primary and secondary education being nowadays not simply generally accessible, but compulsory for all in most countries. The modern trend, that children are educated higher than their parents (even if they come from the working class), gave a reason to some researchers to hope for a decline in the levels of inequality. This idea was partly confirmed by Mare's research showing that educational expansion does outweigh the persistent effects of social origin on education opportunities (Mare, 1980). This hypothesis, though, was refuted by Blossfeld who, based on the results of international comparative studies, formulated the idea that 'educational inequality is persistent over time' (Blossfeld, Shavit, 1993).

In spite of the first primary (and now also secondary) education levels having become open to each strata of the population, we cannot say that this inequality has reduced or vanished. Merely, it has simply moved one level higher. Under today's circumstances, when higher vocational education is of greater value, the inequality is to a larger extent consolidated at the stage of the change from a general to an academic track. Moreover, it was proved that the inequality between educational strata, which is laid at that level, shows up in modern society even stronger than class inequality (Shavit, Yaish, Bar-Haim, 2007).

The education inequality is maintained not only because of the peculiarities of the education system structure, but also as a result of the actions of individual actors. In this study, we concentrate on one such model – a model by Breen and Goldthorpe – called 'relative risk aversion' (RRA). It explains the reasons for stable level of inequality caused by individual choices of life paths. Its important characteristic is the supposition that in the process of choice an individual takes into consideration not only the results of a rational calculation of potential costs and benefits, but also risks associated with possible social mobility. The principal motive for actors is not an upward social mobility; instead, they aim not to lose the existing family status. One of the first stages at which an individuals' tendency to avert risks becomes apparent is the choice of education because it serves as a mobility lift (Breen, Goldthorpe, 1997).

Breen and Goldthorpe base their theory on the approach by Kahneman and Tversky, who showed that individuals as a whole are inclined to overestimate risks and underestimate the success probability (Kahneman, Tversky, 1979; Tversky, Kahneman, 1981). With regards to education choices, this means that pupils and their families perceive the status reduction risk when attempting a higher education level as insurmountably high, with subjective benefits from such a step not outweighing its subjective dangers. This mechanism, in the opinion of Breen and Goldthorpe, consolidates social inequality: The reproduction of a status, not its increase, is the safest way for each group to survive (Breen, Goldthorpe, 1997). The Breen and Goldthorpe risk aversion theory subsequently found a number of empirical confirmations in different countries (Becker, Hecken, 2009; Davies, Heinesen & Holm, 2002; Hartlaub, Schneider, 2012; Jaeger, Holm, 2012; Need, Jong, 2001; Van de Werfhorst, Hofstede, 2007).

The studies of risk aversion described above as well as concepts explaining class reproduction through tracking in the education system (divided into academic and vocational tracks) describe how social reproduction over generations occurs. From this 'diversion effect' perspective (Shavit, Muller, 2000), the choice of vocational education is regarded as the non-choice of higher education, which reduces the chances of obtaining prestigious professions (Gamoran, Mare, 1989; Ainsworth, Roscigno, 2005). This perspective does not take into consideration another effect from education (some consider it wrongly a converse effect) called the 'safety net' (Shavit, Muller, 2000). From the standpoint of human capital, vocational education is an opportunity to increase one's chances on the labor market and get a more prestigious and well-paid job in comparison with unskilled workers (Arum, Shavit 1995; Taylor, Urwin, 2001).

According to Shavit and Muller (Shavit, Muller, 2000), both diversion and "safety net" effects are inherent in each system at the same time, the prevalence of one of these effects depends on the peculiarities of an institutional context formed in the country. The specialization level of vocational secondary schools, stratification levels of the education system as a whole, and the connection of the education system with employers and production firms are of decisive importance.

The education systems of Germany and the USA are two very different examples that prove this thought. In Germany, where the education system is highly stratified, students start getting primary vocational education at school (Haupt- or Realschule). Meanwhile, in the USA graduates get vocational education after high school at community or technical college (Beach, Grubb, 2012; Cohen, Brawer, 2003).

The Russian education system was based on the German system and is divided into three tracks, too: basic vocational (vocational school), secondary vocational (technical college), and higher education (university). The tracking system is intended to be responsible for the transport of students to a certain social and professional position in the future: in accordance with the level of acquired education they have to become manual laborers, skilled workers, and highly skilled professionals. However, pupils do not choose a track as early as in Germany. In Russia, that important decision is made after the 9<sup>th</sup> grade when the child reaches the age of 15 years. None of the tracks are dead-end – on completion of any of these tracks, education can be continued at an educational institution of another type. After the 9<sup>th</sup> grade one can at first finish vocational school, then technical college, and thereupon graduate from university, although the majority of students confine themselves to only one track.

The education choice after the 9<sup>th</sup> grade is crucial to the overwhelming majority. The difference in the social composition of different tracks has been shown more than once (Cherednichenko, 2005; Konstantinovsky, Voznesenskaya and Cherednichenko, 2014). As noted by researchers, this inequality is partially predetermined. Not only the social status of parents, but the starting educational resource, i.e. type of school finished by adolescents, is of primary importance in the choice of a track (Konstantinovsky, Voznesenskaya and Cherednichenko, 2014).

As a result of the existing differentiations in Russia, as in most countries, graduates of vocational educational institutions gain an advantage over unskilled workers on the labor market. At that, they occupy less prestigious professional positions in comparison with those who obtained a higher education diploma. However, given the similarities between the structures of the Russian and German education systems, an inter-track mobility is being developed in the Russian system under conditions of social changes. Thus, getting higher education upon graduation from technical college is gaining in popularity.

#### Data

An analysis of original data of SESL NRU HSE<sup>5</sup> gathered within the framework of longcontinued research both in rural and urban areas was conducted to describe groups using different education strategies and their motives. It was complimented with an analysis of normative legal acts. The project used a mixed methodology in the combination of qualitative indepth interviews with quantitative survey. Interviews with 80 ninth graders belonging to a rural school and their parents were gathered. Then 500 ninth graders from 18 schools of the same district of Leningrad Region were polled. Finally, a survey of 7,500 pupils from 100 schools of Saint Petersburg, as well as 4000 pupils from 50 schools in the Moscow Region was carried out.

This study was devoted, among other things, to the educational plans of pupils and the social and economic status of their families. These datasets were supplemented with the data from 30 interviews with the heads of vocational schools conducted in Saint-Petersburg<sup>6</sup>. To illustrate the educational aspirations and plans of technical college graduates, the results of the technical college students' surveys conducted in Saint-Petersburg in 2014 (3000 students from 30 technical colleges)<sup>7</sup> were taken into consideration.

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<sup>&</sup>lt;sup>7</sup> The study was implemented in the framework of the Basic Research Program at the National Research University Higher School of Economics (HSE) in 2014.

### **Changing institutional context**

The Russian educational system inherited much from the German original, resulting in 3 basic educational tracks existing therein: primary vocational meaning learning at vocational school after secondary school and giving access to low skilled blue-collar jobs; secondary vocational requiring graduation from technical college after secondary (sometimes) senior school and opening access to mean-level skilled jobs; and higher vocational/academic tracks requiring entrance to university after senior school. Although in recent years the borders between these tracks have become ever fuzzier and more opportunities appeared to improve one's professional skills in different ways, not long ago the choice between technical college and high school was a real choice between the mutually exclusive options, secondary vocational and higher education. This influenced and often keeps influencing families' decisions about the future education of their children, though new opportunities, as we will show hereafter, change this established picture.

Increasing demand for higher education, which serves as a trigger for the entire process described in this paper, has already become an established phenomenon for Russia and for a number of other countries as well. In every country the popularity of higher education is growing as a result of education expansion. In Russia, demand for higher education increased constantly from 1995 till 2005 (Abankina et al., 2012) in spite of both education expansion and the demographic explosion of the 1980s. Since 2005, demand for higher education has decreased as a result of the demographic hole and financial crisis (Abankina et al., 2012).

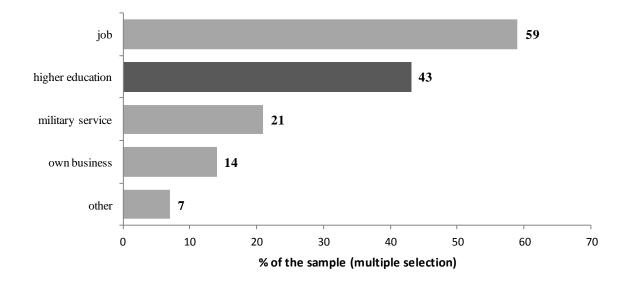
Federal statistics show the year-by-year change in the number of students of different education levels, though is not detailed enough. This allows for the estimation of the popularity of 'technical college' and 'university after technical college' tracks several years ago. The table below represents these statistics compared with the results of our surveys (Table 1).

Federal statistics data	% secondary school graduates entering technical college	% high school graduates entering technical college	% technical college graduates enrolled at the university
Russian Federation	20.0	18.0	35.0
Original data, 2010	% 9th-graders considering technical college	% 9th-graders considering technical college after high school	% 9th-graders considering university after technical college (among those who consider entering technical college)
St.Petersburg	30.5	18.6	30.1
Moscow region	38.7	12.6	34.9
* Federal statistics is taken from Shugal', 2008, p.148. St.Petersburg and Moscow region data is taken from the results of the original survey.			

Table 1. Educational pathways popularity.

According to federal statistics, in 2008 20% of school graduates and 18% of high school graduates went to technical college. Our original data illustrates that about half of the student population are considering technical college after the 9<sup>th</sup> or the 11<sup>th</sup> grade (high school) in St. Petersburg (49.1%) and Moscow Region (51.3%). This greater percentage compared to country level data is due to the fact that students were asked about their possible education choices after school (with multiple choice) in the survey.

Particularly, we were not able to see the share of those entering technical colleges who plan then to continue their studies at university. Preliminary data of survey of St. Petersburg technical college students conducted by SESL in 2014 visually shows that this educational path is actually popular. Summarily, 43% of secondary vocational school students consider further university education as one of their options on completion of their level of education (Fig. 1).



#### Fig. 1. Student's plans for the future, on graduation from technical college<sup>8</sup>.

Originally, the mobility channel to university after technical college was built at the macro-level for college graduates to be able to improve their skills and grow professionally under conditions of a growing demand for a higher education diploma by employers. It was supposed that in such a way an opportunity would be created for those already working at a factory. In time, higher education in shortened programs became ever more popular: pupils leaving school after the 9<sup>th</sup> grade started more actively using this opportunity to enter a technical college, enabling them to be transferred to a higher school. Families started using the existing channel not only to leave school earlier and enter the labor market, but also to have a chance of obtaining a higher education in the end.

<sup>&</sup>lt;sup>8</sup> According to preliminary data SESL research conducted within the framework of NRU HSE basic research program in 2014.

Upon retrospective evaluation of the changes in the education system, it can be asserted that the increased flow of college applicants was also the result of general education reforms that initially were not aimed directly at such a result. The introduction of 11-year compulsory education, which obliges all students in Russia to finish either 11 grades in school, vocational school or technical college, has led to real competition for students between schools and technical colleges. It was particularly topical in the circumstances of a demographic recession.

'Schools, of course, don't want to give up children, to let them go elsewhere. That means schools don't let them out and don't want to. They even don't let us in to allow us to conduct vocational guidance activities' (Deputy Principal of the State Educational Institution of Secondary Vocational Education, Teachers College No. 4, 2010).

The change to per capita financing of schools, which began at the same time, has had its effect, too. The amount of state backing now depends on the number of pupils in school. Teachers were forced to 'keep' their pupils in schools after finishing the 9<sup>th</sup> grade. In the first place it concerned small and rural schools that usually have the highest numbers of pupils leaving school after they obtain basic general education.

'Compulsory secondary full general education was introduced only two years ago. They have sawn the branch they were sitting on. As a result, school is forced to teach everybody until the 11<sup>th</sup> grade ... Formerly, it let them go to vocational schools and technical schools after the 9<sup>th</sup> grade, but when per capita financing and compulsory secondary full education were introduced, school is forced to retain all 9<sup>th</sup> graders, 50% of whom, if seen at the 9<sup>th</sup> grade level, are not able to finish 11 grades' (from an interview with Deputy Principal of the Federal State Educational Institution of Secondary Vocational Education, 'Saint Petersburg Technical College of Management and Commerce', 2010).

The introduction of the unified state examination has had a positive effect on the increase in the flow of technical college applicants, too. College management estimates that before the introduction of the unified state examination, the number of 9<sup>th</sup> and 11<sup>th</sup> graders among technical college applicants was approximately equal. After the introduction of the unified state examination, 9<sup>th</sup> graders became a majority. They started being squeezed out of school by the apprehension of failing in the examination and being unable to obtain the full secondary education certificate.

As a result of complicated transformations in the education system interacting with each other, a substantive group of students leaving the ninth grade to enter a technical college and thereby proceed to a university has been formed. Some of the most popular technical colleges started delivering applicants to the city universities on a mass scale. The percentage of graduates of some St. Petersburg colleges who enter universities could exceed 80%<sup>9</sup>.

The secondary education system could not fail to respond to the increase in demand, so the reorganization of colleges began in 2006. As a result, institutions of secondary vocational education acquired different statuses. Colleges existing at present can be divided into three groups, depending on the status and form of interaction with universities.

The first group consists of those having a legal entity status and not interacting directly with higher education institute. In the absence of interaction, admission to the full-time department takes place on common grounds, based on the results of the unified state examination. All specialists say that technical college graduates do not encounter competition with 11<sup>th</sup> graders who during their study in the high school are specially trained for the unified state examination. So evening and distance study departments are more popular with them because they have easier admission terms (for example, the usual tests in main subjects should be passed, or paid education without entrance examinations is possible). Obviously such colleges are not part of the 'technical college-university' path, as they would rather complicate admission to university than make it easier.

The second group consists of technical colleges that have signed a contract with universities. This format allows college graduates to have only one examination (not in the unified state examination format) so that they can continue their studies at a university in their specialty. They keep the legal entity status at that. Such education institutions work for both alternatives. On the one hand, they cope very well with the function incumbent on them to reproduce the secondary vocational status by training specialists for the labor market. On the other hand, they make admission to university much easier, which attracts representatives of the group striving for higher education with minimum risks.

And the third group that appeared not very long ago are technical colleges that are a result of the reorganization of various education institutions who lost their statuses of being independent legal entities and became part of universities as faculties of secondary vocational education. They function as a stage in continuous education built in the higher education system. University lecturers teach at the faculty. If a technical college graduate wishes to continue his studies in his specialization he is not required to take the unified state examination; it is sufficient, for example, to pass the university tests in the main subjects. As a matter of fact, such colleges practically lose their main function of training secondary-level specialists, instead being

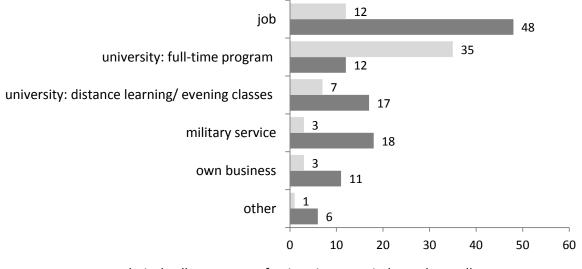
<sup>&</sup>lt;sup>9</sup> According to data from interviews with college management in 2010, 80-87% of Petrovsky College graduates continued their studies at the city universities, for Teachers College this figure amounted to 80%, for Saint Petersburg Economic and Technologic Nutrition College, 60%.

oriented towards work with future applicants of the university. They gather such students and prepare them for the future study at their university.

Thus, in the course of transformations in the education system, the education mobility channel that was initially partially collateral has been institutionalized, and student flows have been reformatted. The education system provides an official path to obtain higher education with reduced risks and an additional guarantee in the form of a secondary special education diploma. This opportunity is to the fullest extent implemented in the format of a special vocational education faculty at a higher school. However, such formats are still unstable at present.

First, admission rules after technical college are still specified by a local act of a separate university. Second, the circumstances of dynamic changes (decline in the mean score of the unified state examination, fall in the total number of applicants, introduction of new requirements to the higher school education quality, etc.) dictate changes in the strategy of admission of applicants including those possessing technical college diplomas.

Such technical college status differentiation leads to the differentiation of educational plans. The further trajectory of technical college graduates depends on the status of their college. According to our original technical colleges' survey (2014), most of the students from technical colleges, which are part of the universities, consider getting higher education whereas students from the technical colleges of other types want to start their labor career.



■ technical college as part of university ■ independent college

#### Fig. 2. Future plans of technical college students (%).

Even large and prestigious universities, such as Saint-Petersburg State University of Economics and ITMO University, have secondary vocational programs. It is difficult to say whether such graduates will be able to compete on the labor market with their counterparts using the direct way of entering university. There is a huge differentiation within universities, so the status of each department or specialization matters a lot. May be the case that a technical college graduate is transferred in the university to non-prestigious specialties and faculties, but there is no data confirming or disproving the hypothesis available.

So as a result of education policies not always being associated directly with changes in the field of secondary special education, a real channel of social mobility was formed to reduce risks connected with the obtainment of higher education. First of all, it is related to the official opportunity to avoid taking the unified state examination many Russian families are afraid of and obtaining a technical college diploma as insurance. These changes found a keen response among representatives of a certain social group.

#### **Educational choice and risk aversion**

Data gathered in the course of the SESL project allows us to obtain a portrait of the social group choosing the strategy of entering a higher school after technical college and establishing principal motives for this choice as well. Based on two samples (2009-2010), we compare these groups in two different regional contexts: the metropolis (Saint Petersburg) and a rural district of Leningrad Region.

In the urban area there are twice as many students considering technical college than in the rural area (27% and 13%). In both cases the number is quite high for those planning to continue their education after technical college by entering a university. In the rural area there are about 50% of such pupils, while in the metropolis 68%. Even if not all of these plans come true, the percentage of those planning to go down that educational pathway is quite high.

The educational system having three basic tracks designates the universally official ways of obtaining different levels of education. However, families having to make a choice see opportunities opened to them in a different way. Their vision of the situation depends to a large extent on their social and economic status, cultural capital as well as structural conditions in which they are situated. On the one hand, not every individual strives for higher education; to many people it is much more important to prepare for military service by acquiring a blue-collar specialty or enter the labor market as soon as possible. This regards first of all lower and middle-class families. On the other hand, many families do not need to seek roundabout roads and try to reduce education costs. They are able to use official opportunities provided by the system – thus mainly upper-class families can obtain higher education. Besides, not all individuals act strategically enough, they often have a lack of knowledge or experience to be able to build complicated ways to achieve goals.

The group using technical college education as a step to guaranteed and quick access to higher education must be quite specific. It is supposed that they are individuals/families possessing certain knowledge and skills, but not sufficient capital to be able to try to enter university after school. The wish to raise their family status by achieving a higher level of education forces them to look for safe ways under the circumstances of the existing system. What, in fact, distinguishes these families?

In the 2009-2010 academic year, 25% of 9<sup>th</sup> graders in both rural and urban areas intending to obtain higher education were going to go to technical college first. Settlement pupils have to go to technical college in the city to implement that educational pathway, so accordingly this choice demands higher costs from rural families than urban ones. Taking into consideration the difference in the social and economic status of inhabitants of two such different areas (of course, the average status of urban families is considerably higher), the absence of differences in the share of those choosing an alternative education pathway are quite surprising.

The rural infrastructure considerably differs from the urban one, which affects the education opportunities of inhabitants very much. The spectrum of education institutions is very wide in the city. There are educational institutions of every level and every quality. In the rural district, even the choice of a school is strongly restricted due to distance between inhabited localities and underdeveloped public transport. Not every district has its own higher school, and there is a minimal number of technical colleges and vocational schools. As a result, country people have to choose: either they agree to the only education opportunity existing in their district or consider alternatives in national areas or the metropolises. In the district of Leningrad Region where our survey and gathering of interviews took place, there is only one vocational school and one college offering specialties that are not in great demand, chiefly for boys. Structural conditions force school-leavers to seek alternatives in the city, which entails high costs and risks: families are afraid of letting 15-year old teenagers out to the big city alone.

The primary reason why students and their families choose the pathway to higher education through technical college is that it is considerably easier to enter university after college. Also, a college diploma provides a guarantee of employment and allows people to work in a decent job while obtaining higher education. In case of failure, it also guarantees a labor market niche.

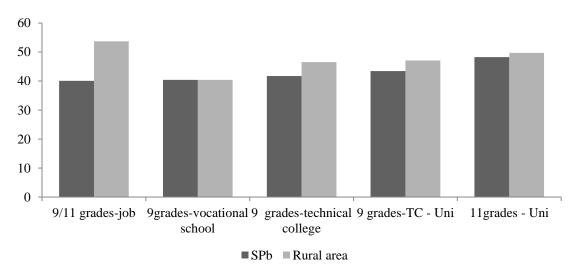
*"And teachers talked us into going to a technical college after the 9<sup>th</sup> grade arguing that after technical college it will be easier to enter university" (9<sup>th</sup> grader, rural school)* 

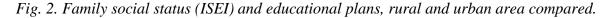
"I will graduate from the technical college with a profession, and after that I can go to the university. Work and study simultaneously" (9<sup>th</sup> grader, rural school)

The same effects of higher education are considered by representatives of different social groups as gains and as losses. Higher education is often called a 'refrigerator' meaning that higher education postpones for a long time labor market entry and prolongs the 'childhood' of

students. It is considered comfortable and advantageous by upper-class representatives who are well provided for, so that they do not hurry their child into the labor market. However, the 'refrigerator' effect seems to be a disadvantage of higher education for middle-class families. It's far more important for them to enter their children into the labor market earlier. Presently, many higher school students work and study simultaneously. This work does not compensate for the loss of profit a specialist with a secondary special education could earn at that age. College education coming before entering a higher school solves this problem. Having a qualification, a student will be able to find a job to earn his living (and partially his family's living) simultaneously with the obtainment of his second education. Such reasoning is obviously topical only for middle (and probably lower) class families, but not for upper-class representatives to whom a blue-collar job signals a descent in social mobility.

The tactics of entering university after technical college are chosen by families with restricted resources. Their social status is higher than the schoolchildren's who want to obtain a vocational education at a vocational school or technical college and enter the labor market. But their status is considerably lower than of those who are going to higher school after secondary school (Fig. 2).





High-status families are able to pay for some additional preparations of their children for university entrance and also have to maintain their status, which is not supported if the child goes to technical college. These differences are clearer in the city, probably because in rural areas even families aimed at going (first) to technical college have to possess financial resources sufficient enough to provide for a student's traveling and living in St. Petersburg. A representative of one of the colleges in St. Petersburg describes families of those entering institutions of secondary education as follows: 'Many families come. It occurs so that a very high percentage of one-parent families is in the city. It makes them decide faster because he has no time to sit around five years long if he has only the mother...'

A good example of urban-rural differences is provided by a professional group of teachers, who are initially best equipped for their education choice, as they deal with the education system on a daily basis. In the city, students from teachers' families choose only the direct 'academic' pathway. Under the limiting conditions of rural areas, they shift from the less risky vocational pathway to tertiary education. Under such external limitations as distance to the city, the necessity to rent an apartment for the child there and let the student live separately from the parents is clear.

The mother's level of education has the same effect as the parents' social and economic status. Schoolchildren whose mothers have primary or secondary vocational education far more often choose to go to university after technical college. This education pathway is not chosen by those whose mothers have higher education or only finished school. In the first case, the family has sufficient resources to choose the more expensive, but more prestigious way – to university after 11 grades, while in the second, on the contrary, there are insufficient resources and a lack of motivation to plan to obtain higher and sometimes also secondary vocational education at all.

Families choosing the tactic of going to higher school through technical college are poorly acquainted with the higher education system; they do not have the required skills to help their child in preparing for admission and to help him further in his studies. Furthermore they probably have no clear idea of their child's chances of successfully graduating from university. At the same time, they are interested in increasing their family status and will not be satisfied with secondary special education. In contrast to parents with secondary (school) education, they still have a sufficient idea of how to use education opportunities provided to them by the system for their own good. Unlike parents with a higher level of education, they lack confidence regarding the positive result of their acts.

Pupils intending to go to higher school after technical college have average school results compared with other pupils (Fig 3). Such schoolchildren learn considerably better than those who do not want to obtain higher education, but worse than those aiming at going to higher school immediately after the 11<sup>th</sup> grade. It probably also increases the lack of confidence of their families: not being the best pupils they cannot guarantee that they will successfully pass examinations and enter university and will then be able to study there for four years until graduation.

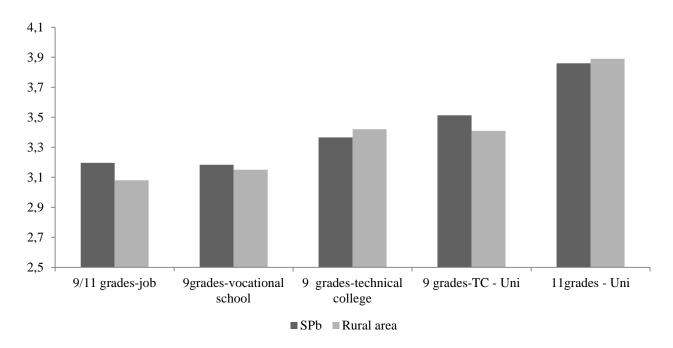
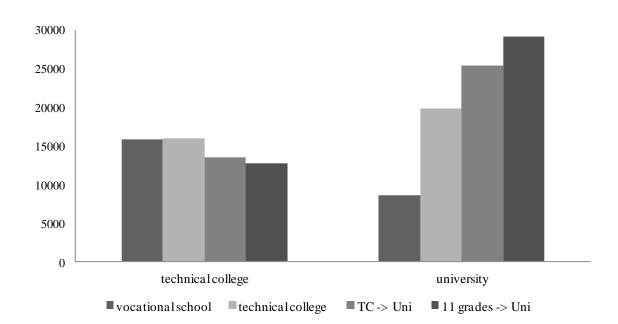


Fig.3. GPA by students' educational plans, rural and urban area compared.

Such an education pathway is chosen by pupils of unspecialized schools (not a gymnasium or lyceum). This is connected with tracks existing in the Russian education system: children from families with a high social and economic status most likely come to specialized schools. Of great importance is also the specific academic culture in such schools where all are aimed at school-leavers obtaining higher education in a standard way. This is sought by families giving their children over to a gymnasium or lyceum. This is also sought by schools because the share of those entering university is one of the key indicators to evaluate its performance. A positive selection occurs: specialized schools are initially chosen by parents aiming for the shortest way of obtaining higher education, because gymnasia and lyceum are considered the best places to prepare for examinations. Such families start preparing for university entrance long before the 9<sup>th</sup> grade, and as a result they do not need to seek alternative tactics.

In order to estimate how valuable and important one or another level of education is to families, in the course of survey, parents of 9<sup>th</sup> graders were asked what amount they would be ready do pay for their child's technical college education and what for higher school education (free-answer question). Obviously those who wanted to obtain higher education directly or through technical college are prepared for appreciably higher costs of higher education and appreciably lower costs of secondary education than families meaning to obtain only primary or secondary vocational education. Accordingly, to those who choose technical college or the higher school pathway, secondary education is not an end in itself, but only an important and convenient insurance on their way to a much more attractive higher education.



*Figure 4. How much would you pay for a year of study in a particular educational track (Rural area data).* 

Entering higher school after technical college is viewed as being less risky. Parents have considerably more confidence in a successful obtainment of the desired education when choosing the college-university pathway for their child. As shown above, this tactic is typical for families with not the highest economic and cultural capital, most often with the mother having no higher education. It means that successful graduation from higher school will lead to intergenerational upward mobility usually associated with high risks. Technical college works separately with students aiming for further higher school education. It prepares them additionally both in the respect of knowledge and in the respect of information about how university education is arranged (which probably none of the family members were ever faced with). In the process of preparation, students have no strong competitors like – upper-class representatives – as they had in school.

According to the obtained statistical data, pupils' confidence in the obtainment of a desired level of education is higher than their parents' confidence. Particularly high is the difference between parents and children who plan to go to university immediately after school. It is probably connected with how parents estimate the costs and alternative possibilities of the education pathway. At that, pupils themselves are to an equal extent confident in the probability of obtaining higher education both directly and through technical college.

"- I: Was it anyhow discussed in your family, to go to the 10<sup>th</sup>-11<sup>th</sup> grades or not to go to

the  $10^{th}$ - $11^{th}$  grades? – R: It was. – I: So what did your parents say? – R: Mom was against (further going to the  $10^{th}$  grade). – I: Did she want you to go to any college after the  $9^{th}$ 

grade? – R: Yes. Because it is easier to be admitted like that" (rural school, a schoolgirl <u>entering  $10^{th}$  grade</u>)

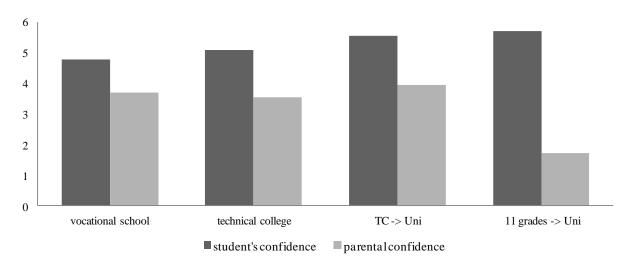


Fig. 1. Assessment of chances to get desired educational level (Rural area)

As a result, the technical college-higher school pathway is taken as a safe one by families choosing it. It provides a student with a guaranteed profession already at the first stage of education and gives more chances of successfully obtaining a higher school diploma that is highly valued by this social group.

As a result of our analysis, we conclude that the university after technical college pathway is an opportunity for families with restricted resources to increase their children's chances of social mobility. It is attractive because it allows the minimization of several risks at once. It gives insurance if the child is not admitted to or does not finish university in the form of a secondary special diploma and work experience. It also circumvents the barrier of university entrance in the form of the unified state examination, avoiding the costs of preparing for it.

During technical college studies in the first year, one can take the senior school program and obtain a secondary full general education diploma. In the course of further studies, technical college students gain not only secondary vocational education, but also work experience in companies, which is a useful advantage in competition for jobs on the labor market. On graduation from technical college, one can go to university, continuing to work. Also, it is possible to reduce the higher school study period by taking into account and re-certifying subjects taken before and hours attended. As a result, the 'college-university' pathway takes the same period of time as the 'school-university' pathway, but a school-leaver can acquire two diplomas (of different levels) and 4-5 years of work experience within the same period.

University study after technical college offers another important possibility: not having to take the unified state examination. At one time, before the universal unified state examination

was introduced, this was a particularly important and influential factor on an education decision (in 2009, pupils after the 9<sup>th</sup> grade began leaving school, lacking self-confidence and not wishing to undergo difficult testing). As evidenced by the education system employees and school-leavers, this factor has been of great importance until now. Another important advantage of the alternative education pathway is that with time one can postpone higher education or abandon it altogether reducing one's risks. A technical college graduate will always be able to find a job and support himself, as parents of such students regularly think.

The pathway 'to university through technical college' is chosen by families where parents have either primary or secondary vocational education. It is important to understand that the difference between these two education tracks is much more critical nowadays than it once was. At the time of education of parents of the ninth graders who participated in the survey, primary vocational education did not yet have such a low reputation as in the early 2000s and didn't strongly differ from technical colleges. The new education pathway is not affordable to everyone at that. Families where parents have only school education do not choose it.

It is interesting that such a great share of families prefer a complicated strategy of choosing a certain technical college and transferring from there to university instead of just choosing a university of lower quality where it is quite easy to enter. We are of the opinion that families choosing the described strategy are interested in increasing their status and that's why they prefer a more difficult way leading to a rather prestigious university, despite not being the most popular in the city. They are probably interested not only in the level, but also the quality of education.

#### Conclusion

The demand for the university after technical college pathway has been around for a long time, and has been reconfigured and institutionalized with time within a changing social context as a social mobility channel to reduce the risks associated with obtaining a higher education. Whenever there is any reorganization from above, the system reaches to a condition that responds to families' needs. It is important that under the conditions of social reproduction through the education system, the signs of which are already observed at the stage of choosing primary school, a mobility channel appears for families who do not possess large resources, but are still motivated to achieve a high level of education. In spite of continuing reforms in the education system, this channel of mobility still exists so that many families use it.

The analysis of our empirical data shows that the university after technical college pathway is popular among students. More than half of 9<sup>th</sup> graders planning to enter a technical college are going to get a higher education. They are characterized by average school results and an intermediate social position between those reproducing the professional worker status and

those reproducing the highly qualified professional status. Parents and students from this social group consider the university after college pathway a relatively safe way of increasing their family status by improving the level of education.

Individuals act differently, depending on locality. More investments are required from rural area families than metropolis families: going to technical college is connected with moving to a new place and the associated expenses, such as renting an apartment. This results in increasing risks, and there are fewer families prepared to take them. Under such conditions, the cultural elite are ready to run risks, because they posses information and are able to calculate not only losses, but also benefits. We claim that the described manner of decision-making fits in with the framework of relative risk aversion theory. From the standpoint of this approach, individuals are inclined to overestimate risks and underestimate the advantages of the alternative under consideration (Kahneman, Tversky, 1979). This phenomenon is seen when comparing the educational choice made by teachers' families in the city and in rural areas. Belonging to cultural elite, they are better informed than most families about the benefits provided by each of the levels of education and the difficulties associated with the obtainment thereof. Most teachers have higher education, and furthermore are (more the others) able to organize their child's efficient preparation for the unified state examination and support them subsequently while studying at higher school. Going to university directly after school is, accordingly, an obvious choice for such families. This is the most reliable way of not decreasing their family status besides the fact that many risks are primordially reduced for these families. However, such a way is the choice of teachers' children in the city, but not in rural area. Taking into consideration additional risks associated with the necessity of moving to the city and still seeking to keep the achieved educational status of their family, they choose the way of going to university after technical college, knowing very well what profits it will bring. Such individual behavioral logic gives us the reason for describing the technical college-university pathway as an example of RRA.

The pathway of obtaining vocational education before higher education is not unique for Russia. A similar pathway was formed in Germany as far back as the 1990s. However, working class students (even those who obtained the *Abitur*) do not use it. As studies show, they avoid higher education by reason of low subjective estimation of their educational attainments and expectations of the high costs of further education (Becker, Hecken, 2009). In Germany, the technical college-university way is opened to gymnasium graduates who acquire *Abitur* and wish to obtain additional insurance before going to university (Hartlaub, Schneider, 2012). In the end, this way is chosen mostly by upper-class representatives who have had sufficient capital to ensure that their child could take an academic school track (which is noticeably longer than

the two other) and pass a difficult final examination. They are, though, not sure enough of the strength and benefits higher education would immediately bring them on the labor market, and therefore they prolong their educational pathway by adding non-obligatory college education. So in Germany the university after technical college pathway is used for the safe preservation of social statuses, while in Russia (as we have demonstrated in this paper) it is the way of upward social mobility.

The American community college system looks more like the described technical college system in Russia. The Russian system should be compared with community or technical colleges in USA with two to three-year periods of study. In the USA, as well as in Russia, technical/community college graduates often enter university. The Californian educational system gives us the most interesting example in this sense, because it has a well-coordinated system for student transfer to the nationalized state level (including the most prestigious universities). For instance about 22% of students from the University of California – Berkeley transferred from technical colleges in 2007. The majority of students using this pathway were born outside of the USA and are highly motivated (Douglass, J. A., Roebken, H., & Thomson, G., 2007, c. 10; Dougherty, Kienzl, 2006). In this way, the American system of mobility channels functions for students who tend to see the risks in direct admission to university after school. Russian technical colleges become like American ones because they g give a safe opportunity for upward social mobility.

The last question to be clarified is the nature of social mobility in Russia after the wellknown transformation. In Russia the social structure was rebuilt after the breakup of the USSR in 1991. Educational and professional statuses obtained in the country of that time by parents of present-day school-leavers though seem to be close to modern ones, but are difficult to compare with them (Shkaratan et.al., 2009). First of all they are about the perceivable prestige of educational levels and professions the notion of which underwent radical changes. This important context could mean that a group that chooses the university after technical college pathway maintains their status rather than increases it (adjusted for the changes occurred). At present, there were no attempts made to compare past and present statuses for more precisely establishing the degree of persistence of social inequality in modern Russia. Thus, our argument considering the function of this social mobility channel and discovered pathway requires additional verification. At that, there is no doubt about the statement that the university after technical college pathway represents the RRA, irrespective of the final goal of such behavior – be it the increase or reproduction of the family status.

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