Anna V. Diachkova, Elena S. Avramenko, Mavzuna Kh. Melikova

Budget, motives and strategies for financial independence of undergraduates

KEYWORDS
financial independence of students;
financial strategies;
student’s budget;
student labor activity;
soft budget constraint

ABSTRACT

Introduction. The problems of scientific analysis, where the subject of study is the financial independence of undergraduates, mainly focuses on two directories: the study of the academic performance of undergraduate and the factors affecting it; financial condition of undergraduate depending on tuition fees. In modern studies, the issues of financial independence of students, their budget are not given due attention. The employment of students is often seen as one of the factors that negatively affect their academic performance, or in the context of forced work caused by high tuition fees.

In today’s pandemic realities, the aspect of the financial independence of students is actualized, while the problem of students’ labor activity during training is of scientific and practical interest as a forced measure to maintain their well-being in order to gain financial independence.

Materials and methods. The survey was attended by: 2-4-year students of the Bachelor’s degree program "Applied Economics and Finance" (38.03.01 Economics) of the Institute of Economics and Management of Ural Federal University was carried out. The total number of students in 2-4 courses on the program is 284.

Results and discussion. As a result of the study, the key motives for obtaining financial independence have been identified, which boil down either to the forced need to find finances, or to the desire to obtain financial independence and the formation of labor and financial competencies; formulated the basic financial strategies of students in relation to budget planning, budget optimization - passive as an orientation towards transfers from parents and the state, active as a search for grant support or going to work; it was found that the problem of choosing between work and study as an additional criterion included opportunity costs, measured as deterioration in academic performance; it was found that significant financial support from parents (family) and its increase with an increase in student spending forms a "soft budget constraint" for a student, reducing the motivation to gain financial independence. It was founded that more than 20% of 2-4-year students have part-time job, while 2/3 of the working students do not “sacrifice” their studies for work. This is due to the fact that the motivation for choosing a job is voluntary. The survey data allowed to conclude that students are focused both on the improving of labor and financial competencies. It was revealed that the main source of income for their budget is transfers from parents (more than 90%) but own earns are less than 6% of the student budget. It should be noted that there was a large range in the students’ income: from 2,500 to 36,000 rubles. This may be due to both the income of the family in which the student lives and the model of financial support of the parents: they admit the independence of students according to their budget or the autonomy of their student children is practically absent.

Conclusion. The results of this study are aimed at comprehending the educational, scientific, labor activity of a student, taking into account the motives for obtaining financial independence, which can be taken into account in the design of individual educational trajectories of students, the development of grant projects and offers of internship, educational loans, which together ensure the strengthening of the financial independence of students.

INTRODUCTION

In the modern world, the share of students in the total population of the country (Percentage of students in tertiary education enrolled in Education programs, both sexes (%)) can range from 1 to 7 % of the total population [1]. In Russia, at the beginning of 2020, 4,068,327 students are enrolled in higher education programs [2], which is just over 2.7% of the population and fits into the conditional cluster of countries in Europe and North America. The scientific community recognizes that students “as a socio-age group can be considered as a force that has a destabilizing effect”, but at the same time, “act as a stabilizing factor” of the socio-political [3, p. 47] and, we add, the socio-economic state in the country.

In this regard, it is important to recognize the issue of the financial condition of students. The financial capabilities of students largely depend on parents, tuition fees, and the system of educational loans in the country. According to Lusardi, Mitchell and Curto, the financial autonomy of students can be a key factor affecting both the financial well-being of each individual and the overall quality of life in the country [4].

Along with this, student performance can be viewed as an imputed (alternative) cost of work during training. By deciding to work, the student reduces his time for study activities, thereby academic performance may deteriorate. This means a decrease in the effective wage rate, and therefore a reduction in the student's budget.

In today's realities of the coronavirus crisis, the aspect of students' financial independence is actualized. The following questions become urgent: do they have to look for work to pay for their education, to what extent do students act as "dependents" in their household? Consequently, the problem of students' labor activity during training is of scientific and practical interest as a forced measure to maintain their well-being or the desire of students to gain financial independence. These are the key questions of the present article.

The purpose of the work is to study the factors affecting the student's budget, to identify the possibilities of financial independence of students based on the data of a survey of students of 2-4 courses of the bachelor's program "Applied Economics and Finance" (Area of studies 38.03.01 "Economics") of the Institute of Economics and Management of Ural Federal University named after the first President of Russia B. N. Yeltsin (hereinafter – UrFU).

MATERIALS AND RESEARCH METHODS

The research is based on key methods of scientific analysis: comparative analysis, incomplete induction, modeling, survey. The study carried out a first round of empirical analysis: questionnaire design, survey conduct, and descriptive statistics. A continuous survey of 2-4-year students of the Bachelor's degree program "Applied Economics and Finance" (38.03.01 Economics) of the Institute of Economics and Management of Ural Federal University was carried out.
For the convenience of interacting with students and prompt collection of information, an online survey form was developed. The article uses data from 251 student questionnaires (the total number of students in 2-4 courses on the program is 284), with the exception of incorrectly (or incompletely) filled forms for statistical analysis. The sample does not include first-year students, since at the moment (the beginning of the first semester) there cannot be an answer to the question about their progress. The questionnaire included 14 questions for students related to personal characteristics (course of study, gender), the structure of their personal budget, free time, academic performance, living conditions. This study includes questions about the student’s assessment of their progress (questions 40, 41 of the questionnaire), taken from the research of E. S. Shmarikhina [5]. The questionnaire includes a question related to quarantine during the period of quarantine measures in order to identify the impact of the current pandemic situation on making decisions about employment. During the questionnaire procedure, there were no violations of the terms of consent to the processing and publication of personal data of students. Note that students' data are not explicitly used anywhere, they are aggregated and given in relative terms.

**Analysis of the Literature**

The study is aimed at studying the academic performance of students, identifying the financial condition of students and the factors that influence it.

In domestic studies, for example, the work of A. S. Shmarikhina studied the factors of academic performance, among which the availability of work for junior students is considered significant [5]. The distraction of a student from studies for work has a significant impact only in junior courses due, in our opinion, to the lack of competence in time management, the ability to distribute efforts between study and work. It can be concluded that the opportunity costs of choosing a job as a deterioration in academic performance are higher in junior years than in senior courses. When the skills to optimize the distribution of time between work and study already appear, as well as the amount of contact (classroom) load among students, the availability of work may not have a negative impact on the result. However, no unequivocal conclusions on this score have been given in the studies.

Meanwhile, in the statistical analysis of P. A. Kanapukhin, V. V. Korotikh, S. Shchekunskikh, among the key factors of academic performance, only the source of funding was taken into account: "The performance of students at their own expense is significantly inferior to the performance of students at the expense of budget funds" [6, p. 35].

O. V. Kotomina believes that interest in the problems of the formation of emotional intelligence in higher education is due to the fact that the degree of development of this psychological personality characteristic has a positive effect on students' motivation for learning, adaptation at the university and on academic results of education. Students who have a high level of emotional stability, the ability to adequately perceive their own and other
people's experiences and manage them, more successfully master professional competencies and, as a rule, are good communicators. Subsequently, such graduates become highly demanded specialists in the labor market [7]. L. Antonucci emphasizes that the emergence of a feeling of insecurity among students, especially because of their relationship with their parents, leads to students looking for additional sources of income [8].

In our study, a student's financial well-being is considered in relation to his emotional state, family relationships and academic performance. Insufficient financial security of the student adversely affects his studies. The logic here is this: being in a difficult financial situation and, in connection with this, being emotionally depressed, the student will look for ways to solve this problem, thereby neglecting his studies.

The key in studying the student budget should be considered the structure of income, where the main sources are help from parents, which we consider as transfer payments, scholarships and personal labor earnings. According to researchers A.S. Jr. Settersten, B. Ray, parental support accounts for approximately 10% of the annual budget for children aged 18 to 21 [9]. Mangan et al. found that more than 1/3 of students' budget consists of material aid from parents [10, pp. 465]. As for expenditures, the main items on them are food, transport, Internet, among others – entertainment, sports, clothes.

In a practical study by Hordysy & Clark, based on interviewing students (at a Northern Red Brick University), they found that additional items of expenditure for British students are interest on the loan, which they have to take to cover current expenses, primarily the rent. Some students, in turn, make savings in the form of deposits [11]. This behavior is aimed at optimizing the budget, intertemporal selection of budget items during study periods and summer months.

Callender & Kemp, based on surveys of more than two thousand full-time students of British universities (1998-1999), compiled the structure of undergraduate budget revenues and expenditures [12] (see the Table 1).

**UK undergraduate budget**

<table>
<thead>
<tr>
<th>Revenues</th>
<th>Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>per cent type</td>
<td>type per cent</td>
</tr>
<tr>
<td>28 family and friends, including parental contributions</td>
<td>living costs 66</td>
</tr>
<tr>
<td>19 student loans</td>
<td>housing costs 21</td>
</tr>
<tr>
<td>27 maintenance grant</td>
<td>participation costs 12</td>
</tr>
<tr>
<td>14 paid employment</td>
<td>on children 1</td>
</tr>
<tr>
<td>6 other miscellaneous income</td>
<td></td>
</tr>
<tr>
<td>3 Access Funds and/or their university's Hardship fund and other student support</td>
<td></td>
</tr>
<tr>
<td>2 social security benefit</td>
<td></td>
</tr>
</tbody>
</table>

It should be noted that twenty years after the Callender & Kemp study [12], the budget structure is almost the same.
Let us supplement the new sources of income that have developed in universities and present the basic model of the student's budget (see the Table 2).

**Table 2**

Budget structure of undergraduate: basic model

<table>
<thead>
<tr>
<th>Revenues</th>
<th>Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>private transfers</td>
<td>food</td>
</tr>
<tr>
<td>parents' money</td>
<td>living and housing costs</td>
</tr>
<tr>
<td>family members’ money</td>
<td>transport</td>
</tr>
<tr>
<td>state transfers</td>
<td>Internet</td>
</tr>
<tr>
<td>bursary</td>
<td>textbooks and stationery</td>
</tr>
<tr>
<td>state or public funds</td>
<td>interest on a loan</td>
</tr>
<tr>
<td>grant</td>
<td>leisure</td>
</tr>
<tr>
<td>own sources</td>
<td>clothes</td>
</tr>
<tr>
<td>wage</td>
<td>shoes</td>
</tr>
<tr>
<td>miscellaneous income</td>
<td>investment in human capital</td>
</tr>
<tr>
<td>interest of a deposit</td>
<td>education</td>
</tr>
<tr>
<td>borrowed funds</td>
<td>sports, arts</td>
</tr>
<tr>
<td>educational loan overdraft</td>
<td></td>
</tr>
</tbody>
</table>

Thomsen & Haaren-Giebel have found that “the main source of income for students is financial support from parents. Here, tuition fees caused an increase in the proportion of students receiving financial support from parents or partners, but only to a small extent (+3 percentage points). The additional financial burden somewhat increases the necessary support from the parents” [13]. This means “soft budget constraints” for students, where higher spending warrants an increase in transfer payments. As a result, students' financial strategy does not change.

It should be noted that when it comes to a student's personal earnings, researchers disagree on the relationship between work and study, which is largely explained by the motives for choosing work activity during study. Let us emphasize that the motives of students' search for work are different: a forced measure to support their urgent needs or a desire to gain their own financial independence. Modern research confirms this idea [8; 14-16]. For example, Hordysy & Clark found that in order to achieve the goal of obtaining financial independence, students "paid" with their personal time, while the time spent on work disrupted sleep patterns, negatively affected their studies, and limited interaction with peers [11].

Based on the analysis of the financial situation of students and the motives of employment, F. R. Safiullina draws conclusions about the motives for students to go to work: financial need to pay tuition fees or personal expenses; gaining experience of financial independence and the acquisition of labor competencies, experience and work skills [14].

Czarnecki, Korpi & Nelson argue that student employment itself may have positive effects and not negatively affect learning. Researchers note that for students from socially disadvantaged families, going to work is forced, since they need to financially support themselves [15].
conclusions are contained in the study by Borjas et al: about 40% of the surveyed students worked 30 or more hours a week; in terms of academic performance, there was a negative trend for financially dependent students (those with student loans) and financially independent students (those who were self-financed). It is noteworthy that no significant differences were found between the estimates of who worked full time and part time [16].

Antonucci notes that more than 50% of the surveyed students cite the lack of support from the state, the feeling of insecurity and insecurity that arises during training due to their relationship with their parents as reasons for choosing employment [8].

Different motives for choosing a job serve as the basis for different financial strategies of students:

- transfer support for parents and / or government;
- search for grant support;
- get a job (part-time gob or summer work) to gain financial independence.

It is important to emphasize that the first strategy reflects the student's passive position in relation to financial autonomy, while the second and third strategies are focused on the active behaviour of students in gaining financial independence. Students can focus on their development, use the opportunities provided by the university and funds for grant support or personal scholarships, without resorting to going to work. As Hordysy, Clark & Vickers found out, this strategy is typical for students from the middle-income group [17].

In a study by Graziosi et al. (2020), conducted with university students (Italy), it was revealed that the strategy of seeking grant support is becoming popular among the student environment, that receiving financial assistance in the form of a grant has a positive impact on the student budget [18].

Of interest is the study of student financial strategies conducted by Christie & Munro, in the course of which it was revealed that students from low-income groups of families tend to go to work because of the search for a livelihood, so they agree to low-paid jobs. It was found that where parents are well provided for their children, most students look for an additional source of income in order to increase independence in making decisions about spending [19].

Antonucci speaks in support of the idea of forced motives to go to work. Due to the lack or insufficient state support or family sources, students need to rely on sources of the labor market, go to work to fill the deficit of their financial resources [20].

It should be noted that parents, the way they are brought up, influences the formation of the financial strategy of students. As Powles notes, the foundations of financial behaviour are laid in the early years [21]. Covarrubias et al. considered the soft and hard forms of student independence [22]. Soft financial independence means significant support from the family, motivating students from such families to financial independence in order to acquire financial competencies. Conversely, strict financial independence suggests that the share of transfers from parents in a student's budget will be small and tend to decrease.

Of course, the financial well-being of the family will have a significant impact on the financial behavior of students. In low-income groups of families, rigid financial independence is the
only option. In families with incomes above average and average, alternatives to choosing soft or hard financial independence may be available, where the main criterion is the educational role of parents.

Wilkins, Shams and Huisman’s study of the relationship between tuition fees and student performance found that “a £ 1,000 increase in tuition fees leads to a 4.4% decrease in university attendance, while an increase in grants and loans leads to an increase in attendance” [23]. This again demonstrates the differences in the motivation for choosing a job.

Practice shows that in foreign universities at least a quarter of all students in senior courses work. For example, Braidford, Houston & Lincoln (2000), a questionnaire survey of students at the University of Northumbria showed: “36.6% of students had a semester job at the time of filling out the questionnaire (while 54% had worked at some time during the academic year before the survey was conducted) ... The average number of hours worked per week was 12” [24].

An analysis of studies from different years has shown that the key motives for students’ choice of work remain approximately the same; no obvious country differences (although the analysis is dominated by European countries) have not been identified.

Next, let us consider how the situation with the financial independence of students in Russian universities is developing in the context of the “New normal” associated with a global exacerbation of the epidemiological situation.

**RESEARCH RESULTS AND DISCUSSION**

In order to solve the research problems, we have prepared a questionnaire, where the first part involves the establishment of the individual characteristics of the interviewed students. The composition and characteristics of the survey participants according to the criteria – gender, training course – are presented in Fig. 1-3.

![Figure 1 Composition and characteristics of undergraduates participating in the survey](image-url)
The distribution of survey participants by year of study (Fig. 1) corresponds to the total number of students enrolled in the programme. Of the total number of respondents, 92.8% of students study on a contract form (Fig. 2), which is due to the quota - there are only 6-7 budget places in each course.

![Figure 2](distribution_number_interviewed_students.png)

**Figure 2** Distribution of the number of interviewed students: budget and contract forms of tuition

The research data allowed us to analyze the academic performance of the students participating in the survey (Fig. 3).

![Figure 3](academic_performance_students.png)

**Figure 3** Academic performance of students participating in the survey
The program in which students are trained is of an applied nature, focused on practical activities. The educational process includes master classes with corporate partners, educational excursions to enterprises. There are also proposals from partners-employers for the employment of students. It is understandable that more than 20% of 2-4-year students have part-time job (Fig. 4), while 2/3 of the working students do not “sacrifice” their studies for work. In our opinion, this is due to the fact that the motivation for choosing a job is voluntary.

**Figure 4** Involvement of students in labor activity

Let us consider the relationship between the employment of students and the year of study at the university (Fig. 5).

**Figure 5** Distribution of the number of employees by years of study
The research showed that junior students are completely immersed in the educational process. So, out of the respondents, only nine 2nd year students work. Fourth-year students, having a different academic classes, are focused on finding a job, therefore, among all working students, the majority are fourth-year students.

The survey data allowed us to conclude that students are focused both on the acquisition of labor competencies and on the acquisition of financial independence. It was revealed that the main source of income for their budget is transfers from parents (Table 5), and students are not independent economic agents, but are only preparing to become them.

It is interesting for the purpose of the research to establish what influence the pandemic situation had on the student's decision to go to work (Fig. 6). Among those respondents who work, no obvious dependence on the quarantine situation has been identified. It is possible that those who found a job during quarantine were motivated by the fact that going into the distant learning format gives them greater freedom in the allocation of their study time, design of an individual learning path.

![Figure 6](image)

**Figure 6** Labor activity of students during the period of quarantine measures

Average income is understood by students as a budget that they have at their disposal. Information of income was provided by all students, including those who had no earned income.

**Table 4**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>12271.15</td>
<td>10225.96343</td>
<td>10001</td>
<td>12000</td>
</tr>
</tbody>
</table>

Descriptive statistics of income (Table 4) showed that, on average, students have a larger amount than the subsistence minimum in the Sverdlovsk region [25]; therefore, in the conditions of the model of “hard” financial independence according to Covarrubias et al.
they could provide themselves at a minimum level. Most often, students named the amount of 12 thousand rubles, which they have on a monthly basis (Table 4). It should be noted that there was a large spread in the income of students: from 2,500 to 36,000 rubles. This may be due to both the income of the family in which the student lives and the model of financial support of the parents: they admit the independence of students according to their budget or the autonomy of their student children is practically absent. Data on the structure of students' income are presented in Table 5.

<table>
<thead>
<tr>
<th>Income</th>
<th>per cent, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>money from parent and relatives</td>
<td>91.5</td>
</tr>
<tr>
<td>bursary</td>
<td>2.6</td>
</tr>
<tr>
<td>earns</td>
<td>5.9</td>
</tr>
</tbody>
</table>

It is obvious that students are financially dependent on their parents or family. Perhaps this is a feature of the sample: on the Applied Economics and Finance programme, almost all students from medium and high-income families study on an off-budget form. In this respect, the data of answers to the question "How often do you have to save" are indicative. According to the survey, the average value was 3.25, while the rating scale varied from “1 - often” to “5 - I don’t think about it”. In our opinion, this indicates a “soft budget constraint” for students. In general, as shown by empirical research, students have little financial independence, but are focused on increasing it.

**CONCLUSION**

According to the results of the theoretical and empirical research, it can be noted that in scientific research the problems of students' labor activity during training are focused on identifying the relationship between the social status of a student (low, medium and high-income groups) and going to work. Many studies have noted: the forced need to start work is characteristic of students from low- and medium-income groups; employment tends to negatively impact academic performance.

The main motives of students when choosing labor activity are the forced need for their own support, the desire to gain financial independence, the desire to acquire labor and financial competencies.

The study identified the main financial strategies: passive - reliance on transfer support from parents, government, university; active - seeking grant support and / or going to work.

The academic performance of students is considered as the imputed (alternative) costs of work during training, which means that they reduce the effective wage rate, as a result, they reduce the motivation to work.
The key sources of students' income are identified: transfers from parents and the state, grants, own income. Financial support to parents due to an increase in tuition fees or an increase in students' needs in relation to their expenses creates a "soft budget constraint" for the student, thereby reducing the motivation to gain financial independence and go to work part-time during the period of study at the university ...

The criterion for choosing between work and study should be called the opportunity cost, measured as a deterioration in academic performance, which reduces motivation to work in the younger years and does not significantly affect the graduation course.

The obtained conclusions about the motives and financial strategies of students should be borne in mind when designing individual educational trajectories of students, in the development of grant projects, internship, as well as educational loans, which ensure the strengthening of the financial independence of students.

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INFORMATION ABOUT THE AUTHORS

1. **Anna V. Diachkova** (Russia, Ekaterinburg) – Associate Professor, PhD in Economics, Head of the Bachelor Programme «Applied Economics and Finance», Associate Professor of the Department of Economic Theory and Economic Policy. Ural Federal University named after the first President of Russia B.N. Yeltsin. E-mail: a.v.diachkova@urfu.ru. Scopus ID: 57211156711

2. **Elena S. Avramenko** (Russia, Ekaterinburg) – Associate professor, PhD in Economics, Associate Professor of the Department of International Economics and Management, Vice-Director of Academic Affairs. Ural Federal University named after the first President of Russia B. N. Yeltsin. E-mail: e.s.avramenko@urfu.ru. Scopus ID: 56582172000

3. **Mavzuna Kh. Melikova** (Russia, Ekaterinburg) – Student of Graduate School of Economics of Management. Ural Federal University named after the first President of Russia B.N. Yeltsin. E-mail: melikova_mavzuna@mail.ru

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