

Increasing University Enrollment as Crisis Response

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Abstract We develop a proposal for expanding university enrollment in Bulgaria by 30,000 students (or about 12% over 2008 enrollment). This is done by creating a student loan program, guaranteed by the government. Student loans, offered competitively by commercial banks, would cover up to 50% of the cost of education. The remainder is covered by direct government subsidies and household income. The proposal is budget neutral – the government spends as much money on university education as in previous years. The program has another benefit: the expansion of credit markets. Such programs have been used successfully elsewhere to reduce unemployment during economic crises, and to boost future productivity.

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Introduction

At the onset of economic crises, the three main goals of governments are clear: keep unemployment low, keep unemployment low and keep unemployment low. While distress comes in various forms - falling exports, drying credit, stalling construction – ultimately it results in large job losses. These in turn spread the pain of the economic downturn, and are especially problematic when concentrated geographically. Governments have designed social safety nets to alleviate the ill effects of job losses. But there is no program that is as effective at addressing unemployment as keeping people employed in the first place.

The fastest and most significant way to boost employment during crises is to put more money in the hands of employers, so they can avoid firing workers. This is best done by tax stimulus. Tax stimulus works fast – unlike fiscal stimulus – and is immune to waste due to mismanagement or corruption (Angelov and Djankov, 2009).

But tax stimulus is not sufficient, since it does not address the issue of people who are just entering the workforce. Say you are graduating from high school or university in a crisis year. Your chances of finding a job are limited. If you don't find one, after the crisis blows over you are forced to compete with new graduates. Prospects look dim.

Unless you use the downturn years to improve further your education and increase your future productivity. Indeed, during past crises enrollment in graduate schools in the United States swelled with over 2 million more students. Continued education is an effective crisis response, since it keeps you out of unemployment and also allows you to better your job alternatives.

This paper develops a proposal to expand university enrollment in Bulgaria by 30,000 students (or about 12% over 2008 enrollment). This is done by creating a student loan program, guaranteed by the government. Student loans, offered competitively by commercial banks, would cover up to 50% of the cost of education. The remainder is covered by direct government subsidies (as is currently the case) and household income.

The proposal is budget neutral – the government spends as much money on university education as in previous years. The extra leverage comes from the establishment of student loans. This also has a secondary benefit: the expansion of credit markets. A hypothetical calculation suggests that the costs to students are reasonable: after graduation a student who has found employment would pay less than 10% of her salary to pay out the loan over a ten-year period. The program can be targeted more narrowly to boost enrollment in particular fields, for example engineering or horticulture. It can also be fine-tuned so the government funds fully particular groups of students, for example those with top high grades.

The paper is organized as follows. Section 1 describes the university enrollment in Bulgaria in 2007/2008. Bulgaria is chosen to illustrate this point due to the availability of data. Section 2 outlines a proposal to create a student loan program, partially guaranteed by the government. Section 3 concludes.

1. University education in Bulgaria

In the academic year 2007/2008, there were 210,000 university students in state institutions, and another 55,000 in private colleges and universities. Total enrollment was 265,000.

For state universities, the national budget gave subsidies of 420.3 million leva. In addition, Sofia University received a subsidy of 6.6 million leva, students received a 10 million leva transport

subsidies (railroad and bus service), and about 5 million leva in cafeteria and dormitory subsidies. Altogether, the state paid 442 million leva in 2007/2008.

In addition, students paid about 100 million leva in state university fees, and another 100 million leva on dormitories, rent, books and food. Altogether, the average student cost 3,000 leva a year to complete her education. We assume that education in private universities cost a similar amount per student. Hence the overall spending on university education in Bulgaria was approximately 805 million leva, about 1% of GDP.

2. How to Increase Enrollment

Since we know how much the annual cost for an extra student is, we can calculate the cost of increasing enrollment by, say, 30,000 students. It is approximately 95 million leva: 3,000 leva each plus some extra money for investment in classrooms. So the total cost of university education becomes 900 million leva, if tuition fees do not increase.

To increase enrollment, a new student loan program can be introduced, paying up to 50% of the educational cost. The student loans will be partially guaranteed by the state (using 10% downpayment as collateral). Next, the state pays 40% of every student's costs as subsidy to the university the student is enrolled in (either public or private). The remaining 10% are covered by the student herself. If the student has sufficient financing, she does not need to take any credit.

Students are free to enroll in any university – depending on entrance exams and preference. Universities are allowed to set their enrollment fees and the number of students (within the limits of their quality accreditation). They become responsible for running the cafeteria and dorms – these become property of the university. As part of this proposal, universities can be ranked on quality, for example using statistics on their former students' wages in the labor market.

The liberalization of university fees is likely to result in some increase – assume 10%.² The student loan program would cover up to 500 million leva a year. The state guarantee comes with a 10% (50 million lev) collateral. The state also gives a direct subsidy of 40% (400 million). In total, even after price liberalization, the state budget spends 450 million, or the same amount it spent in 2008. The amount may even be somewhat smaller, if some students choose not to take out loans.³

The standard debt contract has a 10-year term, with a grace period for the duration of studies (so for a first-year student who stays at the university for 5 years, it will be 5 years grace period, followed by 10 years of payments). If the student leaves the university, he starts paying immediately, unless this is a maternity or sickness leave.

Banks may vary their terms, including interest rate and duration; and students can choose which bank to borrow from.⁴ The money is paid out to the university each semester, and can cover tuition, books,

² According to a survey of university presidents in 2006, higher fees may be necessary, if matched by correspondingly higher quality.

³ A May 2008 law stipulates a similar student loan program. However, it caps the interest rates commercial banks can charge at 2 percentage points above the central bank's rate – or about 5.9% now. This is about half of the market rates at present (BNB 2009). A second issue with the law is the heavy involvement of the Ministry of Education in selecting banks to participate in this program.

⁴ If the crisis is deep and commercial banks do not have sufficient liquidity to finance the student loan program, the government can borrow money from either the World Bank or the EBRD. This money will still be channeled through commercial banks, to ensure competition in the loan offers.

dormitory and cafeteria. If another bank were to offer a better deal, the loan can be re-financed at the student's initiative.

An example may clarify what the burden on the student would be. After finishing a master's degree, Ivan has accumulated 11,000 leva in debt. Using the debt calculator on website www.fincity.bg (used for mortgage payments – a similar financial instrument to the one proposed here given the government's student loan guarantee), we show that a 10-years term of repayment amounts to monthly cost of 140 leva.⁵

In 2008, the average salary was 500 leva (this is probably an underestimate, given the large share of the informal economy).⁶ Employees with university degrees receive a higher salary – around 800 leva (table 1).⁷ Assuming an annual salary increase of 8%,⁸ we calculate that by 2018 (the middle of the repayment period) the average salary would be 1600 leva. The monthly debt payment would be 140/1600 or 8.8% of the former student's income on average during the duration of the debt term. Even when lower initial wages are assumed, the credit burden remains low – lower compared to the 100% wage premium for university degree holders. It can be even lower if a longer loan term is chosen.⁹

Table 1: Scenarios of Monthly Payments

Monthly wage (leva)	650	800	1000
Annual increase	8.0%	8.0%	8.0%
Monthly wage (2018, leva)	1299	1599	1999
Monthly installment as share of wages	10.8%	8.8%	7.0%

Source: Authors' calculations.

These calculations are conservative, since they do not take into account the effect of the informal economy on average wages, assume a smaller-than-previous growth in wages, and use the current high interest rates for the whole repayment period. In addition, students may not all need to borrow money to finance their education.

3. Conclusions

During severe crises economic policy's main focus is on employment-generating reforms. Part of these reforms need to address the needs of new entrants on the job market. The proposal for a student loan program, developed in this paper, does exactly that. It has other benefits as well: it expands the credit market, while offering some public support through a partial credit guarantee. The program can also be fine-tuned, to address specific vocational needs – for example engineering education. Finally, the proposed program does not cost the budget extra money: it operates within the existing budget for higher education.

⁵ An effective interest rate of 10.55% per year in leva leads to a monthly payment of 142 leva. An effective interest rate of 9.41% in Euro – a monthly payment of 135 leva. These rates are currently high because of the crisis – they were 6-8% per year in June 2008 and will probably return to that level by 2011.

⁶ World Bank (2008) estimates gray economy of 30-35% of GDP.

⁷ According to 2006 data by the National Statistics Institute, the average wage for workers with higher education was 59% higher compared to the national average wage and 100% higher compared to average wage for workers with secondary education.

⁸ The average annual increase of wages between 2000 and 2008 is 10.6%.

⁹ A 15-years repayment terms amounts to a monthly cost of 117 leva. The average salary would be 2014 leva (in 2021) so the former student will be paying 6% of her monthly salary to cover debt payments. A 20-year loan can be repaid by around 100 leva monthly repayment.

The proposed program increases access to university education for students from poor families, as they will need to cover only 10% of the education costs out of pocket. It also puts the student at the center of the university educational system. The use of credit as a partial funding mechanism incentivizes students to perform better, as previous studies show that they respond to free education by decreasing their effort (Şahin 2004). Finally, this proposal will encourage universities to be more responsive to students' and market needs. In this way, enrollment will expand but also the fields where market demand is highest will expand proportionately more. The job market will be used as a signal for the number of students in each faculty.

Investing in education is a good crisis response, and it has long-term benefits in increasing the productivity of the working population. This, in turn, is the main factor of future prosperity.

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