

Bajkalská 25, 827 18 Bratislava 212

Tel: +421-2-58 233 447 Fax: +421-2-58 233 487

www.governance.sk

### Student Loan Scheme in Bulgaria

A model of shared financing of higher education system for improving equity, access and quality in a financially sustainable mass higher education system

Dr. Berlinger Edina, PhD
Dr. Gilly Gyula MD, MSc
Renata Kralikova, MA
Assoc. Prof. Dr. Anna-Maria Totomanova, DSc

6th of March, 2008

### **Table of Contents**

DETAILED TABLE OF CONTENTS	3
Summary of the main conclusions on the Bulgarian proposal	8
PART I. THEORETICAL BACKGROUND	10
1.) Why higher education matters at all?	10
2.) Expansion to a mass higher education, while improving its quality in a financially sustainable way	12
3.) Lisbon strategy – official manifestation of the theory	13
4.) Conclusions from theoretical and official arguments - main policy objectives related to higher education	17
5.) Why tuition fees and loans?	21
PART II. STUDENT LOAN DESIGN	26
1.) Core Characteristics of Well-designed Student Loans	26
2.) Loans have to be large enough and universally accessible	26
3.) Risk adjusted interest rate - no untargeted, blanket interest subsidy	28
4.) Repayment mechanism must be efficient, equitable, must not deter access to loan and must be capa of being implemented – The Income Contingent Repayment	ble 32
5.) The scheme should have the capacity to bring in private money in large enough scale $-$ i.e. it should classified as non-public (private) according to EUROSTAT classification rules	l be 49
PART III BUSINESS MODEL	58
1.) Funding and risk-sharing	59
2. Customer service and administration	66
3. Collection of repayments	67
4. Professional and political regulation and control	69
5. Putting it all together: the institutional model	69
Supplementary Section to PART III.	74
PART IV EXPERIENCES ON STUDENT LOAN SCHEMES AND A COMPARATI ANALYSIS	VE 78
1.) Size of scheme (eligibility for the loans)	<b>78</b>
2.) Type of expenses covered	80
3.) Repayment	81
4.) Subsidisation, grace period	83
5.) Efficiency of the loan scheme	86
6.) Administration of loans – Institutional set-up	87
Summary of the main conclusions on the Bulgarian proposal	92
ANNEX	94
Answers to the specific questions raised at the Workshop on the Presentation of the Report on $26^{th}\mathrm{Ma}$ 2008 in Sofia	rch, 94

### **Detailed Table of Contents**

DETAILED TABLE OF CONTENTS	3
Summary of the main conclusions on the Bulgarian proposal	8
PART I. THEORETICAL BACKGROUND	10
1.) Why higher education matters at all? 1.1.) Strategic response to the challenges imposed by the technological change, demographic problems, and global competition 1.2.) Increased lifetime prospects for individuals, increased lifetime earning potential, better job prospects	10 10 11
2.) Expansion to a mass higher education, while improving its quality in a financially sustainable way	12
3.) Lisbon strategy – official manifestation of the theory 3.1.) Strategic importance of education 3.2.) Improving investments while widening participation 3.3.) Reducing the funding gap and make funding work more effectively 3.4.) Universities on expansion, quality, access and funding	13 13 14 16 16
4.) Conclusions from theoretical and official arguments - main policy objectives related to higher	
<ul> <li>education</li> <li>4.1.) Main conclusion and challenges related to higher education policy</li> <li>4.1.1.) All European higher education systems have a common major problem: after decades of underfunded, the expansion per capita expenditure has decreased, which has also undermined the quality higher education</li> <li>4.1.2.) Long term financial sustainability and level of public spending does matter in all countries – Bulgaria cannot be an exemption</li> <li>4.1.3.) To increase spending on higher education to 2% of GDP according to the Lisbon Strategy, a mechanism for bringing in private sources is needed which does not jeopardize access and equity</li> <li>4.1.4.) Four main objectives should be achieved: access, quality, mass system and increasing expenditure 2% of GDP</li> <li>4.1.5.) A well-designed student loan scheme may solve the problems but only if it has some core characteristics</li> <li>4.1.6.) Money in itself will not improve quality. Other measures are also needed</li> <li>4.1.7.) Additional targeted assistance is needed for youngs with lower socio-economic background who underestimate the real value of a degree and are more debt averse</li> <li>4.2.) What is needed is a strategy, which improves access, equity, and quality and brings in enough resource for higher education in order to meet the aims of the Lisbon Strategy</li> <li>4.2.1.) Deferred (and variable) tuition fee</li> <li>4.2.2.) A student loan which is accessible and affordable for all students, should not deter disproportionately young people from lower socio-economic background</li> <li>4.2.3.) Targeted subsidies and assistance for those who are in need – addressing both pecuniary and information poverty</li> <li>4.2.4.) Universities are free (within sensible, wide enough limits) to set variable fees</li> </ul>	17 18 to 18 19 19
<ul> <li>4.2.4.) Universities are free (within sensible, wide enough limits) to set variable fees</li> <li>4.2.5.) State interventions for improving quality e.g. through quality assurance systems, and by linking finance to the choice of students, quality indicators and outcome indicators of the universities</li> <li>4.2.6.) Fostering competition for improving quality – what we do mean and we do not mean by this</li> <li>4.2.7.) Providing information on the outcomes, potential level of earning and employment opportunities luniversities and degree programmes in order to improve information on making informed choices by students</li> <li>5.) Why tuition fees and loans?</li> <li>5.1.1.) Social and private benefits of higher education: a case for sharing the cost of higher education – the benefit principle</li> <li>5.1.2.) Relying entirely on tax funding is inequitable</li> <li>5.1.3.) Serious access problems occur if students have to pay for higher education when student's-ability-to-pay principle is violated?</li> </ul>	20 20 by 21 21 21 he 22 22

5.1.4.) A universally accessible, well-designed, large enough student loan scheme can bring together the	e
ability-to-pay principle with the benefit principle	22
5.2.) Why student loans at all – possible sources of private money? 5.2.1.) Family resources – extensive reliance on it is neither desirable, nor equitable, harms access and	23
inefficient	24
5.2.2.) Student earning while a student – excessive reliance on it may undermine the objectives of	
education: working activities compete with study time and leisure activities	25
5.2.3.) Employer contributions - contrary to popular beliefs they are likely to be small	25
5.2.4.) Entrepreneurial activities by universities - contrary to popular beliefs these frequently yield little no net revenue	e or 25
5.2.5.) Gifts - might be useful potential source at the margin, but should not be relied on excessively	25
5.2.6.) Student's future earning, i.e. loans: the only instrument with the potential to bring in resources of	
large scale into higher education in an equitable way	26
PART II. STUDENT LOAN DESIGN	26
1.) Core Characteristics of Well-designed Student Loans	26
2.) Loans have to be large enough and universally accessible	26
3.) Risk adjusted interest rate - no untargeted, blanket interest subsidy	28
3.1. Interest subsidy is expensive for the tax-payer	29
<ul><li>3.2. Interest subsidy is highly inefficient</li><li>3.3. Interest subsidy is highly inequitable</li></ul>	31 31
3.4. A positive real interest rate releases resources for higher education	31
4.) Repayment mechanism must be efficient, equitable, must not deter access to loan and must be capa	ıble
of being implemented – The Income Contingent Repayment	32
4.1. Two ways of organising loan repayments	32
Conventional, mortgage style repayment Income contingent loan repayment	32 32
4.2. Capital market imperfections in investing in human capital – lack of information on the future of	32
individuals	33
4.1.1. Nor the student, neither the bank has information on the future of a particular student	33
4.1.2. There is no security – neither the qualification nor the brain of the student can be sold	34
4.1.3. Demand side: student borrowing is inefficiently low 4.1.4. Supply side: lending for student is inefficiently low	34 34
4.3. Mortgage type (fixed term) repayments – advantages, disadvantages	35
4.3.1. Advantage – costs of the loan is transparent to the student	35
4.3.2. Generally inefficient – based on a business model with physical collateral	35
4.3.3. Inefficiently high risk premium necessitates interest subsidy – tendency for high default rates	35 35
4.3.4. Mortgage type repayment harms access and equity 4.3.5. Mortgage type repayment necessitates an income treshold which makes administration more	33
demanding than it has initially been planned	35
4.3.6. Income threshold necessitates a permanent ability to test individuals actual income	37
4.3.7. Income threshold creates poverty-trap and weakens repayment flow	37
4.3.8. Poverty-trap creates incentives for avoid repayment and increases default losses 4.3.9. Banks are specialised in short-term loans with physical collateral – they are not experts in collect	38
long-term unsecured loans	g 38
4.3.10. Mortgage type repayment turns many people with temporary financila problems into defaulters	
thus it unnecessarily increases default losses	39
4.3.11. Lack of security necessitates state guarantee – which causes EUROSTAT classification problem	
<ul><li>4.3.12. State guarantee creates incentives leading to default losses</li><li>4.3.13. Mortgage type indebtedness affects negatively other borrowings</li></ul>	42 42
To sum it up: mortgage type repayment is a sub-optimal solution	43
4.4. Income contingent repayment – advantages, disadvantages	43
4.4.1. An income contingent loan (ICL) is radically different – designed explicitly to meet the needs of	
student loan system	43
4.4.2. ICL addresses capital market imperfections, namely the lack of security which plagues mortgage type repayments	43
4.4.3. Income contingent loans protect the student from excessive risks – in-built insurance against inal	
to repay	43

4.4.4. In-built insurance against inability to repay – not only improves access and handles debt averabut also eliminates large administrative burdens	sion, 44
4.4.5. Income contingency focuses on the right income: students future income rather than present	
(parental) income when a student	44
4.4.6. Income contingent loans protect borrowers, thus contribute to equity	45
4.4.6. Income contingent loans protect lenders – a precondition for bringing in private money 4.4.7. Income contingent loans bring together the benefit priciple, ability to pay principle and social	45
insurance principle	46
4.4.6. Income contingent loans have no negative effect on taking out other loans 4.4.7. Design aspects of income-contingent loans	47 47
4.4.8. Disadvantages of income-contingent loans	49
5.) The scheme should have the capacity to bring in private money in large enough scale – i.e. it sho	
classified as non-public (private) according to EUROSTAT classification rules	49
5.1.) EUROSTAT classification criteria	49
5.1.1.) Who designs the scheme and who sets the rules: government or a private entity	50
5.1.2.) Who decides whether a student is eligible, for example, can a private lender refuse to lend so	
whom he regards as a bad risk?	50
<ul><li>5.1.3.) Who bears the risk of default?</li><li>5.1.5.) Where does the money come from?</li></ul>	50 51
5.1.6.) The 50% rule: if the state pays more than 50% of the running costs of an institution, the institution,	
activities (i.e. the entire scheme) should be classified as public.	51
5.2.) Ways for fitting into EUROSTAT criteria	52
5.2.1.) The 50% rule issue	52
5.2.2.) Transfer of risk to private lenders	52
5.2.3.) Transfer of risk to the (cohort of) borrowers	53
5.3.) Built in safeguards – rather than state guarantee (except the risk which are the sovereign risks by	tne 53
state e.g. social policy risks) 5.3.1.) Safeguard 1: A secure and robust repayment mechanism - both in quantitative and qualitative	
5.3.2.) Safeguard 2.: Built-in insurance against default - cohort risk premium is calculated so that the	
as a whole repays 100% of its borrowing.	55
5.3.3.) Safeguard 3: Adjustable mechanisms	55
5.3.4. Safeguard 4: Income contingent repayment - collection of repayment ideally piggy-backed int payroll deduction mechanism	to the
PART III BUSINESS MODEL	58
1.) Funding and risk-sharing	59
1.1.) Financing needs	59
1.2.) Transformation of cash flows, risk and return	61
1.2.1.) Transformation of cash-flow: 1.2.2.) Transformation of Risks and Return	63 63
1.3. Providing financial funds	65
•	_
2. Customer service and administration 2.1. Information and marketing	<b>66</b>
2.2. Processing of documents and data	66
2.3. Running of bank accounts	67
3. Collection of repayments	67
3.1. Repayment rules	67
3.2. Role of tax authority	68
4. Professional and political regulation and control	69
5. Putting it all together: the institutional model	69
5.1. Delegation of tasks	69
5.2. "Retail Bank model" versus "Specialised Institution model"	70
5.3. Illustrating the functioning of an existing ICL model (Hungary)	71
Supplementary Section to PART III.  Economic environment	<b>7</b> 4

PART IV EXPERIENCES ON STUDENT LOAN SCHEMES AND A COMPA ANALYSIS	RATIVE 78
1.) Size of scheme (eligibility for the loans)	78
2.) Type of expenses covered	80
<ul><li>3.) Repayment</li><li>3.1.) Mortgage type loans</li><li>3.2.) Income contingent repayment</li><li>3.3.) Mandatory Income Contingent Repayment</li></ul>	<b>81</b> 81 81 82
4.) Subsidisation, grace period 4.1. Costs of default 4.2. Costs of administration 4.3. Interest rates 4.4. No interest payment during the study and grace period 4.5.) The issues related to interest subsidies 4.6. Extended repayment horizon	83 83 84 84 84 85
5.) Efficiency of the loan scheme	86
<ul> <li>6.) Administration of loans – Institutional set-up</li> <li>6.1.) Role of the government</li> <li>6.2. Specialised institutions versus retail banks</li> <li>7.) Position of student loan scheme in correlation with other instruments for student support</li> </ul>	87 87 88 89
Summary of the main conclusions on the Bulgarian proposal	92
ANNEX	94
Answers to the specific questions raised at the Workshop on the Presentation of the Report on 2 2008 in Sofia  1.) Student Loan Application process in the Hungarian system  2.) Disbursement and instalments of loans for tuition fees and for living costs  3.) Set up costs of the Student Loan Company  4.) What does the loan include in terms of approved expenses?	<b>26<sup>th</sup> March,</b> <b>94</b> 95 96 97

#### Introduction

- (1) The EU Affairs and International Financial Institutions Directorate of the Council of Ministers has requested a consultancy service for the Ministry of Education and Science (MES) of the Republic of Bulgaria on Designing a Student Loan Scheme as a part of a Japanese PHRD Grant (TF05777) for supporting the preparation of the second phase of an ongoing three-phase World Bank Social Sector Institutional Development Policy Loan (SIR DPL 2). As a result of the tendering process the Slovak Governance Institute has been assigned to execute the current consultancy project.
- (2) The objectives and scope of the consultancy project has been defined by the Terms of Reference (ToR) reference number MES-4 as follows: "the purpose of this assignment is to help design a student loan scheme as a prerequisite for the realization and condition for the improvement of the arranged by the Higher Education Act model of shared financing of higher education and above all in the context of the tendencies of popularization of higher education and the provision of equal access to higher education principle. The main purpose of the model is to provide opportunity for every talented person to acquire higher education in compliance with his/her individual plans, abilities and ambitions regardless of his/her family, social and economic status which responds to the current needs of the Bulgarian higher education system, with the aim of increasing participation rates in higher education in a financially sustainable way while ensuring that high quality secondary graduates are not prevented from accessing higher education because of financial constraints."
- (3) This report has been prepared by the team of the SGI in cooperation with our Bulgarian counterparts on the basis of the information and documents which SGI team has been given prior, during and after the first field research visit in Bulgaria which took place between 11-15<sup>th</sup> February 2008. During the first visit of the SGI team, several discussions took place with different relevant players, particularly with officials of the Ministry of Education and Science, Ministry of Finance, rectors, and with the president of the National Student Council, and the Chair of the Parliamentary Commission of Education. In this paper we elaborate based on the discussions and documents which we had been given at that time.
- (4) As one of the next steps of a complex and comprehensive ongoing higher education reform program, the government of the Republic of Bulgaria is going to introduce a student loan scheme which (i) would back up the already introduced variable-tuition fee system, (ii) will improve access and equity by making higher education free at the point of use for every talented young Bulgarian who wishes and is capable of participating in higher education, irrespective of his/her family background and ability to pay, (iii) will contribute to the improvement of quality of an already developed mass higher education system by encouraging competition among higher educational institutions and presumably (iv) will improve in the long term the financial sustainability of a high quality and equitable modern mass higher education system<sup>1</sup>.
- (5) In addition to the economic theory, other countries' experience, our own experience with designing, implementing and running a student loan system, the analysis and suggestions on the design and implementation issues of the drafted Bulgarian student loan law are based on those documents and the draft law which has been provided in relation with this assignment, and on the recent discussions with officials, politicians and professionals on behalf of the Bulgarian government.
- (6) As it has become clear for us, during our visit, a Bulgarian workgroup within the Ministry of Education and Science had already elaborated a draft Law proposal on "Crediting Students and Doctoral Degree Applicants" and according to the announcement in early March by the prime minister, there is an already defined very tight timetable for implementing and introducing the already

<sup>&</sup>lt;sup>1</sup> It must be noted that long-term financial sustainability was not explicitly stated in none of the documents (except the Terms of Reference) which we had been given, nor in the discussions but it is implicitly derived from the other policy objectives and follows from the disciplines of the Lisbon strategy, therefore we assume that it logically has to be one of the main policy objectives of the reforms as it is obviously in any other EU country.

<sup>&</sup>lt;sup>2</sup> The copy of the latest draft version of the Law proposal which has officially been sent to us by the MES recently is attached to the paper.

designed Bulgarian student loan scheme – according to the deadline there, the scheme must be in place at the beginning of the next academic year, i.e. in September of the 2008/2009 academic year.

### Summary of the main conclusions on the Bulgarian proposal

- (7) Nowadays, Bulgaria seems to be in an especially favourable situation in respect of launching an income contingent scheme. Due to the forecast convergence processes, the real income growth rate is expected to be much higher than the real interest rate (being at present even negative) and therefore, provided that this tendency will be stable in the future investing in human capital (i.e. graduates' future income) would be a very clever state policy and also an attractive business option from an investor's point of view.
- (8) Before going into the details, our conclusions on the proposed law on student loan in general are as follows:
- (i) we fully support the general higher education objectives and the main objectives of the law (access, equity, quality, competition), which the proposed student loan scheme aims to promote;
- (ii) we agree, that if the proposed retail banks based system will be introduced with a fixed-term loan repayment mechanism, then almost all of the main design elements will be necessary (precisely this is why we would not suggest to introduce such a scheme);
- (iii) we agree with (almost) all of the other design parameters of the law proposal, (e.g. we strongly support the unrestricted universal access to loans, the fact that the loan will cover all of the tuition fees, all of the regulation elements for protecting students as "consumers", the targeted nature of some supports, the writing-offs for mothers with a second or more children);
- (iv) we think that except for those minor technical problems which this report will discuss later on the law proposal regulates the imaginary retail bank based, fixed-repayment (mortgage) type student loan in quite a sophisticated way;
- (v) we would strongly suggest to avoid the following design elements of the scheme, if it is possible, though we fully understand that under the present circumstances it is difficult: (a) general state guarantee behind each student's loan (since it makes the scheme public, and it carries perverse incentives for collecting repayments), (b) general (untargeted) interest subsidy (since it is very expensive and inequitable) (c) fixed term repayment, (since it requires a state guarantee, interest subsidy and causes many other problems e.g. debt aversion, huge default losses etc. because it is inadequate for student loaning). To the best of our knowledge, these are exactly the killer type problems that will diminish the importantee any single objective for which the scheme is to be introduced and the ones that hinder the successful implementation the scheme.
- (vi) We support the draft law proposal in its intent to protect individual students by determining an interest rate they will be charged with, and also by determining the interest rate for the retail banks purpose. However, it is difficult to understand why and on what grounds an investor who bears neither any risk (full state guarantee), nor any operational costs (according to the law the government is going to pay all of these costs for those banks who are willing(!) to participate), expects to receive an interest rate which is significantly higher than a riskless rate (e.g. a treasury bond rate). According to the asset pricing theory, this is a clear arbitrage situation for the investors (in this case generated by the state).
- (9) It must be noted very strongly, that the above-mentioned points do not represent our value judgements, but are deeply rooted in the economic theory and in the practice and experiences of existing student loan systems as it presumably will be seen from the report.

#### On the project as a whole – implementation issues do matter

(10) As we have already witnessed some failed attempts to introduce student loans schemes, as well as have participated in implementing a successful scheme, we would like to send a final message

on the programme as a whole, particularly on the implementation issues:

- (i) Student loans are technically difficult; and they are particularly difficult if the idea is to finance them by private resources.
- (ii) Policy makers particularly politicians underestimate the difficulty; it is the job of the civil service to make it clear to the Ministers that such loans are not an easy or quick fix.
- (iii) The tasks involved in implementing student loans have always and everywhere been underestimated. It is easy to give out money to students the hard part is to collect it. It is not good enough to start distributing loans with the intention to fix the collection issue later -- the structure of collection has important implications for the design of the loan application, etc.
- (iv) An implementation is two-fold, (a) BUILDING a loan system and (b) RUNNING it. These are different elements. Policy makers virtually never allow enough time for (a).
- (v) Thus, the first step has to be a schedule that is realistic. When serious design and implementation was started in Hungary in 1999, the government had already decided in principle to introduce an income contingent loan system but debates on the details and implementation parameters of the loan continued for quite some time. The process of reaching an agreement on policy design and then building Diakhitel (the Hungarian Student Loans administration) took 2 years and it was possible to do it that fast only because (a) the government at the highest level were behind the scheme, (b) there was a very committed Hungarian team, and (c) they took very seriously the advice they received from foreign and Hungarian experts on the implementation, (d) moreover, the team was well equipped and about 50 external experts were also working on different aspects of the scheme in a cooperative way as a team.

## Part I. Theoretical Background

- (11) Before going into the details of student loan systems, or into any particular student loan scheme, it is inevitable to go through some broader higher education policy issues. Introducing and having a student loan scheme in place is not for its own sake, since any student loan scheme (except for some very tiny business like but from policy point of view irrelevant and insignificant minisystems) is (and should be) nothing else but a higher education policy instrument, and as such an integral part of a well thought out and consistent higher education policy and funding strategy. However, student loan schemes consist of such an amount of technicalities and technical details, that according to our former experiences to go into these details prior to and without having clarified the general higher education policy objectives and the reasons why we are talking on student loans at all many student loans design discussions and exercises tend to become a sort of intellectual adventuring on a system for its own sake. According to a Hungarian (Bulgarian as well) proverb (saying): one has to see first the forest and then the trees in it, in order to avoid not seeing the forest by the trees.
- (12) Similarly, before going into the details of student loan designing, it is also worth understanding the underlying issues which are derived from economic theory in order to comprehend the nature and the consequences of some key design elements of a student loan.
- (13) Details of student loan design issues will be discussed in the light of broader higher education policy issues and objectives and in the light of the relevant economic theory.

### 1.) Why higher education matters at all?

- (14) These issues should be clarified in order to understand the relevance of the general higher education policy objectives and the options into which a well designed student loans scheme as a policy instrument should fit.
- (15) The core characteristics of a well-designed student loans scheme can be determined accordingly, and any particular student loan design should be evaluated in the light of those broader higher education policy objectives, which necessitate the introduction of such a scheme, i.e. a student loan design should be evaluated in terms of how a particular scheme can achieve (or can promote the achievement of) those higher education policy objectives for which it has initially been introduced.

### 1.1.) Strategic response to the challenges imposed by the technological change, demographic problems, and global competition

- (16) It is widely recognised that higher education and investment in human capital is crucial both from the point of view of national economic performance mainly because of the nature of technological and demographic changes- and from the point of view of the life-prospect of individuals.
- (17) Because of the nature of technological change and the information age, the demand for skilled people has constantly been increasing, while the skills needed out-date more and more quickly. Thus, in contrast with the situation, say, a few decades ago nations need not only professionally educated and skilled graduates, who are very well-trained in a specific but rather narrow field for life, but also graduates who are able to be re-educated and re-trained as technological or other changes necessitates it. In this respect, at universities people not only learn something at the highest possible level, but also they learn to learn (almost) everything at the highest possible level. This is one of the reasons why the increased international competition (due to globalization) and the nature of technological changes necessitates an increased participation in higher education, since firms generally tend to employ graduates in an increasing number and with increased income even for formerly non-skilled jobs (e.g. personal assistant, secretary etc.). These are the arguments explaining unemployment among graduates

(as arguments against expansion of higher education), but many surveys show, that unemployment among graduates is quite a temporary condition, and the reality is that non-graduate work places are jam-packed by graduates. Moreover, multinational companies can benefit from the value added of a targeted country seek where the concentration of highly skilled persons (mainly graduates) is high.

(18) In EU countries the demographic change refers mainly to the fact that the average life expectancy has been increasing, which in itself is good news, but on the other hand the proportion of the younger generation has been decreasing, thus leading to a situation where less and less active and productive people have to generate the necessary outputs for financing the increasing spending for pensions, health care etc. In this respect the right strategic response shall be the increase of labour productivity by investing into human capital and into technology, instead of down-sizing the welfare systems. Therefore, the "negative" demographic trends are an argument for investing into human capital and higher education, and not against it.

### 1.2.) Increased lifetime prospects for individuals, increased lifetime earning potential, better job prospects

- (19) The average life-time earning of graduates is 150-170% higher than of non-graduates in EU countries, but presumably this figure is even higher in the new EU countries, for example in Hungary it is 235%<sup>3</sup>. It must be noted that this increased average lifelong-earning potential is a broad estimation, including all graduates, i.e. those graduates about whom "everybody knows" that their income will be high (say: bankers, lawyers) and those whose income will be low (say: teachers). However, it must also be noted, that precisely because of the nature of the technological changes and information age (see above) it is not correct to assume that just because somebody has got a degree in pedagogy/medicine/natural sciences/engineering, he or she will be necessarily a teacher/medical doctor/natural scientist/engineer throughout his/her life<sup>4</sup>.
- (20) In addition to the general increase in the lifelong earning potential of graduates, not surprisingly the level of unemployment is also rather low among graduates, since among many other factors graduates have learned at university how to learn everything at the highest possible level, which is a very important skill in the information age, where flexibility at the labour market is very important. Partly because of this set of flexible skills, employers tend to employ more and more graduates. In this respect the increase in number of graduates is also an important strategy in coping strategically with unemployment problems<sup>5</sup>.
- (21) To sum it up, investing in human capital and into higher education is one of the most powerful responses to the challenges of the modern welfare state in the age of globalization and increased global competitiveness, rapid technological changes, rising proportion of older people (the so-called ageing) from the point of view of increasing competitiveness while maintaining the well-developed welfare systems of EU countries.

11

<sup>&</sup>lt;sup>3</sup> This differences in lifelong earning potentials among countries, can presumably be explained (at least partially) by the existing inequalities among income groups within a country. That is why the EU average of 150-170% is presumably due to the educational level, with the Hungarian 235% being the result of a degree but also result of the present inequalities in Hungary, which in a way come from the transition period. Therefore, it is correct to assume that the former communist countries are closer to Hungary in this respect, than to the EU average.

<sup>&</sup>lt;sup>4</sup> This is one of the reasons why universal access to student loans is necessary, i.e. it is not correct to form views on graduates' lifelong earning capacity based on type of degree granted.

<sup>&</sup>lt;sup>5</sup> We are aware of the fact that the unemployment rate is not (perceived to be) a problem right now in Bulgaria, but the argument here is not on the present short-term situation, but on the long-term strategies for this type of problems.

## 2.) Expansion to a mass higher education, while improving its quality in a financially sustainable way

- (22) The above-mentioned national, EU-level and individual benefits of higher education, its strategic role in coping with the challenges of globalization, global competition, rising proportion of older generation due to increase in longevity, sustaining the welfare systems and increasing the life prospects of individuals in terms of higher lifelong-income and lowered unemployment cannot be realised in a small and rather elitist higher education system where only a small proportion of young people can enrolled into universities.
- (23) That is why during the last few decades all countries within Europe have moved from a relatively small and elite higher education system, characterised by low participation rate (5-10%) of the relevant age group (say 18-25%), towards a mass higher education system, characterised by an ever increasing participation rate (50-60%). The steady growth in student numbers, the widening public expectations placed on universities have not basically been the result of a well thought out national strategy (though there have always been some sensible higher education development strategies), but basically the result of the increasing public pressure to increase the number of university places and student numbers.
- (24) Therefore it is not surprising that there has been, in almost all higher education systems in Europe, a steady growth in student numbers, whereas funding levels have not been raised accordingly. Not surprisingly, this age of "underfunded expansion" has caused significant decline in the quality of higher education. In addition, quality is costly, whereas public pressure and expectations for expansion could be politically manageable by increasing the quantity of education (i.e. the number of students). As a result almost all of the EU countries have to face the need of a high quality and mass higher education which would be strategically inevitable from the point of view of the competitiveness of the EU region, from the point of view of maintaining the well-developed welfare systems (pension, health care, public education etc) of European countries. While partly due to the ever increasing number of students coupled with the ever declining funding and per capita expenditure on higher education, the number of students has increased and the quality of education decreased accordingly.
- (25) It must be noted that we do not want to suggest, by any means, that increasing spending for higher education will be in itself solely aiming at improving quality, but it seems quite certain that a long period of underfunding would systematically undermine the quality of higher education.
- It has been argued by some people that the increase in number of students will automatically (26)lead to a decline in quality, since an increased participation rate means that not only the 5-10% of the best young people will get into university but also another 35-50% from the cohort, who according to the logic of the Gauss dissemination will be less talented, therefore will decrease the quality of higher education because they are not talented enough etc. While we understand the logic of this argument against expansion, this cannot hold too much water. High quality higher education does not mean higher education which university professors would like to see, but the definition of quality compromises -among many other factors—the ability to respond to the needs of those for whom the system exists, in this case meaning that the quality of higher education cannot be high enough if the system is neither able to respond the strategic need of a country – related to the above-mentioned detailed national economic performance reasons, nor to the education needs of the individuals, which indeed have become even more diversified than, say, 25 years ago in a small and elitist university system. Therefore, the arguing in favour of increasing student number as causal factor for declining quality sounds intellectually compelling at first, however turning back to a small and elitist higher education system is not an alternative for coping with the challenges of changing the university system into a mass system, which is also high quality, and where quality implies also the ability to meet the needs of those (the country and the individuals) for whom the system exists. In other words, this type of "Gauss-distribution curve" argumentation might sound good, but does not hold water and has no (must not have) any policy consequences.
- (27) To sum it up: the steady growth in student number and the constant increase in participation rate in all European higher education systems have been partly a spontaneous and inevitable process,

but because funding has not been increased accordingly, the quality of higher education has declined in every national higher education system. In any European country there is no other alternative but to develop and adopt measures for restoring (and then improving) quality, and as one of the important preconditions of restoring the efficient level of funding. Again: funding itself will do nothing for improving quality, but without an adequate level of funding, quality improvement efforts shall fail.

- (28) Logically, it must be noted at this point, that in the field of higher education, not least because the individual needs of the large number of students are diversified, students (and their parents) are in general well-informed on their education needs (or at least are better informed than an "omnipotent central planner"), the economic theory suggests that one of the main mechanisms for improving quality in Higher Education is to introduce a certain level of competition among higher education institutions for students.
- (29) Other important preconditions of this competition among universities for attracting students are among other factors (i) the principle that state subsidy should follow students, (ii) thus the number of financed student places at a given study-course should be in relation with the choice of the students, and (iii) universities should be free (either free, or free within wide enough pre-set ceilings) to charge variable tuition fees, i.e. universities should be allowed to set fees themselves, not the government, and (iv) this variable tuition fee system determined by the universities should be supported by an universally accessible and widely affordable student loan scheme in order to make higher education free at the point of use, thus eliminating access and equity problems.
- (30) The above-stated points would be the main elements of a viable higher education strategy package. (We will discuss this later on in a more detailed way). Apart from this market type competition, other quality measures are needed: continuous and regular internal and external quality assurance processes, regular information for students, prospective students and their parents on the outcomes of each university degree course, in terms of level of unemployment, employment, earning prospects among graduates per university and per degree course (in order to enable students to make better informed decisions on which university to apply at).

### 3.) Lisbon strategy – official manifestation of the theory

The strategic importance of higher education has also been officially recognised within the EU. In this respect the above-adduced arguments are no more just theoretical arguments, but also become in a way official recommendations by the EU for all EU member states. Many official papers and EU reports deal with the Lisbon Strategy and with the related strategic importance of higher education development, higher education finances, access, equity, expansion and improvement of quality. Since this paper is not a detailed and comprehensive analysis of the Lisbon Strategy, here we are not going to go through all the elements of the Lisbon strategy, we shall only point out those parts of it which have particular relevance for the purpose of the present project.

#### 3.1.) Strategic importance of education

(31) The European Commission "....recognises that the efficiency and equity in European education and training systems (thus higher education) are critical factors to develop the EU long-term potential for competitiveness as well as for social cohesion. It is also stated that reforms must be stepped up to ensure high quality education and training systems that are both efficient and equitable. These issues are central to the fulfilment of the EU objectives in the Lisbon Partnership for Growth and Jobs and the Open Method of Coordination for Social Inclusion and Social Protection<sup>6</sup>."

"Across Europe, in the context of public budget constraints and the challenges of globalisation, demographic change and technological innovation, greater emphasis is being placed on improving efficiency in the education and training sector. This is desirable, of course, but it is frequently

\_

<sup>&</sup>lt;sup>6</sup> European Council 23-24 March 2006, Presidency Conclusions par. 23

assumed that efficiency and equity objectives are mutually exclusive. It is too often the case that existing education and training systems reproduce or even compound existing inequities.

However, the evidence shows that viewed in a wider perspective, equity<sup>7</sup> and efficiency<sup>8</sup> are, in fact, mutually reinforcing and this Communication focuses on policies where this is the case. It aims to inform policy-makers about trends in other Member States and the supporting research available at EU level, to help their decision making in the ongoing process of system reform."

"The EU is facing four interrelated socio-economic challenges: globalisation, and the emergence of newly industrialised and highly competitive countries; demography, in the form of Europe's ageing population and migration flows; rapid change in the nature of the labour market; and the technology-driven ICT revolution. Each of these has an impact on the challenge of providing good education for all. People with low qualifications are at an increasing risk of unemployment and social exclusion. In 2004, 75 million EU citizens were low-skilled (32% of the workforce) but by 2010 just 15% of the new jobs will be for those with only basic schooling<sup>9</sup>."

"Education and training policies can have a significant positive impact on economic and social outcomes, including sustainable development and social cohesion, but inequities in education and training also have huge hidden costs which are rarely shown in public accounting systems. In the US, the average gross cost over the lifetime of one 18-year-old who has dropped out of high school is an estimated 450,000 US dollars (350,000 euros). This includes income tax losses, increased demand for health-care and public assistance, and the costs of higher rates of crime and delinquency. In the UK if 1% more of the working population had A-levels rather than no qualifications, the benefit to the UK would be around GBP 665 million per year through reduced crime and increased earning potential. <sup>10</sup>

Policies which reduce such costs can deliver both equity and efficiency benefits. Member States can maximise the real and long-term returns from their education and training systems by considering equity alongside efficiency when taking decisions about system reform."

### 3.2.) Improving investments while widening participation<sup>11</sup>

(32) Higher education is a key sector of the knowledge-based economy and society. It is the heart of the 'knowledge triangle' of education, innovation and research. As the Commission's Communication on the Modernisation of Universities makes it clear, the EU higher education sector faces numerous challenges and needs to be modernised if it is to become more competitive and promote excellence. One challenge is to create diversified systems which allow equitable participation for all, while remaining financially viable and playing their roles more efficiently. The Commission has already proposed that the EU should aim, within a decade, at devoting at least 2% of GDP to all

<sup>&</sup>lt;sup>7</sup> Equity is viewed as the extent to which individuals can take advantage of education and training, in terms of opportunities, access, treatment and outcomes. Equitable systems ensure that the outcomes of education and training are independent of the socio-economic background and other factors that lead to educational disadvantage and that such treatment reflects individuals' specific learning needs. Inequity in relation to gender, ethnic minority status, disability and regional disparities etc. is not the prime focus here, but is relevant as far as it contributes to the overall socio-economic disadvantage.

<sup>&</sup>lt;sup>8</sup> Efficiency involves the relationship between inputs and outputs in a process. Systems are efficient if the inputs produce the maximum output. Relative efficiency within education systems is usually measured through tests and examination results, while their efficiency in relation to the wider society and the economy is measured through private and social rates of return.

<sup>&</sup>lt;sup>9</sup> COM(2006) 481 final; Efficiency and Equity in European education and training system, (SEC(2006) 1096); Brussels, 8.9.2006

<sup>&</sup>lt;sup>10</sup> COM(2006) 481 final; Efficiency and Equity in European education and training system, (SEC(2006) 1096); Brussels, 8.9.2006

<sup>&</sup>lt;sup>11</sup> COM(2006) 481 final; Efficiency and Equity in European education and training system, (SEC(2006) 1096); Brussels, 8.9.2006; p7-8

the activities of a modernised higher education<sup>12</sup> sector in order to build a knowledge-based society.

- (33) There has been a steady growth in student numbers and a widening of the expectations placed upon European universities, but funding levels have not risen accordingly. At the same time, the expansion of student numbers has not increased equity as it has mostly favoured individuals from higher socio-economic groups or those whose parents attended higher education.
- (34) A common assumption has been that a "free" system of higher education (one funded entirely by the state) is, of itself, equitable. In fact, this assumption has not been born out by reality, since the main determining factor in participation is the socio-economic background. The bulk of evidence shows that there are usually significant private returns to those who participate in higher education, and that these are not entirely offset by progressive tax systems. This can have a reverse redistribution effect. This regressive effect is particularly acute where school systems exacerbate the effects of the socio-economic background on educational attainment. In order to bring about a more equitable balance between the costs funded by individuals and society and the benefits accrued by each, (The average private rate of return from higher education is close to 9% across ten OECD countries.) and to contribute to providing universities with the extra funding they need, many countries are turning to the main direct beneficiaries of higher education, the students, to invest in their own future by paying tuition fees (e.g. BE, ES, IE, NL, AT, PT, UK, LI, BG, RO). Evidence also suggests that the market effects of tuition fees may improve the quality of teaching and management in universities, and reinforce student motivation.
- (35) Clearly, the development of tuition fees without accompanying financial support for poorer students risks aggravating inequity in access to higher education. The most disadvantaged are frequently the most risk and debt-averse, and are more likely to bulk at spending time studying, rather than earning, when private returns after graduation are not assured. This is particularly relevant where the level of tuition fees is based on estimated future rates of return, with an implicit assumption that the economy will continue to reward graduates at the same level as now. By guaranteeing bank loans and offering income-contingent loans, scholarships and means-tested grants, governments can encourage access by less wealthy students. Such schemes have already been introduced in a number of European countries (e.g. BE, ES, FR, IE, IT, LV, LT, NL, AT, PT, UK, LI). These are too recent to have been fully studied, but evidence from Australia and the U.S. shows that tuition fees complemented by targeted financial support increase student numbers without having a negative effect on equity.
- (36) As a result of inequities earlier in the education cycle, pupils from disadvantaged backgrounds often do not achieve the level of qualifications needed to access higher education. Even those that do are often reluctant to consider going on to university.
- (37) Policies to reinforce efficiency and equity of school systems are vital, along with actions to change cultural perceptions of higher education. To this end, information about the opportunities and advantages afforded by higher education should be targeted at school pupils, through school visits, mentoring programmes and lifelong guidance, and, crucially, at families when children are relatively young.
- (38) Universities should be encouraged to develop comprehensive outreach and access policies, which could include the introduction of bridging programmes and earmarked places.
- (39) Free access to higher education does not necessarily guarantee equity. To strengthen both efficiency and equity Member States should create appropriate conditions and incentives to generate higher investment from public and private sources, including, where appropriate, through tuition fees combined with accompanying financial measures for the disadvantaged. Specific actions at school level are also needed. Higher education institutions should offer a more differentiated range of provision and incentives to meet increasingly diverse social and economic needs.

\_

<sup>&</sup>lt;sup>12</sup> COM (2006) 208 final; Delivering on the modernisation agenda for universities: education, research and innovation; Brussels, 10.5.2006 (See also, COM (2006) 30 & COM (2005) 152)

### 3.3.) Reducing the funding gap and make funding work more effectively<sup>13</sup>

- (40) "Given the important role of universities in European research, the EU goal of investing 3% of GDP in R&D by 2010 implies higher investment in university-based research<sup>14</sup>. As already put forward in its Annual Progress Report on the Lisbon Strategy<sup>15</sup>, the Commission proposes that the EU should also aim, within a decade, to devote at least 2% of GDP (including both public and private funding) to a modernised higher education sector. OECD studies, for example, show that money spent on obtaining university qualifications pays returns higher than real interest rates.<sup>16</sup>"
- (41) In the meantime, the 2002 EU average of direct expenditure in universities was 1.1% compared to the US level of 2.6%. Less than half of the educational expenditures in the US are financed by public sources (direct expenditure), whereas it is valid for more than 75% in the majority of the EU Member States (and close to 100% in some)<sup>17</sup>. All these taken into consideration mean that in order to achieve the above-stated funding target, European countries have to find ways for bringing in considerable private (non-public, non-budgetary) sources into higher education finance in a way which does not harm access and equity.
- (42) "Student support schemes today tend to be insufficient to ensure equal access and chances of success for students from the least privileged backgrounds. This applies equally to free access, which does not necessarily guarantee social equity. Member States should therefore critically examine their current mix of student fees and support schemes in the light of their actual efficiency and equity. Excellence in teaching and research cannot be achieved if socio-economic origin is a barrier to access or to research careers".

#### 3.4.) Universities on expansion, quality, access and funding

(43) The European University Association, in its document titled "Lisbon Declaration - Europe's Universities Beyond 2010: Diversity with a Common Purpose," stated the following:

"As recorded in the Lisbon Declaration, the European Union is committed to strengthen its higher education systems as a key instrument for success in the knowledge economy. Higher education enrollments are expanding rapidly. Budget financing in most countries has not been able to keep up with the growth of higher education enrollments. Shrinking per-student budget support has eroded the quality of higher education in many countries, and threatens to do so in others. These pressures have motivated a global effort to diversify financing of higher education in order to accommodate growing enrollments without sacrificing quality. The global trend toward increasing reliance on student fee financing is part of this broader effort to diversify the sources of higher education financing.<sup>19</sup>"

 $<sup>^{13}</sup>$  COM (2006) 208 final; Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation; Brussels, 10.5.2006, p. 7

<sup>&</sup>lt;sup>14</sup> See "More Research and Innovation – Investing for Growth and Employment: A Common Approach", COM(2005) 488 of 12 October 2005.

<sup>&</sup>lt;sup>15</sup> COM (2006) 30 final of 25/01/06

<sup>&</sup>lt;sup>16</sup> The Economics of Knowledge: Why Education is Key for Europe's Success, (Andreas Schleicher, 2006) http://www.lisboncouncil.net/files/download/Policy\_Brief\_Economics\_of\_Knowledge\_FINAL.pdf

<sup>&</sup>lt;sup>17</sup> Data source: EUROSTAT.

<sup>&</sup>lt;sup>18</sup> European University Association, "Lisbon Declaration - Europe's Universities Beyond 2010: Diversity with a Common Purpose," 2007. *www.eua.be* 

D. Bruce Johnstone and Pamela N. Marcucci, "Worldwide Trends in Higher Education Financing: Cost-Sharing, Student Loans, and the Support of Academic Research, UNESCO, 2007. portal.unesco.org/education/en/files/53752/11842449745Johnstone.pdf/Johnstone.pdf

## 4.) Conclusions from theoretical and official arguments - main policy objectives related to higher education

The theoretical considerations and the official documents of the EU on the challenges the European higher education systems must face, as well as the main conclusions for setting the key policy objectives point towards the same directions. In this section we shall summarize those, in order to set up the context and the package of policies, in which any student loan scheme -once there is a decision to design and implement one—should be fit in. These broader policy objectives, and the strategic policy package that is emerging out of it shall also assist us in defining (and understanding) what are (and should be) the main characteristics of a well designed student loan scheme in order to make the student loan scheme able to support the achievement of those higher education policy objectives, for which it is going to be introduced. The achievement and/or support of the achievement of these higher education policy objectives create the justification case for introducing a student loan scheme, since these are the reasons for the very existence of such schemes. If these objectives are not achieved or promoted well enough, the student loans scheme will be introduced for its own sake, but taking into consideration its potentially large size and its cost/expenditure consequences it can easily happen, that a not properly positioned, designed and implemented student loan scheme not only will not achieve any single policy objectives, but might even hinder the achievement of these objectives (harm access and equity, instead of bringing in extra sources for funding universities and improve equity it will consume and/or crowd out existing public sources etc.) Basically this is at stake in any attempt for introducing a student loan scheme, and this is why it is inevitably important to understand why the introduction of a student loan scheme is vitally important, why it is going to be introduced, what the objectives are, what it must promote and what the core characteristics of such a scheme are which are necessary for achieving any of the original policy objectives which are the only justification for introducing such a scheme.

#### 4.1.) Main conclusion and challenges related to higher education policy

## 4.1.1.) All European higher education systems have a common major problem: after decades of underfunded, the expansion per capita expenditure has decreased, which has also undermined the quality of higher education

- (45) All European higher education systems have a common major problem: after decades of underfunded expansion, a mass higher education system has emerged, the per capita expenditure has decreased and the chronic underfunding has undermined the quality of the higher education system.
- (46) In the meantime shrinking the size of the higher education system, i.e. the decreased participation rate, is not an option, since it violates the most important EU level strategic objectives in relation with competitiveness, economic performance, social cohesion and access, equity and efficiency. Therefore, the only one direction available is to move from a lower quality and mass higher education system to a high quality mass higher education system.

### 4.1.2.) Long term financial sustainability and level of public spending does matter in all countries – Bulgaria cannot be an exemption

(47) Public funding, public expenditures and long-term financial sustainability do matters in every EU country – Bulgaria is not an exemption and should not be an exemption even if Bulgaria has currently a surplus in the state budget<sup>20</sup>. Public money, public expenditure, long-term financial and

<sup>-</sup>

<sup>&</sup>lt;sup>20</sup> In some of our discussions in Bulgaria we were told, that budget constraints and level of public expenditure do not matter, and thus the Eurostat classification problem and the aspects of classifying the student loan scheme as non-public (private) according to the EUROSTAT criteria are not such an important aspect, since Bulgaria had budget surplus in the fiscal year 2007, therefore, public expenditure and classification problem shall not be seen as a problem. This saying is adressed here, and will be addressed in some other part of this report, since it must

fiscal sustainability must matter for each country within the EU, at least because of the Maastricht treaty. Moreover, the fact that a country in one or another year has experienced a budget surplus should not be assumed as a constant condition. Therefore, all of the welfare systems should be planned in a way which ensures their long-term financial sustainability and minimizes the related tax burdens on taxpayers. Last but not least, this is one of the main problems in even the richest EU member states, due to the fact that the financial sustainability of the affected welfare system must be maintained in the long run and even in periods of (periodic) economic recessions.

(48) If those costs are not explicitly covered by the taxpayer, e.g. the cost of education in proportion with the significant private benefit of having a degree is private (that is not public expenditure), this will contribute to the goal of fiscal discipline and help meet overall public spending targets in accordance with the Maastricht criteria. This is another reason why public spending must matter for every EU country, even for those who have a budget surplus in a given fiscal year.

## 4.1.3.) To increase spending on higher education to 2% of GDP according to the Lisbon Strategy, a mechanism for bringing in private sources is needed which does not jeopardize access and equity

(49) Clearly, something must be done by all EU member states in order to bring in private sources into higher education funding and thus fulfil the objectives of the Lisbon strategy without jeopardizing access and equity. Because the decrease in level of per capita public funding (as a result of the increase in participation rate) has been a longer-term process, underfunding is a chronic problem in each system - the fundamental reason for it being that it is not possible to raise significantly the level of public funding due to the competing funding needs of other welfare sectors (e.g. pension system, health care, primary education, social care, long term care). It is not possible either to bring in considerable private sources into the majority of these welfare systems (for fundamental economic reasons) without seriously harming access and equity. Therefore, it cannot be assumed that the 2% target of the GDP related expenditure level set up in the Lisbon Strategy will be achieved by any of the EU member states by almost doubling its public expenditure level on higher education. A solution should be found to bring in private money (non-public, off-budget) into the finance of the additional funding needs of higher education. Again: if this is the main problem of most EU countries, we can hardly believe that Bulgaria could be an exemption, just because of its budget surplus in the fiscal year of 2007.

### 4.1.4.) Four main objectives should be achieved: access, quality, mass system and increasing expenditure to 2% of GDP

- (50) Significant increase in the level of GDP related expenditures for higher education (almost doubling it), improving quality, widening participation rates, and ensuring access and equity for every talented young person irrespective of his/her and parents' income
- (51) If equal access and equity (and mass higher education) would not be objectives with crucial importance both for efficiency reasons (no talented person should be wasted just because of his/her inability to pay) and for equity reasons (every talented person should have equal opportunities to access and participate in higher education irrespective of his/her ability to pay), the remaining problems could be solved by introducing a mass tuition fee system for generating significant income for the system, out of which quality could be improved. But access and equity do matter, whereas tuition fees themselves (in case they reach an efficient level) do harm access since a tuition fee system in itself makes higher education not free at the point of use, so participation will depend on a socioeconomic gradient the ability of the students (or parents) to pay. In addition, it is well known, that there is also a socio-economic gradient in the level and quality of information on the real value of having a degree. In principle, families with lower socio-economic status (especially if there is no degree in the family) are more reluctant and not willing to pay for higher education, than people in

be addressed, because we do not know any country in the world, where public money and public expenditure would not matter.

higher socio-economic groups. This is why middle-class participation rate is disproportionately large among student, and this is why it is emphasised that untargeted, general subsidization (excessive state subsidies, price subsidies e.g. for dormitories, untargeted interest subsidies and/or state guarantee on student loans etc.) of higher education and students is regressive, because it redistributes from the poor towards the rich.

### 4.1.5.) A well-designed student loan scheme may solve the problems but only if it has some core characteristics

(52) Here is the point where student loans come into play. If a student can get a loan, which is accessible, and not threatening due to its repayment method (e.g. debt aversion can be minimised) and large enough to cover all fees and some of the living costs, such a loan scheme can make higher education free at the point of use and thus tuition fees will not harm access. But such a loan scheme must have some core characteristics (see below). The logic behind this is that not tuition fee itself harms access and equity, but such a tuition fee system harms equity because it should be paid by the student (or parents) at the point of use of higher education.

#### 4.1.6.) Money in itself will not improve quality. Other measures are also needed

(53) More expenditure on higher education in itself will not improve quality. Other measures are needed for improving quality: increase in competition among higher education institutions by, for example, introducing a flexible and variable tuition fee system in which universities are free in determining fees, systems of internal and external quality assurance practices, provision of information on the outcomes of the universities (e.g. on further earning and employment prospects of graduates), state subsidies which take into account the choice of students and outcomes and quality of the universities etc. As student representatives have told us: they are against tuition fees, because they do not see how the fact that they pay some fee would influence quality of education. In our views they are right, this is another formulation of the former arguments and the fact that money in itself will do nothing to quality (but without an efficient level of funding, there is no chance to improve significantly the quality of higher education).

### 4.1.7.) Additional targeted assistance is needed for youngs with lower socio-economic background who underestimate the real value of a degree and are more debt averse

(54) A loan in itself cannot solve the access and equity problems, since people from lower socio-economic groups tend to underestimate the real value of a degree, and are more debt averse. Therefore, additional targeted assistance is needed for young people from poorer background, e.g. targeted grants and scholarships even at earlier life stages like at the secondary school level. Moreover, people from lower socio-economic background are not only poor in financial respect. In their case, as we have mentioned earlier, information "poverty" also exists. , The latter deters them systematically from participation in higher education. (They might not even think about applying to a university and they might be more reluctant to take out student loans because of the debt aversion, which might be due to the lack of information on the loan and the real value of education).

# 4.2.) What is needed is a strategy, which improves access, equity, and quality and brings in enough resources for higher education in order to meet the aims of the Lisbon Strategy

(55) The strategic policy package - which we have been promoting for a long time - for mobilizing an efficient level of additional money has the following pillars:

#### 4.2.1.) Deferred (and variable) tuition fee

(56) Deferred tuition fee, (it is deferred because it can be financed by a student loan, thus higher education is free at the point of use, because it is not the student but the graduate who pays the fee out

of his/her increased earning capacity as a result of his/her degree and higher education).

### 4.2.2.) A student loan which is accessible and affordable for all students, should not deter disproportionately young people from lower socio-economic background

(57) A student loan should be accessible for all students not just in legal terms, but in a sense that it does not deter disproportionately young people from lower socio-economic background (e.g. because of the threatening repayment method and obligations – like any fixed-term repayment based on a commercial bank type loan) and should be large enough to cover tuition fees and a significant part of a reasonably estimated living cost – thus, making higher education free at the point of use for every student irrespective of his parental background.

### 4.2.3.) Targeted subsidies and assistance for those who are in need – addressing both pecuniary and information poverty

#### 4.2.4.) Universities are free (within sensible, wide enough limits) to set variable fees

- (58) Universities are free (within certain sensible and wide enough limits) to set fees, which are variable in terms of different courses and different universities within the same courses are allowed to set different fees (introducing market forces and competition)
- (59) Broad enough and sensible limits in setting fees mean, on one hand that in order to protect individual students from excessive tuition fees it might be useful to set a ceiling for the maximum amount of the fees, especially at the beginning of such a liberalization period. On the other hand, the ceiling should be broad enough, otherwise the system will turn to a flat fee system, which will do nothing for improving quality, mainly because there are no efficient incentives in such a system for competing for students and mainly because the underfunding can come back through the back-door, if for example the level of former public funding is being decreased by a level roughly equal to the level of income from tuition fees. In this way there is a danger that the level of funding of the universities remains the same (i.e. there will not be any extra money for quality improvement), whereas students have to pay for something which was formerly free, or cheaper, without any positive consequences.
- (60) According to our understanding right now in Bulgaria the state determines the number of student per each educational field in a given university, the level of state subsidy for each field and the ceilings of respective tuition fees. We have realised that this is a rather sophisticated process which takes into account many considerations and which involves many stakeholders (e.g. labour market representatives) and that this is basically a variable fee system. However, we suggest granting greater freedom to universities in setting their own fees with the ceiling defined by the higher education law in order to bring in some level of competition and room for quality improvement.

## 4.2.5.) State interventions for improving quality e.g. through quality assurance systems, and by linking finance to the choice of students, quality indicators and outcome indicators of the universities

(61) In other words, fostering competition by allocating state subsidies should result in at least partial competition and should put greater emphasis on the outcome indicators, thus, showing the actual results, quality and real value of a given course at a given university (as opposed to the input indicators, which reflect such factors as say number of teachers, student/staff ratio etc.)

### 4.2.6.) Fostering competition for improving quality – what we do mean and we do not mean by this

(62) In the part that follows, we are not going into further details on those two issues. Logically, these points should be at least mentioned, in order to indicate why it is generally agreed that if extra resources (by tuition fees and loans) are brought into the scheme, quality can be improved, provided the state allows and fosters a level of competition and takes other adequate measures to improve

quality.

- (63) At this point we have to stress on a few more important points showing what we mean and what not when mentioning competition:
- (i) Firstly competition does not mean in this term a totally free and unregulated nail-andteeth law of the jungle type competition, nor does it mean privatization. What we are talking about is a regulated competition, which, however, gives much more freedom and autonomy to universities as they have in a totally centralized planning system, in which all of the important decisions on (i) the number of students, (ii) on the level of state subsidy by each educational field and (iii) on the level of tuition fee, are made by an omnipotent, all-knowing central planner. What we are talking in relation with this issue is to find the right balance, or a sort of optimal "half-way" between a totally unregulated law of the jungle type competition and between no competition where everything i.e. both the volume (number of students) and the price (level of state subsidy and fee) and thus the total income of a university, is decided on central level by an all-knowing central planner. If this is the situation nothing significant and relevant will happen with the improvement of quality, since universities do not have to respond to the real needs of the students, instead they have to be very responsive to the needs of the all-knowing central planner (since everything depends on the grace and goodwill of a central planner). In such a system more extra money will not help in improving quality in terms of increased responsiveness to the needs and expectations of the country, of the economy and the individuals.
- (ii) Secondly, it can be argued that students (particularly from poorer background) are not well-informed, which is true, but in a mass higher education system, which has to be flexible and responsive to the needs of the economy and to the individuals and which necessarily must become diversified (in terms of having many types of courses), the final outcome of the allocation process which is based on the not-perfectly-informed students seems to be better than that of the final outcome of an allocation decision by an assumed almighty, all-knowing central planner since such does not exist in the reality.
- (iii) Thirdly, we are not talking about letting every single allocation decision to the market competition through student choices (since fashion among students can result in problems). What we mean is a regulated competition, i.e. the competion, student choice, universities' freedom in setting fees and in determining the number of student should be increased, whereas the almighty and all-knowing assumption of the central planner should be decreased.

## 4.2.7.) Providing information on the outcomes, potential level of earning and employment opportunities by universities and degree programmes in order to improve information on making informed choices by students

(64) Finally, (in contrast with many health care related decisions) there is usually no rush in making a decision on selecting a university and a programme. Information can be easily and cheaply improved by publishing regularly data and information on such facts, as for example, earning and employment prospects of graduates from different universities, with different qualifications and degrees. This is something which would be worth anyway from the point of view of quality improvement as well as for assisting in diminishing information poverty.

### 5.) Why tuition fees and loans?

#### 5.1.) Why tuition fees

(65) We think that by summarizing the lessons and conclusions on higher education policy objectives and strategy, both on theoretical basis and as well as on the basis of the Lisbon strategy related official EU papers, it has been proven that the necessary increase of higher education funding level to the 2% of the GDP according to the Lisbon Strategy is not possible entirely from public sources, since in this case public spending on higher education should almost double, which does not

seem to be a realistic option. Especially, if one takes into consideration those other welfare systems (as pension, health care, primary and secondary education, social care etc.), they also need public finances and have similar serious financial problems. Moreover, in most of these sectors user charges would either turn to be impossible to pay or would cause major problems in terms of equity and in terms of efficiency (because of the fundamental market failures and information problem in health care, pension, unemployment insurance, primary education etc.)

### 5.1.1.) Social and private benefits of higher education: a case for sharing the cost of higher education – the benefit principle

(66) On the other hand, higher education is different from many other welfare sectors. Higher education brings about significant social benefits as it has been discussed earlier (technological change, demographic change, decrease in unemployment, increase in national competitiveness etc.). Moreover, a graduates' lifelong income is higher, therefore they pay more taxes. These are the reasons why it is justified to maintain significant level of public funding in financing higher education. However, higher education, apart from the fact that it is also a sort of consumption good (it causes utility for its own sake as well), brings about significant private benefit in terms of higher lifelong earning and income opportunities (on average this is about 150-170% in OECD countries, but for example it is estimated as 235% in Hungary – as we have already discussed it earlier) and much lower unemployment, which in the end of the day to a much better labour market position for the individuals. This is why the benefit principle –the one who benefits should be the one to pay-comes into play in the tuition fee debates and this is why it is reasonable and justifiable if the individuals who benefit from education contribute somehow to the cost of education at least in relation with the private benefit.

#### 5.1.2.) Relying entirely on tax funding is inequitable

(67) It is well-known that for many already discussed reasons (information and pecuniary problems) the participation of middle class students is disproportionately larger than the one of people from lower socio-economic groups. This means that relying entirely on tax funding is regressive, since it redistributes significant resources from the worst-off to the better-off people. This equity problem also justifies that those who benefits from higher education should also contribute to the costs of higher education, at least in proportion with the private benefit of having a degree.

### 5.1.3.) Serious access problems occur if students have to pay for higher education when student's-ability-to-pay principle is violated?

(68) However, serious access problems can arise if students have to pay for higher education. This violates their ability-to-pay principle, since students usually have no income, and their dependence on parental income causes access and equity problems for many reasons: (i) poorer families might not be able to pay tuition fees, especially when having more than one bright young child (ii) understanding the real value of having a degree differs in accordance with the socio-economic status, thus poorer families are less willing to pay for their children's higher education, (iii) moreover studies on student poverty in the UK<sup>21</sup> indicate that the parents of many students belong typically to the middle-class and are well-off, whereas their student children are typically poor. That is the case for even the richer parents who do not finance efficiently the tuition of their children. Therefore, a tuition fee in itself harms seriously access and causes equity problems.

### 5.1.4.) A universally accessible, well-designed, large enough student loan scheme can bring together the ability-to-pay principle with the benefit principle

(69) A well-designed student loan scheme, which is universally accessible (not only in legal terms, but also in fact), large enough to cover fees and a reasonable living costs could solve the problem and

\_

<sup>&</sup>lt;sup>21</sup> Nicholas Barr: The Welfare state as Piggy Bank; Oxford University Press, 2001

can bring together the ability-to-pay principle with the benefit principle, since it enables higher education to be free for every student at the point of use (as a result, eliminating the access problem). Thus, out of the increased lifelong-earning/income graduates can pay in turn the significant private benefit obtained by the degree. In this way not students, but graduates pay tuition fees through the repayment of the loan. This also means that those who have never been students and/or whose children will never get into university will pay out of their taxes for the social benefit of higher education, but do not have to pay for the significant private benefit of the graduates. These are the equity arguments for introducing tuition fees, provided that there is in place a properly designed student loan scheme which in effect and in fact makes higher education free at the point of use for every student and thus, eliminates the access problem of tuition fee.

- (70) Actually the income contingent repayment mechanism is the repayment mechanism which perfectly matches together the ability-to-pay principle with the benefit principle (see later sections) and provides an automatic built-in protection mechanism for each individual against the risk of not being able to repay. Additionally, by doing this, the income contingent repayment makes unnecessary many second best solutions which a commercial type fixed-term repayment loan necessitates, but which are administratively very demanding, very costly and result is huge default losses and high unnecessary expenses (e.g. untargeted, general interest subsidy)
- (71) To sum it up: if the access problem is solved and higher education is free at the point of use, there is no reason not to introduce variable tuition fees in order to bring in private money. But it must be noted that the main objective of tuition fees should not be to get money from the students, but to get additional and private resources for funding higher education and for improving its quality. In the light of this, it is vital that the student loan scheme, which is supposed to eliminate the serious access problem which arises when higher education is not free at the point of use, **should not be public** in terms of EUROSTAT classification criteria.
- (72) It must be emphasised, that if the student loan scheme is badly designed and therefore consumes huge amount of public money, (e.g. through general interest subsidies, or generous state guarantee), it will either be classified as public, due to the bad design and lack of transfer of any risk to banks or to students, or because more than 50% of the running cost of the scheme is financed by the state, the problems for which the fee and the loan scheme solution was introduced will not be solved. In fact they will cause even more serious problems by overburdening the existing public funding for education. Therefore, no additional resources will be brought into the funding of higher education, and finally the whole scheme will be accounted as public, and will be financed from general taxation and as such it will be regressive, inequitable and also inefficient. The other option is that for obvious fiscal reasons the student loan system will be rationed continuously and finally it will not be universally accessible and will be shrunk for obvious fiscal reasons. In this case, the tuition fee system will cause the above mentioned serious ability-to-pay and access problems for all students, and disproportionately larger problems for youngsters from lower socio-economic groups. This is again inequitable since talented young people could be excluded who can be seen as inefficient from a national economic point of view, thus, violating all the main objectives of the Lisbon Strategy as well.
- (73) This is why it is not indifferent how a student loan scheme is designed and implemented.
- (74) It must be noted, that if at least those costs which do not necessarily need to be born by the taxpayer are covered by the students themselves, e.g. the cost of education in proportion with the significant private benefit by having a degree (that is not public expenditure), this will contribute to the goal of fiscal discipline and help meet the overall public spending targets in accordance with the Maastricht criteria. This is another reason why the level of public expenditure must matter for every EU country, even for those who have budget surplus in a given fiscal year.

#### 5.2.) Why student loans at all – possible sources of private money?

(75) Before discussing the core characteristics and the key design elements of a student loan scheme it is worth taking into account the possible sources of private money for funding higher education institutions in order to understand why a student loan is basically the only sensible option for bringing in enough private money into the system and from the point of view of access, equity and

quality improvement.

- (76) The former section has discussed the inevitable relationship between a tuition fee system and student loans for solving the equity problems which a sole tuition fee system can bring about. In this section we are seeking for answer to the questions why a student loan is necessary and why other private sources cannot come into consideration. Since many myths and false expectations are attached to other possible sources of private money it is worth to go through all of these potential sources of funding and analyse briefly their nature and their possible role and size.
- (77) As we have seen both macroeconomics feasibility and distributional equity suggest that a large system of higher education (especially if quality improvement and high quality is an inevitable requirement (which is the case)) requires public funding to be supplemented to a significant scale from private resources. Private funding can (theoretically only) be derived from the following six potential sources<sup>22</sup>:
  - (a) family resources;
  - (b) student's earnings while a student;
  - (c) employers;
  - (d) entrepreneurial activities of universities;
  - (e) gifts (e.g. charitable foundations, bequests in people's wills, donations by rich persons or rich firms etc.)
  - (f) student's future earnings, i.e. loans

### 5.2.1.) Family resources – extensive reliance on it is neither desirable, nor equitable, harms access and is inefficient

Family resources are not themselves bad, but do nothing to improve the access of students from poor background. Moreover, as it has already been noted earlier, even students from better-off background (with rich parents) might be in poverty. Therefore, the point is not that it is a problem if parents support their children's university studies, but excessive reliance on parental support does cause serious equity and access problems. Additionally, parental contribution (or support by the spouse) may be conditioned in some cases, e.g. parents (or the spouse) support their student if she/he applies for a "sensible" and "good" course at a good university. Since the talent and the real interest of a gifted young person might be quite different from what some parents would think (e.g. the young person is going to be an actor, but according to his father accountancy is more sensible), external reliance on parental (or spouse) contribution can even result in efficiency problems in terms of unnecessary waste of talent. In addition, if there is no extensive reliance on parental (spouse) support it can emancipate in a way a talented young person (who is actually entitled to elect and to be elected, but would depend heavily on parents support). Thus, extensive reliance on family resources is neither desirable, nor equitable, harms access and is also inefficient. In conclusion, family resources are not a feasible and desirable option for mobilizing enough private funding. It must be noted that a system, where tuition fee is not supported by an accessible student loan<sup>23</sup>, would rely mostly on family resources with the resulting problems.

<sup>&</sup>lt;sup>22</sup> This section draws heavily on the former works of professor Nicholas Barr, particularly on: "The Welfare State as Piggy Bank; Chapter 11"; Oxford Univerity Press, 2001; and on the results of our joint team work in the period of time of designing and implementing the Hungarian student loans scheme in 1999-2001.

<sup>&</sup>lt;sup>23</sup> It must be stressed again, that an "accessible student loan" does not only mean a legally established universal entitlement, but does mean the fact that the loan is not only accessible in theory, but in fact most student dare to take out the loan and the majority of students are not deterred from taking out the loan by some of the conditions for repayment (e.g. typically by the fixed term commercial loan type repayment obligation with the related sanctions)

### 5.2.2.) Student earning while a student – excessive reliance on it may undermine the objectives of education: working activities compete with study time and leisure activities

(79) Student earnings are generally small. The USA with a tradition of student earning opportunities, with flexible labour markets and with high wages is an outlier in this respect. The main objective of attending university is to be a student, studying, passing exams and getting a degree. Earning activities are in competition with the effectiveness of learning and the quality of student experience (which is an important part from the point of view of becoming an intellectual), since earning activities compete with study time and leisure. Similarly to family resources, here the problem is not if a student works something and earns some money. Problems arise in case of excessive reliance on this type of funding source. Therefore, the increase funding level for higher education (e.g. according to the Lisbon strategy) cannot be based on such funding source, since it undermines the main objectives of higher education.

#### 5.2.3.) Employer contributions - contrary to popular beliefs they are likely to be small

(80) Employer contributions: contrary to popular beliefs contributions by employers are likely to be small. This is an entirely predictable systematic problem, due to the changing labour market conditions. In former times a job like a marriage was for life. It was therefore rational for an employer to invest in the skills of his workers, since he himself, as employer would also benefit from this investment. Today, in contrast, labour is mobile. Thus, it remains the interest of employers as a whole to want training and education to take place, but the individual employer would rather let other employers pay for training and then lure away with a better offer the already trained person. In economic terms: this is an externality and in consequence individual employers will systematically invest less in the training of their employees. Therefore, at system level higher education finance cannot rely on this type of funding source – since it is an illusion.

### 5.2.4.) Entrepreneurial activities by universities - contrary to popular beliefs these frequently yield little or no net revenue

(81) Entrepreneurial activities by universities: again contrary to popular beliefs these activities very frequently yield little or no net revenue. Moreover, they are in competition with the "core business" of universities (teaching, research and innovation) since these activities need a very different range of skills from those of carrying out the academic tasks of a university. They also risk diverting the scarce institutional and academic capacities from the main activities (teaching, research) of the "core business" to lower priority activities. This can result in a declining quality of the core activities and little or no net revenue for the institution. Again: even the fact that US institutions are good at that type of entrepreneurship, it should not be assumed that transplanted US institutions approach will necessarily flourish in a different European cultural and economic contexts. Thus, entrepreneurial activities by universities cannot be regarded as a significant source of funding, and it might turn out to be mainly undesirable if these activities start to be "overdeveloped".

### 5.2.5.) Gifts - might be useful potential source at the margin, but should not be relied on excessively

(82) Gifts (e.g. charitable funds, donations by rich people or firms, bequest etc.): this might be a useful potential source of some funding, similarly to parental contribution, but should not be relied on excessively. While gifts may be of relevance to a small number of some top universities (with a rather limited amount of money), gifts are rather irrelevant to the generality of universities and virtually have no relevance to other (smaller) tertiary education institutions or higher schools. In Europe gifts are rarely more than a marginal contribution. In this respect USA is again an outlier, which has a traditional culture of giving. To it sum up, gifts cannot be relied on as significant funding source.

### 5.2.6.) Student's future earning, i.e. loans: the only instrument with the potential to bring in resources on a large scale into higher education in an equitable way

- (83) As parental contributions, student's earning while a student, employer contributions, entrepreneurial activities by universities and gifts are ruled out as major (and significant) source of private funds (and non-public money source), we are left with students' future earning through student loans being the only tool with the potential to yield and bring in resources on a large scale into higher education, in an equitable way. In this term a student loan is a mechanism provided that it is properly designed which enables individuals to redistribute some of their future income to the present. In this way this is a reversed pension scheme and a typical example for the Piggy Bank function<sup>24</sup> of a modern Welfare State, which offers mechanism for individual students to redistribute some resources themselves from his/her later lifecycle when he/she will already have increased life-time earnings at least partly due to the higher education and the degree obtained.
- (84) However, the design of loans is critical, and only a well-designed student loan scheme can do it. In the next section we shall go through the core characteristics of a well-designed student loan scheme. Then, we will discuss how repayments should and should not be organised and the underlying economic theory. In the end, we will cover some other important aspects of loan design.

## Part II. Student Loan Design

### 1.) Core Characteristics of Well-designed Student Loans

- (85) Well-designed student loan schemes do have core characteristics, which are not only applicable for a particular national loan schemes but also to any other well-designed loan scheme. These characteristics are:
  - (i) loans have to be large enough and universally accessible;
  - (ii) repayment mechanism must be efficient, equitable, must not deter access to loans (should handle debt aversion) and capable of being implemented;
  - (iii) the interest rate must be rational (no untargeted, blanket interest subsidy);
  - (iv) the scheme has to have the capacity to bring in private sources, i.e. according to the EUROSTAT classification rules it should be classified as non-public (private) and thus off-budget.

### 2.) Loans have to be large enough and universally accessible

(86) In order to make higher education free at the point of use, thus providing equitable access for

\_

<sup>&</sup>lt;sup>24</sup> According to professor Nicholas Barr (in his book the Welfare State as Piggy Bank), the modern welfare state has basically two different function. One of them is the traditional redistributive function (i.e. the so-called "Robin Hood" function in which the state redistributes from the rich to the less off, by using progressive taxation and needs based entitlements – e.g.: social insurance, health care etc.). The other function is the Piggy Bank function. In this case the welfare state offers mechanisms for the individuals for redistribution over the life cycle and/or insurance against some risks. The pension system is a mechanism which enables individuals to redistribute some resources from the present to a later period of their life cycle. In this way, a student loan (if well-designed) is a mechanism which enables an individual to redistribute from his later lifecycle to the present. (in this term a student loan is like a "reversed pension scheme").

students, a student loan should ideally cover all fees and (almost) all of the living costs<sup>25</sup> which calculation should be based on reasonable estimations. The absence of sufficiently large loans disproportionately affects students from lower socio-economic groups. Small loans make students rely on parental contribution or on earnings while students or on other (much more expensive forms) of borrowings (like short-term personal consumption type commercial bank loans, credit card overdraft etc.).

- (87) The loan scheme itself should be large enough in terms of the number of borrowers, i.e. all of those students who need it should have access to the scheme. In other words, the loan scheme should not contain any overt or hidden element which would threat needy students to take it out. Otherwise many students who would take out a loan, but for some reasons are deterred from taking it out should find other source of finance, e.g. parental contributions, earnings while student and the above discussed access and equity problems would appear again. This would result in a failure to achieve the original objectives of the whole loan scheme. One of the main deterring factors being a loan scheme with a fixed term and commercial bank type repayment (it will be discussed in the next sections).
- (88) Universal accessibility means, that the scheme is not rationed, neither in overt, nor in subtle hidden ways (the following criteria refer to the elimination of those different rationing techniques which are used for reasons of state budget constraints due to heavy subsidies, like conditionality, constraining eligibility and/or use, or tricks for deterring students):
- (i) All students should be eligible (rightly this is the case with the Bulgarian loan design), i.e. the loan is not rationed by making the eligibility conditional (e.g. only students from low income families, or only students with good marks etc. are eligible). It must be noted, that it is rational if there is a sensible age limit in eligibility (e.g. 35 years as in the Bulgarian proposal) otherwise some borrowers predictably would not be able to repay the loan.
- (ii) The loan for covering living costs should be used freely by the student for whatever purpose, without any attempt to control or constrain its use (e.g. there is no prescription that the loan can be used only for buying textbooks, renting a flat, eating in this or that student canteen etc.). This is important from the point of view of the original objectives of the scheme (improving access, equity), and it is also important for making the loan as a "product" user friendly and attractive (one important condition for achieving the large enough size of the scheme).
- (iii) Most of those who need, would actually take the loan out, since there is no such element in the scheme which effectively would deter them from borrowing. This is the most important success factor besides the official and legal universal eligibility. According to international experiences at least 30-60% per cent of the students would borrow if the scheme is not badly designed, or badly managed. The key for achieving high enough borrowing rate is to eliminate all those elements from the scheme which would deter needy students from borrowing (by causing unnecessarily debt aversion, by a fixed term repayment, or by making the scheme difficult to understand or difficult and or burdensome to apply for it etc.).
- (89) Moreover, this unconstrained arrangement is very important for the technical implementation and logistic point of view: any attempt to ration the eligibility, or use the loan to constrain the system would cause tremendous administrative burden and costs to the scheme.
- (90) In order to avoid the rationing of the loan for state budgetary reasons in the long-run, hidden or overt state subsidies should be eliminated. State subsidies (interest subsidies, high default rate, and generous state-guarantee) will result in huge budgetary burdens in a very short period of time, which will necessitate putting a budget cup on the scheme (in order to avoid an open-ended budget and a fiscal black hole). A budget cup will necessitate measures to ration the loan (either constraining the eligibility, and/or its maximum amount, and/or its use). And rationing will result in tremendous administrative burdens and costs on the scheme. Thus, rationing will also make the loan unattractive: the loan will either be too small, or will be too unattractive and the access problems due to small loans

<sup>&</sup>lt;sup>25</sup> The term "living cost" refers to all indirect costs which can burden the student when student: cost of accomodation (renting a flat), meals, textbooks etc.

and/or small number of borrowers will appear again – and the scheme will not achieve its original objectives (i.e. the reasons for its existence) – as one of the reasons for introducing the scheme has been to improve access to higher education to every talented Bulgarian young person. Clearly: if only say 5000 students would take out the loan, the scheme would not achieve any of its objectives.

(91) There are rationing techniques which are necessary for the functioning of the scheme, and therefore should be applied, e.g. a sensible age limit (say 35 years) or limiting the number of loans that a given individual could take out (e.g. the loan is available only for one pathway of BSc-MSc-PhD, but people who are doing at the same time 2 degree courses are eligible only for one loan, or people who are going for a second MSc are not eligible provided they already took out a loan formerly and have not repaid it yet. According to our understanding the Bulgarian draft law -rightly- regulates this issue).

### 3.) Risk adjusted interest rate - no untargeted, blanket interest subsidy

- (92) It is desirable if students pay an interest rate on their loans whose basis is the interest rate, which is basically related to the government's cost of borrowing. More precisely it is the cost of the money, which is lent to the students. This also means that the loan is not subsidised in any hidden or overt way, i.e. the students are the ones who pay the whole price of the money to be borrowed. We have used the term "rational interest rate" instead of market interest rate, because by the term market interest rate people usually mean the relatively high interest rates of commercial rate for individual borrowing (i.e. credit card rate, short term personal loans, loans for cars, TV etc.). The level of such "rational interest rate" roughly equals the government cost of borrowing, if the funding of the student loan scheme is well-thought out and well-organised. Since here the funding is organised entirely on the market (capital market), this low interest rate is in fact a market interest rate, but much lower than it would be in case of an individual commercial bank loan.
- (93) The majority of the student loan schemes incorporate an interest subsidy whose aim is to prevent excessive debt, thus promoting access. Though the aim should be appreciated, in fact general interest subsidies, as most of price subsidies (price distortion), cause inefficiency and inequity, thus not achieving the general aim, but its opposite.
- (94) If the interest rate is lower than the cost of borrowing for the purpose of funding the student loan scheme, then there is in fact an interest subsidy, which requires a tax payer subsidy by the (scarce) state budget. Such an interest subsidy causes major problems, since it is inefficient, inequitable and very expensive in public expenditure terms. Hidden interest subsidy means that the scheme does not contain "officially" an interest subsidy, but since the real cost of the money is not wholly paid by the students via their interest rate, somebody else (the taxpayers through the state budget) should pay for the difference.
- (95) There are some schemes where there is no interest rate at all. Most schemes (e.g. Australia, UK, and New Zealand) have a "zero real interest rate", i.e. the interest rate is tied to inflation, and thus the nominal interest rate equals the inflation one.
- (96) There are other types of interest rates, where for example retail banks lend money to students, with higher interest rate as it would be if the funding of the scheme would be organised by the government. A commercial type individual loan rate usually contains a risk premium biased upwards by the presence of potential adverse selection. Because banks' commercial interest rates and the related costs would be too high (even if the government agrees with the banks on a ceiling, as compared with the government costs of borrowing), the state would subsidise the interest rate in order to keep it reasonably low for the students. The reason for doing this can be different, e.g. for keeping the scheme attractive enough, affordable and for protecting individuals from too high interest rate (which could lead to unwanted risks of non-repayment, with its bad consequences for the individuals). In this case the difference between the subsidised interest rate for the students (usually equal to the government cost of borrowing) and the real interest rate what the retail banks charge are higher (minimum 2,5-3,5%) than the difference, say, between the government cost of borrowing and the

inflation rate (maximum 1,5-2%).

- (97) Therefore, all those costs and other consequences that, for example, the UK and New Zealand schemes and governments have experienced with interest subsidies, are even worse in cases when a government intends to subsidise commercial banks' interest rate and related costs, since in this case the interest rate difference is significantly higher (min 3-3,5% max 1,5-2%). This small difference means a 1,5-2 times higher interest subsidy!!!
- (98) In the next section we will present some well-grounded facts on what an interest subsidy means in terms of public expenditure and in terms of losses for the UK and the New Zealand student loan systems. Moreover, the New Zealand experience is also a powerful example that even a seemingly very small "adjustment" in interest rate can result in extremely large losses and public expenditure increases. This is why it is absolutely crucial to avoid any unjustifiable increase in the market interest rate, and to avoid any untargeted interest subsidization.

#### 3.1. Interest subsidy is expensive for the tax-payer

- (99) The UK loan scheme charges students a zero real interest rate, i.e. the nominal interest rate is equal to the rate of inflation. In order to understand the example below, it should be known, that in the UK scheme the Student Loan Company lends at first government money, then periodically sells the debts to capital market players in order to bring in private sources<sup>26</sup>.
- (100) Simulation work (Barr and Falkingham, 1993; 1996)<sup>27</sup> using LIFEMOD, a micro simulation model developed at the London School of Economics<sup>28</sup>, suggests that under those sort of arrangements if the government lends 100, about 50 would be repaid. The missing 50 breaks down broadly as follows:
  - 20 is not repaid because of fraud, early death and migration (none of them very large), and mainly because some graduates have low earnings and so never repay their loan in full.
  - 30 was not repaid because of the interest subsidy.<sup>29</sup>
- (101) As a separate piece of evidence, the UK government has sold tranchés of student debts to private buyers. The terms of the deal have not been made public, but it is believed that the debt has been sold for about 50 per cent of its face value. The government's internal estimation breaks down the missing 50 per cent into about 15 per cent because of low income, early death, etc., and 35 per cent because of the interest subsidy. The evidence on the cost of the interest subsidy is compelling. The government did not use LIFEMOD; thus the "market test", the official estimation and the simulation estimation have reinforced one another<sup>30</sup>.

<sup>&</sup>lt;sup>26</sup> This practice of debt sales has many difficulties in case of other countries. For example, it turned out in Hungary during the time of implementing the Hungarian student loan scheme, that for the same fundamental constitutional reasons it is legally not possible to sell debts in tranches. Moreover, in case of a new scheme, where there is no experience and factual information on such issues like default rate, repayment discipline, effectiveness of the collection etc., it is not possible to sell debts this way, or do it but only with huge losses. Additionally, if the government lends money and then after a few years tries to sell debts, the extra money will come into the system few years later, whereas higher education needs extra money now. For these, and for other reasons the funding of the Hungarian system was organized in a quite different way, namely: student loan bonds are issued by the Student Loan Company (not by the state) firstly at the capital market, and then this money is lent to students.

<sup>&</sup>lt;sup>27</sup> Barr, Nicholas and Jane Falkingham (1993), *Paying for Learning*, London School of Economics,

<sup>&</sup>lt;sup>28</sup> Sensitivity Tests, London School of Economics, Welfare State Programme, Discussion Paper WSP/94.

<sup>&</sup>lt;sup>29</sup> Barr, Nicholas, and Falkingham, Jane (1996), *Repayment Rates for Student Loans: Some Sensitivity Tests*, London School of Economics, Welfare State Programme, Discussion Paper

<sup>&</sup>lt;sup>30</sup> Nicholas Barr: The Welfare State as Piggy Bank, Ch 13, p 204; Oxford university Press, 2001

- (102) According to estimation<sup>31</sup> if the interest subsidy would be removed from the UK scheme the fiscal cost of loans would be reduced since the loss would be decreased from about 50% to 15-20%. The present value of the annual savings –given the present huge size of the UK system- is estimated as GBP 700 million (annually), which is a sustainable long-run annual resource.
- (103) Thus in the UK, about one-third of student lending is not repaid just because of the zero real interest rate subsidy, in other words the interest subsidy converted nearly one-third of total lending into a grant.
- (104) It must be noted that the costs of non-repayment for other reasons (i.e. the remaining 20 out of the missing 50 above) should be paid by somebody. If not the students pay for this cost the taxpayer (through) the state budget should pay for it. In this term the interest rate would be not only the difference between the rate that the student should pay for and the government cost of borrowing, but the other costs of non-repayment as well (which can also be built into the interest rate).
- (105) The cost of interest subsidies<sup>32</sup>: New Zealand. The government of New Zealand which was elected in December 1999 acted early on several of its manifesto commitments. These included three changes (in 2000) to the previous student loan arrangements:
  - Students pay a zero real interest rate during their student days, and a market rate, as defined above, only when they leave university (under the previous arrangements, interest was charged from the moment the student took out the loan). That is the interest subsidy is applied only for the study period which seems to be a very small, insignificant change.
  - The threshold for targeted interest subsidies (a zero real rate in place of the market rate) has been increased for part-time students (previously the threshold was fairly low).
  - The 'market' interest rate has been frozen<sup>33</sup>, at least for many years to come (it is in fact a non-declared, hidden interest subsidy).
- (106) Prior to these changes, the interest rate was 1% above the government cost of borrowing, i.e. it an extra 1% was charged, built into the interest rate, which partly covered the losses of non-repayments (according to official estimation it covered about half of the losses of the portfolio). That time, prior to these changes the government of New Zealand estimated that for every 100 it lent, 90 would be repaid. The missing 10% was mainly the result of low-earnings of some students. As a result of the three changes above, it now estimates that for every 100 it lends, only 75 will be repaid. The change is so expensive precisely because the subsidy to students while they are still at university applies to all students. The effect of these seemingly small changes is the increase of non-repayment from 10 per cent to 25 per cent.
- (107) The government of New Zealand estimated that the three changes would add about NZ\$350 million to the higher education budget which previously stood at NZ\$1.8 billion, i.e. the changes absorb close to one-fifth of the higher education budget, using the resources for subsidies which disproportionately benefit the middle class.
- (108) Beside the illustration of the devastating effects of interest subsidies, New Zealand's experience also shows, that even seemingly "small adjustments" (particularly if they affects the interest rate) can be very expensive for the tax-payer and the state budget. According to our information the present New Zealand government is considering to remove this interest subsidy in a way but once an interest subsidy was established as a "right" it cannot be removed easily in a political aspect.

-

<sup>&</sup>lt;sup>31</sup> House of Commons Education and Skills Committee Session 2001-02 (24 April. 2002): Funding Higher Education: Policies for Access and Equity, 24 April, 2002; London

<sup>&</sup>lt;sup>32</sup> Nicholas Barr: The Welfare State as Piggy Bank, Ch 13, p 211-212; Oxford university Press, 2001

<sup>&</sup>lt;sup>33</sup> This "frozen" "market interest subsidy" is a typical example for hidden interest subsidy. In this case the term "hidden" refers to the fact that it has not been declared.

#### 3.2. Interest subsidy is highly inefficient

- (109) Interest rate subsidy creates incentives to borrow as much as possible even if a given student does need to borrow, put the money into the bank, or buy government or other bonds which have higher interest rate than the student loan one (arbitrage), to profit from the interest rate difference, and repay as slowly as possible.
- (110) A blanket interest subsidy has also a negative effect on quality by lowering the amount of funds available to higher education institutions due to the fact that the costs of interest rate can easily absorb a significant part of the higher education budget. The unseen costs of the ongoing interest subsidy take up funding which otherwise would go to the universities. (Usually it is politically easier to decrease the funding of universities, than to remove some quite significant student subsidies).
- (111) Interest subsidies are expensive, therefore rationed. The different rationing techniques will necessitate the introduction of administratively very demanding and costly procedures and mechanisms, like e.g. income testing. The rationing will result in a tiny but administratively very costly scheme, which cannot achieve any of its original objectives (access, efficiency, quality, bringing in enough private sources). It is an absolutely senseless and inefficient situation if there is a loan system in place which has large enough administrative costs, consumes public money, but the scheme in itself is useless since it cannot achieve any of its original objectives.

#### 3.3. Interest subsidy is highly inequitable

- (112) A general interest subsidy is untargeted. It benefits mostly those who borrow most. As it has been discussed earlier, one of the equity problems in higher education systems is that middle class participation is disproportionately larger than the participation of youngsters from lower socioeconomic groups. Therefore, a general income subsidy is automatically regressive, it benefits middle class mostly, thus redistributing (huge amount of money) towards the well-off.
- (113) Instead of spreading interest subsidy thinly across all students, a more equitable approach is to charge a rational "market" interest rate, and to use the savings in form of targeted subsidies for those students whose access is most fragile (e.g. children from lower socio-economic groups who without support would not even think of going to a university) and those whose subsequent earnings are steadily low, therefore could get into a real trouble being not able to repay the loan. In a latter case a system of targeted interest subsidies and targeted debt forgiveness can be designed, with very clear and transparent conditions for targeted assistance (see later).
- (114) General, untargeted interest subsidies impede and harm access: loans are expensive due to subsidies, therefore inevitably rationed (as soon as the Ministry of Finance/Treasury realises the huge costs of subsidy which sometimes are overlooked at the designing and introducing phase of such a scheme). And because loans are rationed they will be too small (either in terms of the amount of the loan, or in the number of borrowers or both). As it has been mentioned earlier, if loans are small not a single objectives of the scheme will be achieved.

### 3.4. A positive real interest rate releases resources for higher education

- (115) Untargeted, general interest subsidies do not achieve any desirable objective for which student loans as an instrument have originally been introduced. Interest subsidies are expensive for the tax-payer (state budget), inefficient, regressive (i.e. redistribute towards the better-off) and thus unfair.
- (116) A positive real interest rate (i.e. no interest subsidy) on the other hand, releases resources for higher education. This improves quality and allows the government and higher education institutions to undertake targeted active measures for promoting access. A positive real interest rate makes it possible to extend the loan. For example, if loans for living cost are not large enough they can be increased.

# 4.) Repayment mechanism must be efficient, equitable, must not deter access to loan and must be capable of being implemented – The Income Contingent Repayment

#### 4.1. Two ways of organising loan repayments

(117) There are two different ways of organising repayment of student loans: conventional, mortgage style (fixed term) repayment or income contingent repayment. The way the repayment is organised has fundamental influence on the student loan scheme, as it will be shown in the detailed discussion below. It seems to be worth to define briefly the two different types of repayment and clarify some definitions and the used terminology.

#### Conventional, mortgage style repayment

- (118) Mortgage type loans have repayments organised like every well-known, conventional commercial bank loan. This is why almost everywhere in the world when people start thinking on designing student loans the first (and unfortunately many times the final) idea is organising repayment as it is organised in any other commercial bank loan.
- (119) One needs to explain why this model is called "mortgage-type" and not, say, "car-leasing type"? The reason for using this term lies in the longevity of the repayment period, since there is, say, a 15-25-year long repayment period of a mortgage loan (for buying a house) which is the same for the repayment period of a student loan. An efficient loan takes into consideration the lifetime of the asset being financed by the loan thus there are 3-6-year car loans, 1-3-year washing-machine/plasma television loans, whereas there are 15-25-years loans for buying a house (or flat). A longer repayment period makes it possible for an individual to take out larger loans and/or to afford smaller monthly repayments. In case of a student loan, the asset being financed by the loan is the student's higher education, knowledge, degree (brain) and the increased life-long earning and employment prospect. Thus, the longevity of the asset to be financed by the student loan is the whole life of the student. This is why a student loan is compared with the long-term mortgage loans, and not with the long-term car loans. Additionally, this is why it is not a problem if the repayment period of a student loan is relatively long, even up to 25-30 years.
- (120) In the following discussion, the term mortgage type loan will be used for a student loan which has repayments organised as in a conventional commercial bank type long-term loan. In this type of loans, the student borrows a given amount of money during his study period, and then repays it after finishing his study period and facing a, let say, X BGL/per month for the next 10 years. The monthly repayment (the amount of money to be repaid per month) is determined by the size of the loan (the total amount of money borrowed), the duration of the loan (the longevity of the repayment period usually is predetermined) and the interest rate. The monthly repayment is fixed (apart from some periodic adjustments due to changes in the interest rate or due to some early repayments). This is why mortgage type loans are also referred to quite frequently as "fixed-term repayment loans".
- (121) Since the interest rate, duration and size of the loan fully determines the fixed amount of repayment, what is left not determined in a mortgage type loan is the fraction of the graduate's income (the % of the monthly income absorbed by the monthly repayment). In case of low income beginners, or in case of low earners this is a large %, while in case of high earners this is a low %. In other words the repayment is totally independent of the borrower actual/current income and current ability to pay. Therefore, the less able to pay the borrower is, the higher the burden becomes (as the higher fraction of his current income will has to be allocated for repayment)

#### Income contingent loan repayment

(122) In case of income contingent student loans, the repayment (the amount of money the borrower should pay per month) is calculated as X% of the borrower's subsequent earnings until the time she/he

fully repays her/his loan.

- (123) Thus, in contrast with mortgage type loans, the fraction of the borrower's current income that the repayment absorbs is fixed. In this way, the repayment automatically matches the borrower's current ability to pay (income) by having a fixed repayment rate (say 6% of his/her current income). If borrower's income is low (say 150EUR/month), the amount to be repaid is low (6% of 150 EUR/month = 9EUR/month). If income is high (say 3000 EUR/month) the amount to be repaid is high (6% of 3000EUR/month = 180 EUR/month) and if current income is zero, than 6% of ZERO = ZERO<sup>34</sup>.
- (124) In income contingency the size of the loan is known, and so is the interest rate (or in case of a variable interest rate the method for determining it is known); the current amount of outstanding debt is predetermined, as well as the rate of repayment (X% of borrowers income), thus the amount of monthly repayment and duration of the repayment period is left unidentified.
- (125) Ideally the repayments are collected alongside (income contingent) income tax, or (income contingent) national insurance contribution, by using the payroll deduction mechanism by employers, in order to base the repayment on the person actual/current (that is not last years') income. However, as the Hungarian experience has shown, it can be organised separately and effectively<sup>35</sup>. (There is no tax collection mechanism in Hungary; nevertheless the default rate is surprisingly low.) This experience also indicates, that income contingent repayment can be organised very effectively without using the tax collection mechanism.

### 4.2. Capital market imperfections in investing in human capital – lack of information on the future of individuals

### 4.1.1. Nor the student, neither the bank has information on the future of a particular student

(126) The fundamental information problem in investing in human capital is that neither the student, nor the bank has information mainly on the future of a particular student.

(127) Neither the bank, nor the student know

the asset which moves the student loans)

(i) whether a particular student will not fail his exams, and whether he/she will be able to finish his/her studies and get a degree (which in general and in statistical terms will result in an large-average 150-250% higher lifetime earnings, less unemployment etc. – which is

- (ii) whether a particular student will get a good job, with high income (or with what income)
- (iii) whether he/she will reamain in this (presently unknown presumed good job) or will get a better job, or will be unemployed etc.
- (iv) Moreover, as it was discussed earlier youngsters with poorer backgound (especially if parents have no degree) systematically tend to underestimate the value of education and

-

<sup>&</sup>lt;sup>34</sup> These are examples illustrating the behaviour in an income contingency type of loan. However, there are examples that in order to strengthen the repayment flow, and in order to decrease default and losses borrowers have to repay say 6% of the official minimal wage even if she/he has officially no income (and is not e.g. on maternity leave, in military service, and unemployed)

<sup>&</sup>lt;sup>35</sup> Originally the Hungarian tax office was supposed to collect repayment alongside income taxes. Even the tax laws were modified accordingly. However, after some political changes the Hungarian tax authority finally could manage getting itself out of repayment collection, and therefore the student loan company had to organise independently the collection mechanism, which has proved to be –to many peoples' surprise- very effective. This example shows that hostility or reluctance by the income tax authority is not an impediment from the point of view of successfully organising income contingent repayments.

are generally less informed on higher education, i.e. on the "nature of the product and the asset".

### 4.1.2. There is no security – neither the qualification nor the brain of the student can be sold

- (128) In case of a loan for house/car, the house/car acts as a security for the loan, i.e. even when borrower has no money for repayment, the house/car can still be taken over by the bank or the borrower can sell it and repay the outstanding debts. Thus, neither the bank, nor the borrower has to face a substantial risk of not being able to repay in case of conventional loans for house/car, since both of them can do something with the security (house/car). Moreover, the borrower might be able to disappear, but cannot take with him the house. Therefore, these type of conventional loans are relatively low risk operations, and because the house/car etc. acts as a security the bank can lend money for them in good terms (e.g. with low, or at least rationally calculated risk premium (interest rate)).
- (129) This is why the financial market provides from itself, without any substantial state intervention (except from regulatory framework, consumer protection, some control etc.) many different loan products in good terms for house, cars, television etc.
- (130) In contrast, the security in case of investing in human capital would be the university degree or more precisely the brain of the borrower. However, someone who has borrowed to get a university degree but then has high repayment and low earnings, does not have the option to sell that qualification (or his/her brain). Therefore, besides the fundamental information problems on the future prospect of a particular student, there cannot be a proper security for student loans. It would be possible to find a guarantor, or to offer parents' house as a security, but this solution would finally lead to access problems. Since rich persons are good guarantors and can offer security, but poor people not necessarily are in a position to offer proper security, those who could get the loans in best term would not need them and those who would need them could not get it. Therefore, a student loan scheme cannot be based on this "second best" solution.

#### 4.1.3. Demand side: student borrowing is inefficiently low

(131) Demand side problem. For all these reasons, borrowing to finance university studies and getting a qualification exposes the borrower (typically an 18-25 years old student, without a job and a degree) to a very substantial risk and uncertainty. As a result, borrowing to finance being a student and getting a university qualification (i.e. investment in human capital) will be inefficiently low (much less than would be necessary from an efficiency point of view) in the market.

#### 4.1.4. Supply side: lending for student is inefficiently low

- (132) Supply side problem. There is no security. Additionally, a lender would have to face the uncertainty about the risk of student loan applicants whether the student will get a degree, will get a job, will have enough earning etc. (see above). Therefore, a lender would charge a risk premium, which due to the uncertainty (lack of information on real risk) will tend to be higher rather than efficient. If a lender would be well informed, the risk premium could be efficient (similar to travel insurance when skiing). But since lenders are not well-informed about the risk of a student, they need incentives when deciding what type of students are less risky, then find a way to lend only for the one who bear less risks (i.e. cream skimming). One obvious way to cherry pick the students who bear fewer risks is to lend only to those whose parents have a house as security, or to lend only to those who are studying at a prestigious university. Finally, the end result of the lending process will be inefficiently low.
- (133) In conclusion: Students do not demand and banks do not offer student loans without massive state intervention.

#### 4.3. Mortgage type (fixed term) repayments – advantages, disadvantages

#### 4.3.1. Advantage – costs of the loan is transparent to the student

(134) Basically this seems to be the only<sup>36</sup> advantage of a mortgage type loan, besides the many disadvantage is bears innate.

#### 4.3.2. Generally inefficient – based on a business model with physical collateral

(135) Mortgage type repayment is inefficient in general, since it is based on a business model which assumes physical collateral as security (e.g. house, car etc.). Since higher educational qualification (or student's brain) is not similar to owning a car, or a house, there is no security for the lender. Therefore and for the above discussed detailed information problems, a lender would charge an inefficiently large risk premium. This also leads to inefficiently small amount of borrowing and inefficiently small number of loans.

### 4.3.3. Inefficiently high risk premium necessitates interest subsidy – tendency for high default rates

- (136) Because of the inefficiently high risk premium (set by a not well-informed lender) there is a tendency for high default rates (as the OECD noted).
- (137) Moreover a high-risk premium would increase the interest rate. This almost inevitably necessitates the incorporation of an interest subsidy with the aim to prevent individuals from excessive debt and thus to promote access.

#### 4.3.4. Mortgage type repayment harms access and equity

- (138) Mortgage type repayment is inequitable in many ways. First because the monthly repayment bears no relation to a person's earnings (ability to pay). Second people from poorer backgrounds are less informed on the benefits of education and therefore are less prepared to face the risk of borrowing; moreover they are more debt averse and tend to have little or no well-established credit record, so they will tend to borrow less. On the other hand, because of their not well-established credit record and poorer background they are the less tempting for lenders, when lenders are cherry-picking.
- (139) As a result a mortgage type repayment deters the very people that student loans are intended for and does nothing to encourage their participation in university education.

### 4.3.5. Mortgage type repayment necessitates an income treshold which makes administration more demanding than it has initially been planned

(140) If repayment is fixed it has no relation to a person's income and his/her current ability to pay. Since the student loan is an unsecured loan, and there is no security to take away or sell when a person is temporarily not able to pay or in cases when the repayment would absorb a large proportion of a borrower's income, a mechanism is needed to protect individuals with low or no earning (which very

\_

<sup>&</sup>lt;sup>36</sup> Another – mainly speculative and theoretical - advantage of a mortgage type loan needs to be mentioned, i.e. it has an income effect which works in favour of labour supply and in contrast with income contingency there is no substitution effect which works in an opposite direction. Therefore, it might - in theory - discourage work effort less than income contingent loans. This effect is also mentioned as a moral hazard problem of income contingency. The moral hazard problem in case of income contingency would be that graduates would work less hard in order to repay less. However, this problem would be serious if the majority of the borrowers with their qualification would behave like this. In order to take serious the moral hazard problem we have to assume, that the majority of the graduates would seek for their pension age the worst paid job, just because they would seek the happiness and satisfaction of non-repaying fully their income contingent loan. Because we strongly believe that this is an extremely unrealistic and rather general assumption, we do not think that this theoretically well formulated argument on moral hazard would hold too much water.

often is only a short, temporary situation), otherwise many borrower would have to face the unavoidable risk of non-repayment. In case of student loans, it is predictable, that the majority of the newly graduates will presumably start with a low income, which income during the lifetime carrier will increase. Thus, the majority of those graduates should cope with this excessive risk of not being able to repay, unless there is a mechanism which would protect individuals from this type of avoidable and excessive risk (note: there is no security, i.e. there is no escape route). Moreover, the repayment period is long. During this period many graduate borrowers may have temporarily problems with the ability to repay.

- (141) It must be noted that default can occur for three different reasons: (i) not willing to repay (fraudulence etc.), (ii) not being able to repay temporarily and (iii) completely not being able to repay (early death, permanent inability to work due to illness, injury etc.). The true default rate in the sense of being completely unable to repay (point iii) or fraudulently unwilling to repay (point i) is generally low in most advanced countries' systems. The problems with mortgage type schemes are that they tend to convert into defaulters those who only temporarily are not able to repay many times for very justifiable and acceptable reasons. This type of default is referred here as "avoidable default".
- (142) If there is no sensible mechanism in place for protecting individuals who are temporarily not able to repay, all these people can be converted into defaulters, which leads to a large and avoidable default loss increase. In this respect not only individuals should be protected from this type of avoidable excess risk but also the scheme itself. (State guarantee is not a solution, since this excess risk and avoidable default would mean that guarantee –apart from other serious problems- would be called in an unnecessary, and avoidable excess quantity, thus the system could collapse at the beginning).
- (143) This mechanism is inevitably necessary in mortgage type schemes, for equity reasons, for reasons of protecting both individuals and the scheme from excessive risk and large avoidable default losses and also necessary for political reasons in order to ensure that the scheme is politically sustainable. Therefore (almost) all mortgage type student loan systems apply an income threshold, i.e. if a person's income is under a certain limit he/she should not repay the debt. The income threshold solves the problem of excessive risk of non-repayment and avoidable default, but (as usually all second best solutions do) creates many other serious problems and huge administrative burden and cost to such schemes.
- (144) It should be noted that some income contingent schemes also apply such income threshold (e.g. UK). (As we will see it is unnecessary since income contingency automatically protect low earner individuals from not being able to repay, since repayment in an IC scheme is X% of current income, that is always connected with the ability to pay.) The reasons for using income threshold in income contingent schemes are partly historical and political in a sense. In the UK the original scheme was a mortgage type one which necessitated an income threshold, thus that income threshold as "a protection mechanism" was inherited by the new income contingent scheme (weakening unnecessarily the repayment flow) and cannot politically be removed once it is in place.

The situation in other income contingent schemes is in a way similar: because "everybody knows" that the income threshold exists to protect individuals in need (a common sense from the old conventional mortgage type loans), some IC schemes also apply that (though income contingency in itself is a perfect protection mechanism by defining repayment as a person's current ability to pay). Some schemes which contain income contingent elements (e.g. NL) use income contingency in order to get some money back from low earners when they are under the threshold, i.e. for strengthening the repayment flow. The point here is: the income threshold is unavoidable, inevitable in a mortgage type scheme, but absolutely unnecessary in income contingent schemes and the fact that many existing IC schemes apply income threshold does not contradict this conclusion, since the reasons for applying an income threshold in IC schemes have mostly political, historical and similar roots.

(145) In the next sections we briefly discuss the main problems related to income threshold (which are again inevitable in mortgage type systems).

#### 4.3.6. Income threshold necessitates a permanent ability to test individuals actual income

- (146) In the light of the former section the explanation is simple: not only the newly graduates have low income for a while causing temporary inability to pay, but also older graduates do. Lifetime earning capacity of graduates is in general much higher (150-235%) than that of non-graduates, since income of graduates is continuously increasing after graduation in general. In other words in terms of the particular borrowers their income may change in both directions temporarily even if in general it increases. In terms of income threshold this "stochastic" change in individual income level means, that during the loan repayment period people can be not only once (e.g. when starting as junior experts) but many times under the income threshold, thus many borrowers can in a way somehow "oscillate" around the income threshold particularly during the first, say, 10-15 years after graduation.
- (147) Therefore, in order to protect individuals and the scheme but also keep repayment collection effective in terms of avoiding fraudulence (everybody can say that, sorry, my income is now low) mortgage type schemes cannot avoid the obligation to have a permanent capacity to test individuals' current income. Mortgage type scheme at first have to be able to check whether the income of a person is really low, but even harder is to recognise very quickly when a person income has become again higher than the income threshold.
- (148) The point here is that mortgage type schemes –provided that they want to be effective- have to have basically the same capacity to test individuals' income as an income contingent scheme should. In other words: one of the arguments for mortgage type loan is that its collection is easier even in countries where grey economy and hidden income are large and the tax system is weak, since banks will solve the problems of collection. But the bad news is that if the scheme wants to be effective, the same capacity for testing individual income is needed in an income contingent scheme. Not surprisingly the default loss can be even 90% in those developing countries, where the reasoning for a mortgage type scheme was the large share of grey economy and weak tax system. The World Bank calculated that Kenya's loan system was so distorted that it would have been cheaper to give money as a grant or gift to students because so little was collected and administrative costs were so high<sup>37</sup>.
- (149) As an additional piece of evidence: Mortgage type repayments imply more queries from borrowers about default. In the UK's original mortgage type loan over 200 people dealt with queries about default; the new income contingent scheme (nowadays larger than the old) has 15 people dealing with default related queries<sup>38</sup>. This means that mortgage type schemes need not only as large administrative capacity for income testing as an income contingent system, but even much higher (and still less effective). To stress this point once more: in the UK the same Student Loan Company, the same management, the same staff etc. run both the "old" mortgage type scheme and the "new" income contingent scheme (obviously within the same country and same cultural context). The difference can hardly be explained by else, but the fundamental differences in unnecessary administrative burden between the mortgage-type and income contingent schemes since in this case all other things are the same.
- (150) To sum it up: In the light of the above reasoning and some facts our view is that having a grey economy, or a weak income tax system is not an argument for introducing a mortgage type loan instead of an income contingent one, but an argument for not introducing a student loan scheme. A mortgage type scheme needs even larger capacity to test individuals' personal incomes, as in an income contingent system would need.

#### 4.3.7. Income threshold creates poverty-trap and weakens repayment flow

(151) Poverty trap refers to the following phenomenon: If the income threshold –which is introduced

<sup>&</sup>lt;sup>37</sup> Student Loans in Russia; Report on a Conference, Dietchly Park, Oxford, UK, 27-29 Jan, 2006; Oxford Russia Fund, The Eurasia Foundation; The New Eurasia Foundation; Assembled by Rachel Wellhausen, Feb. 2006

<sup>&</sup>lt;sup>38</sup> Student Loans in Russia; Report on a Conference, Dietchly Park, Oxford, UK, 27-29 Jan, 2006; Oxford Russia Fund, The Eurasia Foundation; The New Eurasia Foundation; Assembled by Rachel Wellhausen, Feb. 2006

for protecting low earners- is, say, 140 BGL/month, and if the monthly repayment is, say, 80 BGL, then the following situation can arise. The individual (say, a fresh graduate beginner to be protected by the threshold) does not have to pay, since his/her income is low, say, 130 BGL/month. His/her disposable income is 130 BGL/month. After, say, 6 months he/she will be promoted because he/she was so good and bright at work and in the meantime the boss has increased his/her salary by, say, 50 BGL/month. Her/his income is now 180 BGL/month and she/he is above the income threshold (140). Because of this she/he has to start/continue repayment (80 BGL/month). The result is that due to the promotion and rise in salary now her/his disposable income is 100 BGL/month. In other words: because her/his salary has been increased by 50 BGL (by cca 40%, from 130 to 180), her/his disposable income fell by 30 BGL (from 130 to 100, by cca 26%). This means that he/she supposedly being protected because of the low income has now an even lower disposable income because she/he has finally passed the income threshold. Whatever numbers are used in such an example, the poverty trap as a phenomenon exists and causes problems in mortgage type schemes.

(152) Moreover an income threshold also weakens repayment flow (as compared with an income contingent system in which other things being equal the only difference is the lack of income threshold), since lower earners either pay the total sum of monthly repayment or pay nothing.

#### 4.3.8. Poverty-trap creates incentives for avoid repayment and increases default losses

- (153) If a person's income increases beyond the income threshold marginally, and thus he has to pay the full amount of a monthly repayment, his marginal decrease in disposal income can be large, causing a serious financial hardship than it has been before the increase in income. This –for very real existential reasons can create a strong existential type incentive to avoid this situation, i.e. a person can try to be under the income threshold as long as he can, until his/her income will not be high enough to pay repayment and avoid the poverty trap. (A second income threshold obviously could not help.)
- (154) This phenomenon as a tendency weakens the repayment flow, increases default risks and losses. This is another reason why a mortgage type scheme has to have the capacity to check and follow individual incomes. Again: if a person's income dramatically falls, he will run to the bank and ask for deferral immediately. But if his income increases again, he will not necessarily hurry to the bank and ask the bank to start take away his money again. Therefore banks (or a Student Loan Company) should be able to recognise immediately when the person's income is high enough again.
- (155) Moreover if a person "stays" for too long time under the threshold, the subsidised interest rate increases the costs of subsidies and the person still could accumulate such a large debt which can never be repaid. That is not only a poverty trap, but also a debt-trap.
- (156) This is why the grey economy, the large section of the informal sector, and the weak ineffective income tax system cannot be an argument for mortgage type loans, since in this situation it performs even worse. In such cases mortgage type systems perform even worse in terms of default losses but in turn at least they have much higher administrative costs. (And again: this theory can be tested by looking at whatever mortgage type scheme.) Grey economy and such are mainly arguments for not having student loans.
- (157) Both mortgage type repayment loans and income contingent loans are ineffective in a country without the institutional capacity to collect repayments and to track incomes of the individuals'.

### 4.3.9. Banks are specialised in short-term loans with physical collateral – they are not experts in collecting long-term unsecured loans

(158) Banks are specialised in short-term loans with physical collateral and are not experts in collecting long-term, unsecured loans. In this term a governmental guarantee as a security (apart from other killer problems related to EUROSTAT classification criteria) is not a solution. It only solves banks' problems by providing a governmental guarantee (and taxpayer money) as a security, but does not solve the financial problem of a student loan scheme and state, nor does it solve borrowers' problems: they will have an unresolved problem because of their irrecoverable debt, assumed by the

state and will still be chased by the tax authority for the outstanding debts that will be converted into public liability recovered by the tax authority in such schemes. In this term a badly designed loan scheme not is only extremely expensive by causing huge and mostly avoidable default losses, but it is also bad because the poor design can predictably convert many borrowers into (avoidable) defaulters, who then would be into trouble with the tax authority and with their credit ratings.

- (159) Commercial banks are experts in collecting repayment for shorter-term loans, which are secured by some tangible asset. However, the most efficient method to collect the money is to relate the duration of the loan to the lifetime of the assets to be financed (3-5 years for car loans, 15-25-years loans for home). A degree, increased lifetime earnings and prospects are an asset, which has lifetime longevity. Therefore, student loans should be long-term. Moreover —as it has been discussed earlier—it is undesirable both from efficiency and from equity and access point of view if there is no tangible asset as security. But banks are specialised in collecting long-term loans with tangible physical asset as security (a short-term student loan is not a solution, since either the monthly repayment must be too large, or the total amount of loan should be not large enough.)
- (160) In addition, mortgage type loans cannot avoid the implementation of income tests and individuals' income awareness if it is needed, i.e. the income threshold problems. As it we have elaborated earlier, without an income test there is no way to relieve unnecessary and excessive burdens and risks on low earners, otherwise the lender and the scheme will face high default rates and losses and predictable political problems (since it is easy from a political point of view to harass and chase too many graduated people as a result of a badly designed scheme). But again: trying to track individual incomes is in itself a serious administrative task and burden (it is costly) but this is not something what banks usually do and can do (this is why they prefer mortgage type loans which have nothing to do with current income), this is not their business. On the other hand, giving banks information on current individual income, say, by the tax authority may create constitutional and legal problems (tax-secret).
- (161) An addition to the nature of the incentive structure which is in a way in contrast with being too active in student loan repayment collection: Students will be the future best customers for commercial banks, because they will be the future graduates, elite, with higher than average lifetime income. Therefore, commercial banks whose very interest is to have as many customers as possible, and among them as many "good customers" as possible usually tend to be very reluctant to chase and harass students (graduates) for repayment. This cohort of people (i.e. the graduates with higher lifetime income, better and more secure job, often in important position etc.), are seen by the banks as the best potential customers in the future, from in regards with many other financial products. Logically they are not going to harass and alienate them by means of collection of (otherwise state guaranteed) student loan repayments. Instead they would tend to simply administer that they have done their best in trying to collect repayments, and then together with the necessary proofs (some papers) they will call in the state guarantee.
- (162) In the end: it is frequently believed that student loans can be run best by commercial banks, because: (i) it is a loan and banks are the financial market players who usually give loans (ii) they have money, (iii) they can collect repayment, therefore they have to do it. Basically none of these is true. The student loan is not what a commercial bank usually provides (long duration, no security) and not a loan whose repayment a commercial bank could collect (since without an income threshold such scheme fails, but income threshold necessitates the ability to track individuals income, because the move around the threshold is not a one-way move).

### 4.3.10. Mortgage type repayment turns many people with temporary financila problems into defaulters – thus it unnecessarily increases default losses

- (163) As it was discussed earlier there are three types of "defaulters":
  - (i) who are fraudulently not willing to pay
  - (ii) who are completely not able to pay (e.g. death, serious injury)
  - (iii) who are not able to pay temporarily, (temporary low earning or no earning etc.).

- (164) There are some categories, which can be handled by targeted assistance (e.g. temporary no earning in case of women in maternity leave, temporary inability to earn due to injury etc.) but these types of categories are (and should be) usually assisted by different set of targeted assistance (e.g. zero interest while on maternity leave, or write offs/debt forgiveness in certain circumstances etc) therefore this section does not refer to them.
- (165) In a mortgage type scheme many people belonging to category (iii), who are temporarily not able to pay (note: there is no tangible asset as security (as escape route) and repayment bears no relation to income (to actual ability to pay) will be converted into defaulters which could be avoided if repayment has been organised in another way.
- (166) As previously discussed, a mortgage type repayment has such features (e.g. repayment is not related to persons' current income and there is no tangible asset as security) which makes it necessary to bring in such design element as the income threshold. Or in order to avoid excessive indebtedness to subsidise interest rate is always an issue (see previous sections). Or the incentive structure for collecting repayment is in a way contradictory: borrowers may have many serious (and understandable) reasons in some cases not to repay, banks are inherently not interested in threatening, chasing, harassing their potential future best customers, and state guarantee does secure the loans, so it is always easier (and reasonable) for the banks to finally call in state guarantee.
- (167) As the proportion of those who fraudulently do not want to pay, and who are completely unable to pay is relatively small among defaulters (according to most systems experiences), large proportion of default in a mortgage type scheme can appear due to those avoidable defaults, which basically occur because the scheme's design as a mortgage type, that is why a mortgage type scheme itself is one of the major risk factors for default and default losses.

### 4.3.11. Lack of security necessitates state guarantee – which causes EUROSTAT classification problems

- (168) As previously shown, in case of student loans there is no asset (brain, knowledge, increased lifetime earning etc.) that is tangible and could act as a security. Requiring parents' house, car etc. as a collateral or similar guarantees would seriously harm equity (those who most need loans have less this type of security), therefore this is undesirable. Therefore, the government offers guarantee for the loan of each student. This causes serious problems with classification of student loans and their costs as non-public according to EUROSTAT classification criteria, which is relevant from the point of view of being in compliance with the Maastricht treaty.
- (169) Classification issues will be discussed in the consecutive sections. However, the problem should be mentioned logically in this point as well.
- (170) The problem is the following: the government wants to bring in extra non-budgetary (private) resources into higher education finance in order to (i) increase the expenditures on higher education out of off-budget, private sources ("cost-sharing" issue), (ii) improve quality, (iii) decrease the level of underfunding etc. Therefore, it introduces tuition fees. However, in order to avoid access and equity problems (and being in compliance with the Lisbon strategy) it also wants to make higher education free at the point of use by introducing a widely available and affordable student loan scheme. Since the government thinks that private banks have money to lend to students, and private banks can lend money, and collect loans, it also believes that if private banks lend money to students, who pay tuition fees, then students pay the loan back to the banks, who are experts (in this system of beliefs) in collecting repayment, and following such a logic the problem is solved. But it turns out, that banks cannot (for very obvious capital market imperfection reasons) lend money to students unless the government guarantees the loans of the students (and subsidises the interest rate). It also turns out that banks take the position that this is not a market operation and they are helping the government to implement a policy. They also think that all of their costs should be covered if they are willing to do such a big favour helping students and the government in implementing a social policy project. Therefore, the government undertakes the obligation to pay for all bank costs because they have been so nice in doing the government a favour (presumably as a part of the "social responsibility" items in their mission statement).

- (171) And here is the situation when EUROSTAT classification criteria come into play:
- (i) Firstly, it turns out that according to the EUROSTAT classification criteria what really matters is who bears the risk of the scheme (not just where the money primarily comes from). State guarantee means that it is the state only (that is the taxpayer) who has any risk in such a scheme. In other words: a guarantee means that the private sector bears no risk, neither does the bank, nor the individual student, since if anything fails state will pay for it. Therefore, the whole scheme must be counted as public according to this classification criteria does not matter finally what amount of money will be called in for state guarantee. The only player who takes all of the risk is the state in such a scheme. In this respect studenta act as agents of the state, who borrow money on behalf of the state. Therefore, the whole scheme should be counted as public (namely it increases the indebtedness of the state).
- (ii) Secondly, another killer criterion of EUROSTAT is that: who bears the cost of running the scheme or the cost of the organizations who runs the scheme. This is the so called 50% rule, according to which if either the costs of the scheme, or the operation costs of the scheme are financed by more than 50% by the state the whole scheme must be counted as public. In other words: in a scheme where all of the costs of running the scheme (i.e. lending, servicing, collection) is financed by the state, this arrangement only alone itself is sufficient for classifiying the whole scheme as public (apart from state guarantee, costs of interest subsidy, costs of default (which is to be high in such a scheme).
- (172) Then our envisaged classic mortgage type scheme is (must be) classified *entirely* (!) as public according to the EUROSTAT classification criteria and rules. That means that the scheme will increase public debt (guarantee) and public expenditures in government accounts.
- (173) The end result is that the government's initial intention to bring in private money by fee and loans, has finally turned out to be counted as public, since there is no risk transfer, and the government pays all of the running costs and losses of the system. Therefore, whatever money is going to come into the system as fee from the loans, the increase in public burden will be always the same.
- (174) The point here is, that if the scheme is classified as public then the money it will bring in to the system is public, but because it is public it must be accounted in the budget, and because there is no better place for budgeting this as in the budget of the education this easily can crowd out higher education budget. Thus, the original objective of the scheme being to bring in extra money into the higher education turns the outcome into the absorption of a significant part of the existing budget for higher education. In other words, this strategy not only does nothing to achieve its original objectives, actually it achieves exactly the opposite of it (that is not only it does not help, but it may do harm).
- (175) One final point is, that many times the role of the commercial banks is overestimated, not just for the above mentioned reasons, but also because of the fact that commercial banks have nation-wide branches in place, e.g. to process loan applications, customer services etc., whereas the government has (obviously) no such network of branches in place and thinks that it would be a tremendous task to establish them. The last is absolutely true. However, if the state itself organises (not creates from nothing!) the scheme, in order to avoid all of those (in fact "killer") problems which are discussed in this paper, the government does not have to create (let say build up) network of branches throughout the country. In a system organised by the government, commercial banks can find their most appropriate role and place. Banks are interested in having a piece of the cohort of students who are taking out loans, since their interest is to increase the number of customers, and to have large number of good customers. And since graduates' lifetime earnings prospects, job-prospects etc. are much better than the average and then the one of people without a higher education qualification, loan taker students are the future best customers for the bank. What the government should do is - to keep in mind this - simply use the banks' branches. This means: students open a normal bank account at whatever bank (as a Bulgarian citizen he/she even cannot be refused) to which the student loan organisation transfers the money. If some of the banks are willing to take part –only for the sake of the bank's own very best interest - in loan application process then this process can also be solved through the branches. If not - loan application can be organised in many other ways: at universities, or even through post-offices (this was how the system started in Hungary, until the banks did not start to participate)

(176) However, apart from the above stated reasons it logically does not follow from the fact that the government has no bank branches but the banks have, student loans should be run by commercial banks (with all of its consequences: mortgage type debts, shorter than efficient duration, large interest subsidies, state guarantee etc.). Moreover, if there are not foreseen loans for living (e.g. in the Bulgarian scheme only women-students with children have the right to such loans) and loans for tuition fees are directly transferred to the universities' account, then that is not quite clear why banks and branches are needed anyway, particularly since loan applications can be organised in many other ways, and because universities are already supposed to do a large part of application related administration (i.e. there must be in a place, an office at the university where students go when applying for loan). However using banks for processing some part of a student loans scheme cannot be mixed up with basing a whole scheme on banks, and for being able to distort the scheme from the banks' point of view.

#### 4.3.12. State guarantee creates incentives leading to default losses

(177) This was discussed in the earlier section, too. Banks are reluctant to harass their student loan borrowers since they are their best potential future lifetime customers, and they do not need to do so, since they always can call in the guarantee (after stating that they did their best, but could not collect repayments).

(178) Moreover, if a mortgage style loan has, say, a 10 or 15-year repayment period many people who during later lifetime could otherwise pay, but in the years of beginning (and family settling) are not able could convert to defaulters (even if there are some mechanisms for deferring temporarily repayment). It must also be noted that mortgage type loans, especially if run by retail banks tend to have too short (i.e. inefficiently short) repayment period, say, 10 years. This is partly a result of the formerly mentioned problems with banks: they are experts in shorter-term loans with a tangible asset as security and are not experts in long-term loans especially if no security is provided. The other reason for short repayment period is the cost of interest subsidy (!) and a widely spread belief that 10 years for repaying student loans is a long period, whereas in case of student loan the asset (higher lifetime earnings and better prospects) which is financed from the loan has a much longer duration (from the time of graduation to the retirement age, say, 30-40 years). But shortening the repayment period causes problems: firstly the monthly repayment could become too high or the size of the loan should be too small. Secondly, the earning capacity and real income in the first 10 years of a graduate are usually much lower than the income in the later decades of his/her active years. Thus, those years "are screened out" from the lifetime of the person with a qualification in which he/she would be much more able to repay the student loan. But actually why should the duration of the loan be 10 years? Mainly because banks cannot handle long-term unsecured loans and because of the costs of income subsidy.

#### 4.3.13. Mortgage type indebtedness affects negatively other borrowings

(179) In many countries the level of indebtedness is legally limited or within the banks' lending practice it is at least a rule of the thumb to limit the above mentioned when they are not willing to lend any more money. Apart from this the risk of a loan depends on the level of indebtedness (i.e. what proportion of disposable income is already absorbed by other repayment obligations). The less the level of indebtedness is, other things being equal, the better the conditions of the loan will be. Therefore, a mortgage type student loan with its fixed term monthly repayment count in whether banks are willing to lend more money, and/or on what conditions are willing to do this, say for example for buying home to a young graduate married couple. In such a way mortgage type loan indebtedness affects negatively borrowings for other purposes. This is not the case with income contingent loans, since income contingent repayments are simply impossible to put into any risk the assessment equation, because it effectively does not affect the persons' ability to pay other loans, since income contingent loan repayments are not related to the indebtedness, but relate only to the current income of the individuals.

#### To sum it up: mortgage type repayment is a sub-optimal solution

- (180) The final conclusion from the previous section is in brief the following: mortgage type student loans inherently carry such fundamental problems that must be addressed somehow. But the solutions for these problems generate further problems both for the individuals, and for the taxpayer. It does not matter in what way these problems are handled, the final outcome is that none of the original objectives of introducing such a student loan scheme will be achieved.
- (181) The previous sections elaborated what negative outcomes could occur in a mortgage type student loan scheme. The particular mix and the proportional breakdown of these negative outcomes will depend on the current political priorities. But the end result is that it is predictable that a mortgage type student loan, particularly if it is run by commercial banks, and particularly if all of the operational and running cost are going to be financed by the state, as well as all the risk of this lending operations is taken over by the state in form of a state guarantee behind each student loan, sooner or later will lead to all imaginable negative outcomes—from a yet not known breakdown to negative outcomes—what is predictable and was predicted in the previous sections. Thus, such a scheme will not achieve any of the objectives it has been introduced for.

#### 4.4. Income contingent repayment – advantages, disadvantages

### 4.4.1. An income contingent loan (ICL) is radically different – designed explicitly to meet the needs of a student loan system

(182) There are two strategic sets of arguments for income-contingent loans: they address important capital market imperfections; and they have philosophical advantages. As a reminder from earlier section: in an income contingent repayment the borrower has to pay a fixed percentage (say 6%) of his/her current income. If he/she has low income the repayment is low (e.g. say 6% of 150 is 9), if income is high repayment is high (say 6% of 3000 is 180) if income is zero repayment is automatically zero since 6% of zero is zero (although a technical issue but it is useful to demand to have a minimum repayment even if official income is zero, say 6% of the official minimal wage – this strengthens repayment flow and stabilises the system).

### 4.4.2. ICL addresses capital market imperfections, namely the lack of security which plagues mortgage type repayments

(183) Conventional (i.e. mortgage-type) loans, when used as an instrument to finance investment in human capital, face the capital market imperfections described earlier in the previous section (lack of information on a student's future and lack of security). As a result of those problems, the risk for both borrower and lender is inefficiently high and, in consequence, borrowing and lending for human capital formation are inefficiently low. Income-contingent loans directly address capital market imperfections, because income contingent loans automatically allow borrowers to repay always on the basis of their ability to pay (X% of income is a measure for ability to pay) over the course of the loan. Rather than going into default (actually converting borrower to default), a change of job or other life circumstances will make income contingent repayment drop and adjust accordingly and automatically. This is one of the safeguards which protect both lender and borrower against the absence of collateral (security).

### 4.4.3. Income contingent loans protect the student from excessive risks – in-built insurance against inability to repay

(184) They protect the student from excessive and thus inefficient and avoidable risk. Students with low current earnings make low (or no) repayments. From a lifetime perspective, students who do well repay in full, and those few students whose lifetime earnings are low do not. However, the latter can hardly be imagined, since it would mean that a graduate during his whole period of active years, from finishing his studies to retirement age (say, from 25 to 65 (40 years) earns so little money that she/he is not able to repay fully his/her outstanding debts. However, in this rare occasions it is right if the

remaining outstanding debts are written off say at retirement age, since in the case of these few particular borrowers the general assumption on the significant private benefits of higher education finally have not proved to be true.

(185) Thus income contingent loans contribute to access, because loans have an inbuilt insurance against possible inability to repay. A graduate who becomes unemployed (or temporarily unable to pay for whatever reasons) does not go into default; rather his /her loan is carried over until later years in life when she/he is again employed. This undercuts the default problem by automatically taking into account a graduate's ability to pay.

### 4.4.4. In-built insurance against inability to repay – not only improves access and handles debt aversion, but also eliminates large administrative burdens

(186) As it was discussed earlier mortgage type repayments imply more queries from borrowers about default. In the UK's original mortgage type loan over 200 people dealt with queries about default; the new income contingent scheme (nowadays larger than the old) has 15 people dealing with default related queries<sup>39</sup>. This means that mortgage type schemes need not only as large administrative capacity for income testing as an income contingent system, but even much higher (and still less effective and inefficient). To stress this point once more: in the UK the same Student Loan Company, the same management, the same staff etc. run both the "old" mortgage type scheme and the "new" income contingent scheme (obviously within the same country and same cultural context). The difference can hardly be explained by else, than by the fundamental differences in unnecessary administrative burden between the mortgage-type and income contingent schemes since in this case all other thing are the same.

### 4.4.5. Income contingency focuses on the right income: students future income rather than present (parental) income when a student

(187) Income contingent schemes are based on where a student ends up rather than where he/she starts. In other words ICL depends on the outcomes of higher education and graduates' income and his/her ability to pay once the loan repayments begin.

(188) This feature makes income contingent student loan fairer, and more equitable than most of other instruments for financing students (e.g. grants and income tested mortgage type loans). The point here is that most of the systems for supporting students, particularly those which involve public money are rationed, because of public finance. The usual way for rationing such a support system is to make the support dependent on and/or related to the social need of students, i.e. defined as the income of the students' parents. This type of student support system falsely assumes that students' social need always closely correlates with the income of the parents. The problems with excessive reliance on parental income as a primary source of financing students and higher education has already been discussed in detail earlier in the discussion of the possible sources of private money, i.e. the cost-sharing issue.

(189) To understand the point it is worth thinking over the following stylised example: imagine, say, a rich banker, whose daughter goes to a university to get a social worker qualification and becomes a relatively low paid social worker, and in parallel the son of a low-paid social worker who goes to a university to get a qualification in economics and finance and finally becomes a rich banker. Those support systems which are based on parental income (publicly financed and thus rationed systems like grants and mortgage type loans with expensive interest subsidy and state guarantee) look at the wrong end, that is where the person comes from (parental income). These systems as in our example will give large support to the son of a social worker who will become a rich banker, and small or no support to the daughter of the rich banker who becomes low paid social worker. In these terms a well designed income contingency loan looks at the right end, because it will look at the outcomes, i.e. not at the

\_

<sup>&</sup>lt;sup>39</sup> Student Loans in Russia; Report on a Conference, Dietchly Park, Oxford, UK, 27-29 Jan, 2006; Oxford Russia Fund, The Eurasia Foundation; The New Eurasia Foundation; Assembled by Rachel Wellhausen, feb 2006

income of the parents but at the income of the students when having the degree and start earning money. Thus mortgage type loans provide large support for the low-paid daughter (who becomes a social worker) of a rich banker, and less support for the rich son (who becomes a banker) of the low-paid social worker in our stylised example. Therefore, income contingency as a mechanism not only automatically protects individuals, but also automatically allocates support on the right basis and to the right direction. Therefore ICL has significant equity advantages also in this respect.

#### 4.4.6. Income contingent loans protect borrowers, thus contribute to equity

- (190) By protecting the student from excessive risk, i.e. protecting borrowers, income-contingent loans help to bring a level of lending which supports the efficient amount of higher education; and by making it easier for students from poorer backgrounds to participate, they also contribute to equity.
- (191) The reason for this has already been discussed: due to the capital market imperfections students are very reluctant to take out such a loan whose repayment bears no relation to the current income, since students when students do not even know whether they will not fail their exams, whether they will get a qualification and a well paid job. This very understandable reluctance - whose basis is the fundamental capital market imperfection (discussed earlier) and the lack of information on the future, together with the fact that repayment bears no relation to income - is why students and parents proved to be rightly disinterested in loans when they are asked about willingness in public opinion surveys. If they are asked about willingness to take out mortgage type loans they rightly answer: no, no way. This is where beliefs about "debt aversion" or more precisely overestimation of debt aversion originate from. However, income contingent loans are designed precisely because of the capital market imperfection, to match repayment automatically to the current ability to repay and thus to protect individuals from excessive risk – in other words to eliminate or (minimise) debt aversion. The minimisation of debt aversion improves equity, since the level of debt aversion relates to the socio-economic background, thus having a socio-economic gradient, namely: students from less welloff families (particularly if parents have no degree) are more debt averse than students from rich families. However, the original objective of a student loan scheme has been to improve equity and access – but if students from poorer families are debt averse and refuse to take out the loan (in case of mortgage type loans it is almost sure), then the scheme will not contribute to equity and access.
- (192) Debt aversion is not something that will automatically disappear: the nature of an income contingent repayment should be explained and well communicated in order to manage the debt aversion problem. However, the point is: one has to be very careful with taking views on debt aversion, and needs and demand for student loans among students and their parents according to some surveys, because the answers to the questions about willingness to borrow fundamentally depend on what type of loan is questioned. Namely, nobody will borrow a loan which causes excessive risk for the student, i.e. a mortgage type loan.

### 4.4.6. Income contingent loans protect lenders – a precondition for bringing in private money

- (193) Income-contingent loans, if properly designed, also protect lenders, and thus enhance the long-run possibility of private finance, and again by doing so help to bring about a level of lending which supports in an efficient amount the higher education system.
- (194) If students' debt aversion can be decreased and willingness to borrow can be increased, firstly by a well-designed income contingent scheme which does not expose students to excessive risk, and secondly, if the nature of such scheme is properly explained and communicated to students, the latter will be willing to take out loans in an efficient quantity (and the scheme is not classified according to EUROSTAT criteria as public, due to such features as guarantee at the wrong place, interest subsidy etc.), then this mechanism is the only one able to bring in efficient quantity of extra non-budgetary private money into the higher education system. (See also: sections on possible sources for private funding).

### 4.4.7. Income contingent loans bring together the benefit priciple, ability to pay principle and social insurance principle

(195) Another approach to demonstrate that income-contingent loans are both efficient and equitable is through the assumption that income-contingent loans are compatible with the benefit principle (who benefits should pay), with the ability-to-pay principle, and with the social insurance principle.

#### Benefit principle.

(196) In his classic book, Capitalism and Freedom (1962), Milton Friedman considered the government's role in post compulsory education and training. He accepted the capital market imperfections just discussed, especially the risk within student loans, for example the lack of any security. He pointed out that

"[t]he device adopted to meet the corresponding problem for other risky investments is equity investment plus limited liability on the part of shareholders. The counter-part for education would be to provide a share in an individual's earning prospects; to advance him the funds needed to finance his training on condition that he agree to pay the lender a specified fraction of his future earnings" (1962, p. 103).

(197) On that basis Milton Friedman advocated loans from government, in return for which,

"[t]he individual ... would agree to pay to the government in each future year a specified percentage of his earnings in excess of a specified sum for each \$1000 that he received .... The payment could easily be combined with payment of income tax and so involve a minimum of additional administrative expense" (p. 105)."

#### Ability-to-pay principle.

(198) A different approach starts from a predisposition towards free, tax-financed education, abandoning that model only because of its regressiveness when applied to higher education. Writing over 40 years ago, Howard Glennerster at the London School of Economics, pointed out that:

"in the United Kingdom, higher education is now financed as a social service. Nearly all the costs are borne out of general taxation.... But it differs radically from other social services. It is reserved for a small and highly selected group.... It is exceptionally expensive.... [And] education confers benefits which reveal themselves in the form of higher earnings. A graduate tax would enable the community to recover the value of the resources devoted to higher education from those who have themselves derived such substantial benefit from it" (Glennerster, Merrett and Wilson, 1968, p. 26).

#### Social insurance principle.

(199) An important function of social insurance is to give people a mechanism for redistributing earnings over their life cycle. Pensions are a device for redistributing from one's middle years to one's post-retirement years. Student loans are precisely the same thing - a device for redistributing from one's middle years to one's early years. In addition, it is possible to design loans so that there is a built-in element in the interest rate for covering costs of non-repayment, or alternatively interest rate repayments continue for an extra year or two after the loan has been repaid; or both. This is a self-insurance by the cohort of borrowing students, and a guarantee for fully repaying by all of the borrower students all the money that has ever been borrowed by students. Higher-earning graduates repay somewhat more than they have borrowed, making good any shortfall from lower-earning graduates. Thus, the cohort as a whole insures itself – a pure social insurance arrangement. However, it must be noted that a scheme can be and should be designed in a way, which does not result in excessive income redistribution among low earners and high earners, since it can result in free-rider problems and strong incentives for high earners to drop out of the scheme, having to bear unfairly large costs compared to the other borrowers. As the Hungarian example shows (see the later sections on finances) it is possible to design the financial parameters in a way, which is enough to cover all of

the costs of default but still does not redistribute excessively among borrowers. Therefore, it is possible to organise the risk-sharing community in a way by which the lifetime earnings of the whole cohort of borrowing students will become the asset which can provide the security for the capital market lenders. This is done by a "cohort risk premium", which is a built-in extra interest rate added to the interest rate (cca 2%), by which the borrowers as a cohort guarantee that all borrowed money will be paid back by the cohort.

(200) It must be noted, that according to EUROSTAT classification criteria this is the genuine risk transfer, by which not the state but the cohort of students provides the full guarantee for covering those risks of non-repayment which are due to the risks of the students.

### Loans are different: loans for house/car are made for people <u>after</u> they know their income and assets – student loans are given <u>before</u> people know their income and assets

(201) Conventional loans (on which mortgage type student loans are modelled) and student loans are intended to operate in very different circumstances. Loans for a house purchase are normally made available to people after they know their income and assets. Student loans, in contrast, are given before people know their income and assets; indeed, it is one of their central purposes to increase borrowers' income and assets. Of course, the latter situation is much more uncertain than the former, hence the usefulness of income-contingent arrangements.

#### 4.4.6. Income contingent loans have no negative effect on taking out other loans

(202) In many countries the level of indebtedness is legally limited or in the lending practice of the bank is at least a rule of the thumb of the limit above which they are not willing to lend more money. Apart from this the risk of a loan depends on the level of indebtedness (i.e. what proportion of disposable income is already absorbed by other repayment obligations). The less the level of indebtedness, other things being equal, the better the conditions of the loan. Therefore, a mortgage type student loan with its fixed term monthly repayment does not count in whether banks are willing to lend more money, and/or on what conditions they are willing to do this, let say, for example, for buying a home by a young graduate married couple. So mortgage type loan indebtedness affects negatively borrowings for other purposes. This is not the case with income contingent loans, since income contingent repayments are simply impossible to put into any risk assessment equation, and because it effectively does not affect the person's ability to pay other loans, since income contingent loan repayments are not related to the indebtedness, but relates only to the current income of the individuals.

#### 4.4.7. Design aspects of income-contingent loans

(203) The previous paragraphs discussed the "whys of income-contingent loans. This section briefly discusses some issues of how.

### There is no need for income threshold – all income threshold relates to the administrative burdens, costs and losses are eliminated

- (204) At what level of income should a student start to make repayments? The case for an income threshold (e.g. average earnings) in income contingent schemes is mainly political; people think that such a system is fairer. That argument, though widely believed, is false. Income-contingency is automatically fair. If the repayment rate is, say, 6 per cent of earnings and the starting threshold is low, then repayments will be low. If a beginner kindergarten teacher earns 150 BGL per month, her monthly repayment would be 9 BGL. The reason for not setting a threshold is to make much stronger the repayment flow, i.e. the loan scheme becomes more effective. A key issue for policy makers is to assess the balance between these economic and political advantages, which pull in different directions.
- (205) As it previously discussed (see sections on inevitable need for income threshold in mortgage type schemes), in mortgage type schemes it is an absolute must to have an income threshold in order to protect individuals for excessive risks which an unsecured mortgage style loan brings about, and for

keeping the scheme politically sustainable. This is a must in mortgage type schemes since repayment bears no relation to individuals' current income. However, an income threshold in mortgage-style schemes causes serious problems. In fact, an income threshold would cause serious administrative and other problems in income contingent schemes as well (as the UK scheme experienced it), but one of the beauties of income contingency is, that it is designed precisely to protect individuals from excessive risk, since repayment is determined as ability to pay (% of current income). Therefore it automatically protects individuals and there is no need for such "second best" design elements like income threshold in mortgage type schemes. The elimination of income threshold from an income contingent scheme eliminates unimaginable extra administrative and other problems (e.g. excess default) and all of their costs (which cannot be overestimated enough).

(206) It should be noted that including an income threshold in most income contingent schemes is not in contradiction with the above arguments. The reason for having income threshold in an income contingent scheme is not theoretical, or practical, it is mainly political: conventionally loan schemes are mortgage type and must have an income threshold. Therefore, "everybody knows" that student loans must have income threshold. Thus by the time when the first income contingent schemes appear this design element have been installed into the scheme (or inherited from the older mortgage type scheme). But once an income threshold is in place, it cannot be removed easily for political reasons – because "everybody will know" that by eliminating the income threshold the scheme will become more unfair. Therefore, the best solution is not to introduce an income threshold from the very beginning of the design and implementation of an income contingent scheme, otherwise it will never be removed, which causes huge unnecessary administrative burden and thus costs, and additionally weakens the repayment flow and decreases the robustness and stability of the scheme. Note: This refers only to income contingency. An income threshold is a must in mortgage type schemes.

#### Implementation.

- (207) To achieve the desired effect, the ideal solution is loan repayments to track a person's earnings on a current basis, i.e. week by week or month by month, rather than being assessed retrospectively on the basis of income in a previous year. The most cost-effective method of implementing repayments on a current basis is as a payroll deduction alongside income tax or social security contributions.
- (208) However as the Hungarian example shows collection of repayment can be implemented cost-effectively without using payroll deduction of the income tax collection machinery of the tax authority. Since the Hungarian scheme was introduced in 2001/2002 academic year the number of defaulters has been insignificantly low and the repayment flow stronger by cca 30% in every year than it has been estimated for that year and the total of administrative costs have been cca 1% of the total of the scheme (Note: this is due to all of the design parameters of the scheme, e.g. early repayment, cohort-risk premium etc. However, if collection is not effective there would be large default losses and large administrative costs). In this scheme the repayment is based on the previous year's income, which theoretically may cause problems, but seemingly have not caused problems since its introduction, during the last 6-7 years.
- (209) The income tax mechanism and the tax authority role are three-fold: (i) ideally collection is organised as a payroll deduction alongside income tax or social security contributions. (ii) tracking each individual income year by year in order to be able to determine repayment (i.e. what equals to the 6% of the income?) (iii) to enforce repayment from fraudulent defaulters (in income contingent schemes usually very few people).
- (210) Earlier discussion of mortgage-type loans stressed the practical problems of collecting repayments. Analogous problems arise with income-contingent loans, whose effectiveness is heavily dependent on the effectiveness of the tax system. This raises problems in countries where income tax collection is leaky and where a large fraction of the population is outside the formal income tax net. A central issue for Bulgarian policy makers is the need to ensure that income tax collection is sufficiently robust to support a student loan system if this line of policy development is to be pursued. Note that an effective tax system is a significant component of EU accession.

#### 4.4.8. Disadvantages of income-contingent loans

- (211) The income contingent schemes require an effective income tax system. However, it must be emphasised that capacity to track individual incomes and enforce repayment from fraudulent defaulter is also unavoidable in mortgage type repayments (e.g. income threshold the "oscillation problem") as it has been elaborated earlier in the sections on mortgage type repayment. Thus, income tax mechanism (at least in being able to track individual incomes) and tax-enforcement should be used in mortgage type schemes as well. In such a case, the large share of informal sector, grey economy, ineffective tax system etc. is not an argument for mortgage type loan, but rather an argument for not introducing student loan scheme.
- (212) They may be perceived as a tax, with potential disincentive effects. This theoretical argument is one of the very few advantages of mortgage type loans, with an income effect which works in favour of labour supply and in contrast with income contingency there is no substitution effect which works in an opposite direction. Therefore it might –in theory—discourage work effort less than income contingent loans.
- (213) This effect is also mentioned as a moral hazard problem of income contingency. The moral hazard problem in case of income contingency would be that graduates would work less hard in order to repay less. However, this problem would be serious if the majority of the borrowers with their qualification would behave like this by reaching the retirement age. In order to take serious the moral hazard problem we have to assume, that the majority of the graduates would seek for their pension age the worst paid job, just because they are so happy and satisfied of non-repaying enough, that it is worth not earning enough in their whole life. Because we strongly believe that this is an extremely unrealistic and vague assumption, we do not think that this theoretically good sounding argument on moral hazard would hold too much water.

# 5.) The scheme should have the capacity to bring in private money in large enough scale – i.e. it should be classified as non-public (private) according to EUROSTAT classification rules

(214) As it has already been discussed earlier: if the scheme has no capacity to bring in private money in a large enough scale, the scheme will not achieve any of its original objectives. This depends entirely on how the scheme will be classified according to the EUROSTAT criteria, i.e. it depends on the design of the scheme.

#### 5.1.) EUROSTAT classification criteria

- (215) One of the main objectives of any type of reforms is to bring in huge amount of private money into higher education funding. Moreover, there is virtually no other mechanism by which such a large amount of private funds could be mobilised into the higher education sector. (Donations, bequests are not significant, the fees from students or parental contributions at the point of use have bad effect on equity and access, side work by students has considerable limits because this activity is in competition with the students' learning i.e. with their basic tasks).
- (216) In this respect the classification of a student loans scheme entirely depends on the classification rules of the EUROSTAT (ESA95 Manual on government deficit and debt, 2002 edition, which is legally binding in the European Union). If for any design parameter the loan scheme would be classified as public the main objective (i.e. mobilising private sources for funding higher education) is not achieved, which is a problem. If it would not matter (which is not the case), then there would be absolutely no need for introducing such a technically and politically difficult scheme like fees and loans for fees, since there are much more easier and simpler ways to increase public spending on higher education. Public money should be simply given to higher educational institutions.
- (217) The whole issue is technically very complex and difficult. In order to tackle it in the most

sensible way we would suggest - since the design of the scheme is thought to be ready - to contact the EUROSTAT in Luxembourg and discuss at least informally (presumably a formal agreement cannot be expected unfortunately) every bit of the design parameters of the scheme in order to make as sure as that it is not possible for the scheme to be classified as public, say 5-6 years after its introduction, because if the scheme is classified as public after a couple of years of functioning, it will be a real disaster for the Republic of Bulgarian both in political and in fiscal terms.

(218) However, there are some basic principles which help find the way for adjusting many elements of the scheme before consulting the EUROSTAT. To simplify the complex problem few factors are relevant when deciding whether a student loan should be classified as public or private<sup>40</sup>:

- (i) Who designs the scheme and who sets the rules: government or a private entity
- (ii) Who decides whether a student is eligible, for example, can a private lender refuse to lend someone whom he regards as a bad risk?
- (iii) Who bears the risk of default?
- (iv) Where does the money come from?
- (v) The 50% rule: if the state pays more than 50% of the running costs of an institution, the institution's activities (i.e. the entire scheme) should be classified as public.

#### 5.1.1.) Who designs the scheme and who sets the rules: government or a private entity

(219) Obviously the government sets the rules since without the government the market would not provide from itself student loans in efficient quantity, not least because of the fundamental information problems and capital market imperfection in investing human capital – thoroughly discussed in former sections. For example the draft of the Law on Student Loan is one of the formal manifestation where basically the government sets the rules (the draft law determines universal eligibility, the maximum level of interest rate charged by the banks, the level of interest subsidy, thus the level of students' subsidised interest rate, state guarantee, assumption of all costs related to lending operations etc. – in this respect all of the rules are set by the Bulgarian government).

### 5.1.2.) Who decides whether a student is eligible, for example, can a private lender refuse to lend someone whom he regards as a bad risk?

(220) Obviously not, because this is one of the main reasons why government intervention is needed. According to former experiences the universal nature of the scheme (i.e. the fact that all students are eligible) is not a problem, since this is a non-discriminatory rule and as such is not problematical. The point is that the government should not make individual assessment of who is or is not entitled to a loan, but merely establish normative criteria for eligibility. (In this way the government does not interfere with the private sector, does not take away the private lenders' right to make such decisions).

#### 5.1.3.) Who bears the risk of default?

(221) There are three cases: the black, the white and the grey:

(i) If a student takes out a conventional loan from a bank, it is the bank's scheme, i.e. the bank

<sup>40</sup> This section is based on several working documents written by Professor Nicholas Barr (at the London School of Economics) where he advised the Hungarian government on the same issue in 2000 and 2001 and on the paper that was elaborated for Slovakia in close collaboration with Nicholas Barr, Mary Canning of the WB, Hugh Macadie from the UK Student Loan Company, and with the Slovak Government. This part of the paper has already been reviewed many times, and since most of its crucial conclusions bear very serious consequences on the everyday, real-life operations of the Hungarian scheme (today with about 300-350 thousands students and billions of outstanding debts) the basis of this part has also been many times fixed and negotiated with the EUROSTAT (at first around year 2000), and checked by Nick Barr with his former colleagues at the IMF. This is why we have used former original documents for this part of the report – since the statements and conclusions of this part have been many times checked with the relevant organisations and experts.

decides on the rate of interest, whether or not it wishes to lend to a particular student; the bank bears the risk of non-repayment since the money comes from a bank. It is clearly a private scheme (the problem is that such a scheme virtually cannot exist due to the fundamental information problems and capital market imperfections).

- (ii) If the government designs the scheme, it declares that all students are eligible, bears the risk of non-repayment itself and provides the money the students borrow, the scheme is public (unfortunately it seems that this is the case in the present Slovak scheme as it is in its present form).
- (iii) The classification problem arises when a scheme meets some of the criteria to be classified as private, but not all, e.g. if a student borrows from commercial banks, but the government gives the bank a full guarantee, then it counts as public spending. The underlying logic is that since the government guarantees repayment, the student is acting as an agent of the government and hence the loan is a government borrowing.

#### 5.1.5.) Where does the money come from?

(222) This is one important element of the scheme in a sense that if the money originates from the state budget or state reserves the scheme is obviously public. However, just because money comes from a bank or from whatever private entity the scheme is not necessarily private in the lights of the other criteria. What really matters is who bears the risks of default or failing the scheme (a state guarantee means that the only risk transfer is that all of the risk and possible costs are transferred to the state), and for example who bears the costs of running the scheme and/or the other costs of the scheme.

### 5.1.6.) The 50% rule: if the state pays more than 50% of the running costs of an institution, the institution's activities (i.e. the entire scheme) should be classified as public.

- (223) In the case of the Bulgarian proposal the statement orders in the law proposal according to which the state will pay for all of the costs of lending operations, customer service, repayment collection etc., and the fact that these costs (and the costs of interest subsidies) will be budgeted to the state budget would be itself enough to classify the whole scheme as public.
- (224) In assessing whether a scheme conforms to the classification criteria, the critical element is risk transfer, more precisely if the risk is somehow transferred from the state/government to some private entity (to the private lender or to the cohort of students).
- (225) An element of judgement is also inescapable in assessing the scheme, i.e. there are no black and white answers. For example, if the government undertakes, say 1% of the future losses in form of a limited state guarantee, but private lenders bear the risk above that level the scheme is obviously private. But if the level of this guarantee is, say 75%, the scheme is obviously public. The borderline between public and private in this case depends partly on some judgement. This is why it would be important after being ready with the first set of obvious corrections of the scheme to consult directly with the EUROSTAT in Luxembourg on the necessary adjustments.
- (226) In the light of this, the Bulgarian proposal, because of the full state guarantee virtually for every single student loan, has a consequence that the entirety the whole scheme would be classified as public.
- (227) The third important point in assessing a scheme is that, what matters is not the letter of the arrangement but its intent and its real economic content.
- (228) Moreover, it helps to establish the private nature of the scheme if agency relationships are made as explicit as possible even in a contractual form (e.g. a student loan agency as an agent for government, a student loans agency as an agent for private lenders, universities as an agent for student loan agency (in processing the loan applications), or tax authority as an agent of the student loans agency in collecting the repayments etc.)

(229) In order to establish the private nature of the scheme the positioning of the student loans agency should be also carefully designed. It is certainly not a problem if it is a state owned agency, but the state and/or government supervision and control of it should be carefully designed. It certainly cannot be put into a Ministry (like a department of it), or it cannot be budgeted in a Ministry's budget. As regards the organisational form in legal terms it could be either like a non-profit Fund(ation) or a sort of publicly owned firm (in this case with a closed fund and with a zero-profit functioning) at an arm length from the government. However, all of these legal entities have to comply with specific accounting rules; some of them can be incompatible with the operations and logic of the student loans scheme (e.g. requirements for capital reserves according to the outstanding loans).

#### 5.2.) Ways for fitting into EUROSTAT criteria

(230) All of the issues below are deeply technical but still may affect fundamentally the original design. The proposed options below cannot be handled as a "magic wand" for solving the EUROSTAT problems. These are design parameters and possible technical solutions, which logically should be able to provide solutions to some aspects of the EUROSTAT classification problem. Nevertheless, it should be emphasised, that once the specific design of the scheme is ready, (which may contain the below design elements and/or their specific combinations) it is strongly recommended to discuss it either formally or informally with the EUROSTAT on whether the scheme in its final specific form could be classified as non-public or not. This should be done prior to the legislation process (i.e. before pushing any law proposal through the Parliament).

#### 5.2.1.) The 50% rule issue

(231) The 50% rule problem can be handled presumably if for example a very small fraction of the interest rate (let say 0,5%) is built into the interest rate in order to cover in the long-run the administrative costs of the student loan agency. In this case, it can be argued that there is a social policy interest in having a privately funded student loan scheme; the only purpose of the subsidy is to ensure its viability during the start up period. This subsidy has an explicit and obvious rationale and it would, say within 10 years, entirely phase out, since the sources for financing the running costs will come back from the repayment flow of the former students through the built-in administrative cost element. Moreover, the "infant industry argument" can also be applied. Even in a free trade regime a country may offer temporary protection (e.g. via tariffs) to a newly emerging industry (this policy is explicitly allowed under WTO rules as well).

#### 5.2.2.) Transfer of risk to private lenders

(232) Precisely because of the previously mentioned infant industry argument it is not such a big problem if during the first years of the scheme the money for borrowing comes from the state. If the loan scheme is set up with a secure, robust and flexible repayment mechanism, without any overt or hidden subsidies (which would put the repayment security to risks as well), and there is genuine risk transfer to the private sector, the student loan agency should be able to borrow from the capital market at an interest rate very little above the government borrowing rate. But in order to be able to make good deals for the benefit of the students and for ensuring viability of the scheme, particularly during the first few years of the scheme, the student loan agency should have a well-established track record on the security of repayment and on the repayment flow, so that private capital market lenders can base their calculations on proven performance. In the absence of such track record, however, private lenders are likely to charge a significant risk premium, making it impossible to get a scheme started. This is why (and only this is why) it should be accepted either the direct state lending operation or excessive government guarantees during the first few years of the scheme. The purpose of this state/government operation in short is to allow the infant loan scheme to be born at first and then to grow up. Once the scheme is well-established, a small government guarantee (say 5% of total losses) would suffice if the other parameters of the scheme are properly designed and give sufficient safeguards to private lenders. As the baby loan scheme grows up, and the scheme becomes robust and secure enough (it is also a matter of the size, since capital market operations have a certain minimum level in size) it is possible to bring in private money in order to get rid of the original state funded portfolio. Debt sales are one solution (on which the UK student loan company should be discussed), securitization is another possibility, issuing student loan bonds is a third option.

(233) Though it will be detailed in the next main part of this paper it must be noted here that in the Hungarian scheme the risk is shared in a following way: (i) there is a student loan company which issues student loan bonds through the government debt management agency (which in this respect acts as an agent on a contractual basis) piggy backed onto the consecutive tranches of state bond issues, or lends money from wholesale lenders, and the state offers a guarantee for those risks which are related to the state (i.e. social policy risks due to politics and other factors), (ii) all other risks of non-repayments, which are related to students more precisely to borrowers (possible low earning, defaults, early deaths etc.) are transferred to the cohort of the students, by adding an extra interest rate element on the interest rate which covers all these losses— thus all of the borrowers guarantee that all of the borrowed money will be repaid by the cohort of students who have ever borrowed. This "cohort risk premium" results in a genuine risk transfer to private sector (as borrowers are private entities). The details will be discussed later.

#### 5.2.3.) Transfer of risk to the (cohort of) borrowers

(234) Another way to transfer the risks from the state to the private sector is to build into the interest rate an element whose purpose is to cover the (real and genuine) risk of default of the students. In other words this cohort risk premium is calculated so that the cohort of students who have taken out loans as a whole repay 100% of the students' debts. This solution has major advantages, namely, it gets students the best possible deal. Risk is transferred and reduced because the asset, which secures the loan, is the earning capacity of the cohort of students rather than of the individual. Moreover, the default risk is borne by the private sector, since it falls on students repayments. Thus, there is a genuine and explicit risk transfer. (If one thinks it through he will discover that this type of guarantee is as strong as the state guarantee (if repayments are collected by the tax authority), since in this case the loans are secured by the lifelong earning capacity of the cohort of graduates who have taken out loans, whereas in case of a state guarantee the loans are secured by the lifelong earning capacity of the population as a whole including the people without a higher education degree, the low earners and the poor as well.)

### 5.3.) Built in safeguards – rather than state guarantee (except the risk which are the sovereign risks by the state e.g. social policy risks)

- (235) A built-in private type hierarchy of safeguards allows capital market transaction to bring in private funding from the earliest possible phase and allows the phasing out of massive state finance and state guarantees as early as is possible.
- (236) Bringing in private money is not just an option. It should be done after the baby scheme grows up; otherwise there is a real danger that the scheme will be classified as public. In this respect a clear distinction should be made between the very first stage of the scheme where the big issue is whether the baby scheme is able to be born and if able whether it is able to grow up, and the second phase when everybody is happy because the baby is growing and because it is becoming more and more mature.
- (237) In the very first phase –in a symbolic way it can be said that- almost all of those practical solutions are acceptable which helps the baby be born and grow, provided that none of them endangers it by pre-programming its premature death.
- (238) The above consideration means that the original design should envisage the adolescent and mature stages of this planned baby system, which should be designed from the very beginning so as to be able to be attractive on the capital market as soon as possible and this should be reflected in each contract and in each regulatory material. Otherwise, the earliest debts cannot be sold, or on the basis of the original legal framework and individual contracts no student loan bonds can be issued. In other words, if the scheme is not properly designed from the very beginning it should be actually changed

and it should be actually started again from the very beginning, when the same initial problems will come up with the same obvious excuses for not solving them (i.e. this is a new scheme, we have extremely tight deadlines, we cannot concentrate on these details, because other problems are more urgent etc.)

- (239) The other consideration for bringing private funding from the capital market is practical. If the government wants to bring in private money to the higher education system now, in order to improve quality, efficiency, access and equity, it is not enough to have the first private money flow after 10 years of launching the system when the repayment flow will be strong enough. The only way to bring in private money into the system in the shorter run is to design the scheme robust and secure enough to attract capital market lenders, grow up the scheme as soon as possible, build up a reliable track record and use one of the forms of capital market transactions.
- (240) The point in the above considerations is that from an implementation point of view a clear distinction should be made between those practicalities and the massive government interventions which are necessary to start the scheme and make it viable (e.g. state lending for students, providing massive state guaranties, financing the start-up cost including the first few years' running costs etc.), and between the matured form of the scheme. The latter should be reflected in all legal materials whereas the first should be done and be reflected in some preliminary legal materials.
- (241) What are the possible built-in safeguards which provide guarantees to private capital market lenders in the long-run rather than providing 100% or unconditional state guarantees?

### 5.3.1.) Safeguard 1: A secure and robust repayment mechanism - both in quantitative and qualitative terms:

- (242) First of all, ideally the repayment should be based on the actual income of the person and it should be deducted at the time and point of birth of the income. In this case, all of the people automatically fulfil their repayment obligations without doing anything for it. The existing mechanism, which is doing it, is the payroll deduction mechanism of the income tax and/or the social security contributions. Therefore, ideally that existing mechanism should be used being the most effective one in doing this. In other words the whole collection mechanism should be piggy backed onto one of the payroll deduction mechanism.
- (243) As it has previously been discussed, if it cannot be implemented for whatever reasons, the Student loan organisation itself can organise repayment - as it is the case in Hungary - by calculating the repayment on the basis of last years' income. In this case the role of the tax authority is to assist in tracking individuals' income, by providing information on it to the student loan company, and to collect money from fraudulent defaulters. In Hungary the tax authority refused to collect repayment (mainly for some political reasons), however it is keen on cooperating in other ways. Additionally, in contrast with the expectations and deep concerns about the losses, extra administrative costs, and ineffectiveness of such collection, the collection of income contingent repayment by the Hungarian student loan company is more efficient and inexpensive as it has ever been expected. (There are virtually no defaulters (only a few dozen among more than 150 thousands of repayers), no financial loss for default (due to the cohort risk premium), and due to the options for early repayment annually about 130% of the estimated repayment comes in (i.e. usually 30% more than it should come in), whereas the total costs of administration of the whole scheme are around 1% of the scheme. At the beginning of each year the monthly repayment for a given year is determined and fixed with the borrower, who makes a permanent order for his/her bank, which transfers the money to the student loan company accordingly. The author of this piece of the present paper originally would have never believed that it could work this way, but according to the facts this mechanism does work very effectively (to many people's surprise).
- (244) The most secure and most robust repayment mechanism can ideally be ensured if the tax authority collects repayment based on the current income of the person piggy backed onto the existing payroll deduction mechanism. The other way is the collection model that has emerged in Hungary. In order to be able to do whatever repayment mechanism efficiently, it must be universal.

- (245) One of the main lessons from the experiences with the Hungarian system, allowing early repayment (in whatever pattern, i.e. in one sum or in any other way) extremely improves repayment and makes repayment flow very strong.
- (246) Another experience is, that if the students with (officially) no earnings have to pay at least, say 6% of the officially determined current minimal wage, it does not cause problems in repaying but it also strengthens substantially the repayment flow and decreases default risk.

### 5.3.2.) Safeguard 2.: Built-in insurance against default - cohort risk premium is calculated so that the cohort as a whole repays 100% of its borrowing.

- (247) It should be noted that at this point and in this context, the argument for the necessity of using the income tax collection mechanism needs to be reinforced again. If the collection of repayment is not as secure as it can be, the default rate can be unnecessarily high. This could result in a larger "cohort risk premium", which, beyond a certain level endangers the viability of the scheme (the higher the interest rate, the longer the repayment period). In this respect the secure repayment collection mechanism is one of the preconditions for being able to use this mechanism for transferring risks of non-repayment from the state to the private sector (in this case to the cohort of students). On the other hand, it is also a precondition for being able to provide to the capital market lenders robust safeguards against future losses.
- (248) According to some actuarial simulation on average approximately 10% of the borrowers will not fully repay the loan. This figure can be converted to a cca 2% cohort risk premium, in other words about 2% added on top of the interest rate can cover in the long-run the losses from default. (These figures have only indicative importance, i.e. this is the approximate level of this extra interest rate element.) The calculation and the level of the cohort risk premium depend entirely on the population, on the country's labour market, the earnings in different professions, health status of the population etc. Therefore these projections should be based on real modelling exercises. Finally, the projected default should be actuarially correct. (The insurance statisticians should underwrite the final results.)
- (249) Because such modelling exercise and such projection are inevitably built into the model, these projections have their own limitations. One (perhaps the only one) possible way to handle this uncertainty in the future is to leave all of the key parameters of the loans scheme adjustable and buildinto the scheme (and into its whole legal framework, including the possibility of a regular and transparent adjustment and fine tuning mechanism.)

#### 5.3.3.) Safeguard 3: Adjustable mechanisms

- (250) The scheme should not depend on the exact accuracy of the initial calculations, which are based on huge assumptions on the uncertain future. If all (key) elements of repayment and the loan parameters remain adjustable over the entire lifetime of the loan, the scheme as a whole will be very robust and secure from investors, students and state point of view, as well. **The main adjustable parameters are as follows:**
- a) The repayment rate of X% of earning can be adjusted. According to our simulation 1% increase of this repayment rate result in cca 5-6 years shorter repayment period (depending on other variable parameters). This is a very powerful adjustment mechanism, but this cannot be used too frequently. Nevertheless, if the scheme and the initial model are regularly re-evaluated it will be possible to recognise in a very early period if something has started to go wrong. By this mechanism, as a preventive measure the collapse of the scheme can be prevented in a very early, due time.
- b) The interest rate can be adjusted year-by-year to reflect actual market rates. Variable interest rates in students' loan contracts automatically give opportunity to adjust the interest rate whenever it is needed. However, it should be an obviously transparent process, and the level of the variable interest rate should always reflect the effective costs of borrowing of the student loan agency in a given period of time.
- c) The same equally applies to the cohort risk premium, which also needs to be adjustable.

The cohort risk premium should be regularly (say every year, or every half year) recalculated, actuarially underwritten. The loan contract and the legal framework of the scheme shall make the legally correct provisions for it and shall guarantee the transparency of the process.

d) If an additional element is built-into the interest rate for covering the administrative costs (running costs) of the student loan agency, which I would strongly support, not least in order to avoid the 50% rule problem, it should also be regularly adjustable in a legally guaranteed transparent way. (This additional element makes it absolutely necessary to run the student loan agency and the scheme in as cost-efficient as possible way).

### 5.3.4. Safeguard 4: Income contingent repayment - collection of repayment ideally piggy-backed into the payroll deduction mechanism

- (251) The logic behind the necessity of using the existing payroll-deduction mechanism and tax office's income tax collection mechanism is the following:
- The size of the student loan scheme cannot reach its efficient level (i.e. efficient enough number of borrowers) if the repayment obligation is not based on the person actual income (i.e. s/he has to pay X% of his/her current taxable income).
- If the basis of the repayment is the person's current taxable income then it is based by default on the person's ability to pay, whereas in case of mortgage type loans (fixed term repayments) it is entirely independent of the person ability to pay, because repayment is a fixed amount of money per month determined by the size of the debt, the rate of interest and the repayment period.
- Therefore, not surprisingly 18-22-year-old young persons are very reluctant to take out mortgage type loan, since they are absolutely uncertain whether they will be able to finish their studies, whether they will get a job, how much salary they will get and how it will change in time<sup>41</sup>.
- Because the income contingent repayment mechanism is based on the persons actual ability to pay, the lack of information on the persons future jobs and income is not a problem, since the student does not have to fear that s/he will not be able to fulfil his/her repayment obligations. If s/he will have zero income than X% of zero is zero, if his/her income is low X% of it is also low etc. The burden is always the same as a percentage of his current ability to pay.
- (252) If the repayment is based on the person's income in the previous year(s) problems may emerged (however, as it has already been stated, the Hungarian collection is organised in this way, and its results in a way contradict the following argumentation. Nevertheless, it is useful to think about the facts why a payroll deduction mechanism is the ideal solution for collecting income contingent repayments). For example, if the student had high income in the previous year, but now s/he has less income, then X% of repayment rate may be much more than X% of his/her current income (e.g. 2X). This may result in a situation in which s/he for very obvious reasons (e.g. s/he already spent the money and now he/she has no money) cannot pay his/her monthly instalment and for obvious reasons (even for constitutional reasons) s/he will be/must be allowed not to pay the monthly instalments. Moreover, the student will have very strong financial incentives to try to evade his/her repayment duty. But if the same person will have high income again in the next year, his/her monthly instalments will be based on the income of the previous (low income) year. Therefore, in this year s/he will not pay back too much because s/he has not to do so. The result is (i) many uncomfortable administrative and other burdens on the individuals, (ii) weaker flow of repayment as it could be if the repayment would be based on the person's current income, (iii) additional administrative costs at the student loan agency

applicable economic theory (on information).

<sup>&</sup>lt;sup>41</sup> The existing student loan scheme in Slovakia is a mortgage type scheme. Currently about 5000 students take out loans out of the eligible cca. 100.000 full-timers. (There is another cca 50.000 part-time students who are not eligible). The scheme has been in place since 1997. The fact that in spite of the heavy interest subsidies (no interest rate during study years and 3% interest rate after graduation) only 5% of the eligible students apply for this loan is an example from the current Slovak practice which reinforces the theoretical argument! The low participation rate in this scheme is not rooted in the special Slovak spiritual attitude towards debt (as it has been argued) but rather it is deeply rooted in the relevant and universally

- (iv) a larger administrative cost element built-into the interest rate (equals longer repayment periods; but beyond a given level can endanger the viability of the entire scheme!!!), (v) less secure repayment mechanism leads to larger risks of non-repayment, which result in higher market interest rates, plus higher cohort risk premium, which again may trigger a vicious circle by increasing the overall risk of the scheme and further increases in the interest rate components etc.
- (253) If the repayment is based on the person's current income s/he always will be able to repay a small percent of the income which s/he currently gets. It will never be a financial burden (moreover this type of payments are psychologically much more like the running costs of a household (e.g. regular electricity bill), than some additional expense).
- (254) If the repayment is piggy backed into the existing payroll deduction mechanism, s/he practically has not to do anything to fulfil his/her repayment obligations, since every employer and other "income payer" will deduct the X% of his income before paying him/her any money. Therefore the individual will never be able to spend his/her money before fulfilling his/her repayment obligations that is the individual will never find him/herself in a very embarrassing situation.
- (255) Beside the payroll deduction mechanism it is also very important that all of the employers and other "income payers" report at least once a year to the tax authority and to the individuals. Due to the income tax system there is also a mechanism by which the tax authority and the payers have to reconcile with each other who is paid, by whom, what and why. This is not surprising, because the income tax collection mechanism has been precisely designed to track each individual's income and to collect income contingent income tax (based on the person's current ability to pay) at the place and at the time where and when the income is born. The main reason why the income tax collection mechanisms are almost universally designed to work in this way is that it is well known that the income tax system will simply not work (precisely for the previously detailed reasons (i.e. large numbers of individuals will spend their money before having paid their taxes)) if the tax is not piggy backed into the payroll deduction mechanism. This is precisely why the income contingent loan repayment should be collected together with the income contingent income tax payments. Otherwise the income contingency model will not work, or the system will suffer tremendous losses (unnecessarily).
- (256) It should be noted that the annual reconciliation process is also very important if the repayment is deducted by the "income payers" from the current income when it is born. It needs a very sophisticated database which registers all the employers, entrepreneurs, companies etc. who exist (and who do not exist anymore) and who are or were "income payers".
- (257) As a summary: student loans simply cannot work if the repayment is not income contingent. Income contingency cannot work if it is not based on the person's current income. It simply cannot be implemented without using the existing payroll-tax deduction mechanism and the tax authority income tax collection and reconciliation mechanism. (If the student loan agency should do the same then practically a second Tax Authority would emerge in terms of administrative and IT systems, which is neither feasible, nor desirable. If the collection is organised in a different way, the system will be more fragile, less secure, more risky, with huge administrative costs and cannot achieve its original objectives (i.e. mobilising huge amount of private funding to improve equity, access, quality and efficiency in the higher education system for obvious reasons of national economic performance).

## Part III Business Model

- (258) We have seen from the previous section that the core characteristics of a well-designed loan scheme are the followings:
  - (i) universal access, universal conditions with no risk assessment, no collateral;
  - (ii) income-contingent repayment;
  - (iii) self sustaining operation with targeted state subsidy.
- (259) Basic requirements for the student loan institutional system:
  - (i) attractiveness (all stakeholders should be motivated to participate)
  - (ii) efficiency (low financing cost, low default risk and low administration cost)
  - (iii) stability, financial and political sustainability
  - (iv) classified as private, not part of state budget
- (260) These requirements are necessarily interdependent and mutually reinforcing each other. Moreover, the impossibility to meet any of these requirements seriously undermines the scheme.
- (261) The potential players and stakeholders involved in the student loan system:
  - (i) students (graduates),
  - (ii) universities,
  - (iii) private investors,
  - (iv) state (especially ministry of education and ministry of finance),
  - (v) tax authority
- (262) Student loaning consists of several tasks that can be shared between public and private players, so student loaning necessitates the implementation of a special public-private partnership. The major tasks are the followings:
  - 1. funding and risk-sharing
  - 2. client service and administration
  - 3. collection of repayments,
  - 4. professional and political management and control.

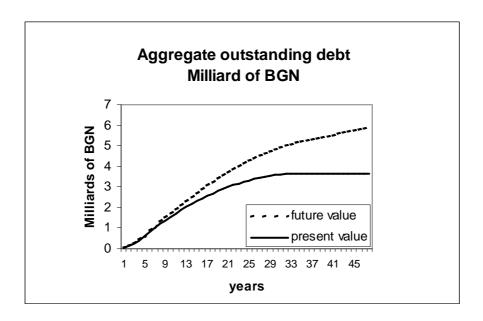
#### 1.) Funding and risk-sharing

#### 1.1.) Financing needs

(263) As it has extensively been elaborated in the previous parts of this paper, income contingent loans do perform much better in achieving those policy objectives for which the introduction of student loans is justifiable, more precisely income contingency is the solution for student loaning. Therefore, in this part of the paper we analyse the financial needs of a student loan scheme with use of a stylised model of an income contingent loan. This model basically indicates the possible orders of magnitudes of an efficiently large enough system for Bulgaria. It must be noted that as regards the size and the orders of magnitudes they would be the same in case of a mortgage type system, if it could have efficiently long duration. However, as it has been argued in the previous parts, banks are not experts in providing and collecting long-term unsecured loans, which would meet the needs of a student loan system and students themselves, thus the duration of mortgage type loans is usually 10-15 years long. In this respect we need to emphasize that the loans size in the case of a mortgage type ones with a 10-15-year duration may be somehow smaller.

(264) The financial need of the system is strongly correlated to the age of the system. In the first years students are taking up the loan, there are no repayments yet. In the second period students continue to take up the loan but graduates are already repaying, nevertheless the system is not mature yet. The system can be considered mature only after some 20-30 years, when new generations keep on entering and older generations who have reached full repayment are leaving, so all the generations are represented, and the life-cycle characteristics of the system are stabilised.

(265) Let us take a simple deterministic model, where the number of the students within each generation is constant, the amount of the loan is indexed as a function of the income growth and income's growth rate is constant and equals the interest rate. For the sake of simplicity let us suppose that there is no default and administration cost. In this case the outstanding aggregate debt will evolve in time as graph 1. shows:



Graph 1.

(266) In the mature period the present value of the aggregate outstanding debt becomes constant. Obviously in order to implement a student loan system, a huge amount of money should be gradually introduced while getting mature. This is the working capital the system uses while it's operating. The

size of a mature national-wide, universal system that really fulfils its main objective of facilitating access to HE can be compared to the biggest retail banks of a country in terms of outstanding debt and number of clients.

(267) The amount of working capital needed depends on several factors as the number of new borrowers per year (G), the income of graduates (B), the length of the training period (n), the initial amount of the loan (C), the repayment rate  $(\alpha)$ . In the case of Bulgaria one can use the following estimations:

- G = the number of new borrowers in a year = babies born per year × participation rate in HE × loan take up rate =  $75\,000 \times 0.5 \times 0.5 = 18\,750$ . (i.e. size of a cohort of borrowers)
- $C = \text{loan amount per year} = \text{loan amount} \times 10 = \text{minimal wage} \times 10 = 220 \times 10 = 2200 \text{ BGN}.$
- B = income per year of a freshly graduate =  $500 \times 12 = 6000$  BGN.
- $\alpha$  = repayment rate = repayment per year / income per year = 0,06.

(268) If the training period n=5 years, then the following formula gives the size of the system (S) $^{42}$ :

$$S = G\left(C \cdot \sum_{j=1}^{n} j + \alpha \cdot B \cdot \sum_{i=1}^{\frac{C \cdot n}{\alpha \cdot B}} (i-1)\right) = 18750 \cdot (2200 \cdot 15 + 0.06 \cdot 6000 \cdot 465) = 3.7 \text{ Md of BGN}$$

(269) The size of a matured student loan system calculated in present value is 3,7 billion of BGN. It must be noted that when designing a student loan system the matured size of a scheme should be taken into consideration, since the consequences of any failure will appear in this order of magnitude. It means that this amount of money must be put into the system during the first 30 years. In this parameter setting the number of clients will increase gradually to 600-700 thousands.

MARKET	SIZE (Milliard, BGN)
	approximately
Student Loan Debt	3,7
Domestic Debt	3
Foreign Debt	50

Table 1.

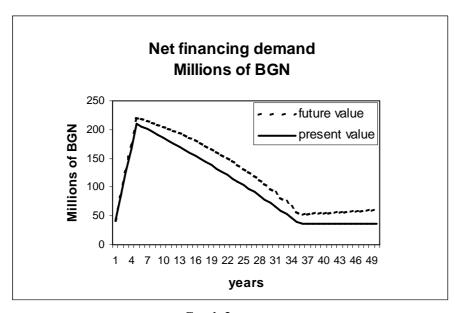
(270) The cost of interest rate subsidy can be easily calculated: 1% of interest subsidy results in a public expenditure which can be calculated as 1% of the total outstanding debt. In our example it is  $0.01 \times 3.7 = 37$  Millions of BGN every year (as expressed in present value). Following this logic the public expenditure of a 2%, 3% or 4% interest subsidy equals annually 74, 111, 148 Millions of BGN respectively, and so forth. As this expenditure is expressed in present value, these numbers should be compared with the present size of the education budget. (Otherwise interest subsidy itself could crowd out, and practically absorb substantial proportion of higher education budget). According to our estimation the interest subsidy according to the current Bulgarian draft law on student loan is roughly about 3%. (the consecutive amount in present value of 3% interest subsidy in such a scheme thus roughly 111 Millions of BGL/year as expressed in present value, which according to our estimation is roughly the 28-30% of the higher education budget.)

-

<sup>&</sup>lt;sup>42</sup> The proof of this equation is available upon request.

- (271) The net financing need of a given year is the change of the total debt. If total debt increases new financing funds have to be involved (the financing need is positive). The net financing need is in effect the result of three components:
  - new loans to students,
  - + accumulation of the interest rate on the existing debts,
  - repayments of graduates.

Graph 2. depicts the net financial need's evolution in time.



Graph 2.

- (272) In a mature system cash-inflows of graduates' repayments are just financing the cash-outflows of new loans; therefore the only financing need is due to accumulating interests on the working capital.
- (273) The size of the system -3.7 Milliards of BGN and 600-700 thousands of clients confers real importance to the questions here below:
  - (i) How is it possible to reduce the financing costs (the price of the money involved)?
  - (ii) Is this loan system part of the state budget or considered as private debt (classification problem)?
  - (iii) How are the corresponding risks and administration costs shared?
  - (iv) What are the cost effects of a given subsidy-policy?

#### 1.2.) Transformation of cash flows, risk and return

- (274) One of the basic concepts of economic literature is that risk and return goes together. If the investor bears more risk then he/she will expect more compensation in form of return.
- (275) Financing costs should be reduced via wide competition of investors from the capital market (domestic and foreign banks, mutual funds, pension funds etc.). The problem is that the players of the capital market are used to regular lending schemes. However, an income contingent student loan is very different from a traditional loan with fixed repayment (so called "mortgage type loan") from several aspects:
  - no fix maturity,

- no fix cash flow,
- no collateral,
- income verification is needed, tax authority should be involved, protection of personal data to be assured,
- debts are cancelled in case of retirement, disability,
- debts are not inherited,
- early repayment is possible without extra fee or "punishment",
- heterogenuos portfolio: the riskiness of the individual borrowers are very different,
- significant political risk: politicians want to be popular by certain modifications (concerning eligibility, amount of loan, interest rate, grace period etc.) that may seriously harm long-run financial sustainability.

(276) That is why investors are usually reluctant to finance directly an ICL scheme and to take all the corresponding risks. That is why there is a need for some kinds of state intervention that transforms the cash-flow and the risk-return characteristics of the student loan debt portfolio before passing it to the investors. See Figure 1.

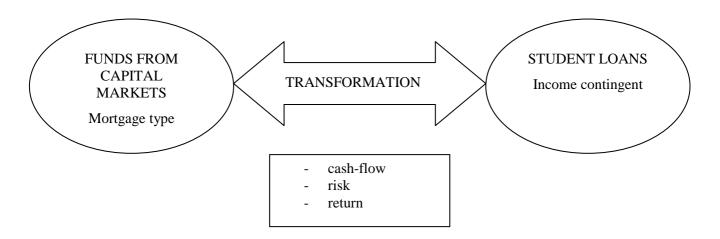
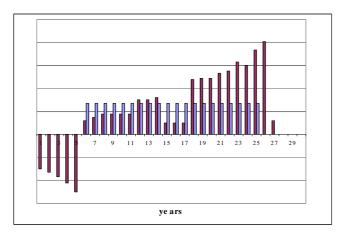


Figure 1.

#### 1.2.1.) Transformation of cash-flow:

(277) Graph 3. illustrates the difference between the cash flows of an ICL and loan (red) of the same maturity but with fixed repayment (blue).



Graph 3.

(278) There are two main differences between the cash-flows. Firstly, in case of IC repayment, cash-flows are stochastic that have to be converted into fixed instalments; therefore the transformer must operate an efficient liquidity management system (forecasting cash-flows and optimising between inflows and outflows). Secondly, an ICL scheme is inherently more patient: (2) the weight of the repayment cash-flow is much more on the later years. Thus, investors requiring fixed and equal instalments from the beginning will need significant cash-flow compensation in the first years.

#### 1.2.2.) Transformation of Risks and Return

(279) In a private system of investors in a competitive environment the interest rate on the student loans would consist of the following elements:

Interest rate = Riskless interest rate + Risk premium + Margin (due to operational costs)

- Riskless rate represents the time value of the money.
- Risk premium is to cover the losses due to non-repayment.
- Margin is to finance operational costs.

(280) While the level of the riskless rate is fairly straightforward (Treasury bond rates are around 4,5-5% in Bulgaria), the required risk premium and the margin are very dependent on the efficiency of the loan scheme and the risk-perception and risk aversion of the investors. A well-designed loan scheme will exhibit low risk premium and low margin at the same time. Without state intervention, however, the market could easily break down, because the interest rate could be so high (especially in case of bad design, no competition or high risk aversion of investors) that students would definitely

refuse to take up the loan.43

- (281) State might intervene in order to diminish the interest rate paid by the students by taking over one part of the risks. In a system where state finances all the losses of non-repayment and all the operational costs, investors would risk nothing, so they would expect only the riskless rate on their investment, thus the interest rate of a student loan would equal the riskless rate. In many countries, interest subsidy is even higher; it covers not only the risk premium and the margin, but also a part of the riskless rate. As we have seen in the 1. Chapter this kind of excessive, non-targeted interest rate subsidy is not fair and financially not sustainable in the long run. Furthermore, if the interest rate is below the Treasury bond rate it creates obvious arbitrage opportunity of taking up the loan and buying immediately treasury bonds, so in this case state subsidy is practically spent on well-informed, less needy students' extra profit. Clearly, this is a perverse redistribution of taxpayers' money.
- (282) Seemingly there is a good solution, because it cannot go either with or without state subsidy. But the possible solution is to avoid the two extremes and to apply a reasonable, sophisticated state subsidy policy. To sum it up, a well-designed scheme has three main attributes:
  - Interest rate of student loans is not less than Treasury bond rate.
  - Risk premium and Margin are low.
  - Risk premium and Margin are financed (students and state) in an optimal mix.
- (283) The key point of the mechanism design is to determine the optimal risk-sharing mix that depends also on country-specific factors. Here below we describe the Hungarian solution and the rationale behind it.
- (284) Let us take the risk premium first. The causes of risk of non-repayment (default) can be divided into two parts:
  - Individual factors (death, disability, emigration, low income, sporadic unemployment etc.)
  - Systemic factors (macros chocks, recession, global unemployment, bad parameterisations, political changes)
- (285) Individual risk factors can be modelled and their effects can be calculated, therefore these risks can be priced. However, systemic factors are rather uncertain and unexpected; therefore their pricing is almost impossible. In this sense default losses can also be divided into two components:

Default losses = Expected (individual) losses + Unexpected (systemic) losses

(286) The Hungarian income contingent scheme, which is a good example from many points of view, followed the principle that the expected, individual losses have to be financed by the risk community of the borrowers. That is why the interest rate of the student loan comprehends a risk premium corresponding to these kinds of risk. This risk premium is variable and is recalculated every year according to the actual facts and expectations (it is between 1,5-2%). These extra 1,5-2% lead to overpayments of those borrowers who succeed to fully repay their debt before retirement without any default event. Expected losses of other, less lucky borrowers are financed from these overpayments. Theoretically this is a kind of "joint-liability" scheme where borrowers provide cross-guaranty to each other. <sup>44</sup> If for example it turns out that incomes are lower, and/or repayment discipline is worse than expected last year, the risk premium will increase, so better borrowers have to pay the bill. In this way borrowers are responsible for each other. We are convinced that this fact contributes to the surprisingly good repayment statistics in Hungary (more than 98% of the scheduled repayment

<sup>44</sup> Economic literature states that one possible remedy of moral hazard and adverse selection emanating from asymmetric information situation is applying joint-liability contracts.

<sup>&</sup>lt;sup>43</sup> Because of the threat of moral hazard and adverse selection investors are also reluctant to lend money at very high interest rate.

obligations come in).

(287) At the same time unexpected risks related to systemic problems are born by the state in form of explicit state guaranty behind the whole system. It means that in case of a macro chock when all the graduates are unemployed or leave the country or die in a civil war; or if it turns out that the system is completely badly designed without hope for recovery (bad parameterisation, unforeseen adverse selection mechanism, inefficient collection mechanism due to grey economy etc.) state will consolidate the system. However state guaranty cannot be called down in case of individual defaults during normal operation because these kinds of losses are foreseen and covered by the cohort risk premium.

(288) Operational costs are also shared between the community of borrowers and the state in the following way:

- The set up costs of the system were paid by the state.
- Regular costs of operation are financed by the borrowers in form of a margin of 1%.

(289) The 1% of operational cost is also exceptional in the international practice and shows the efficiency of the administrative system and the collection mechanism.

#### Hungarian model of optimal risk-sharing mix:

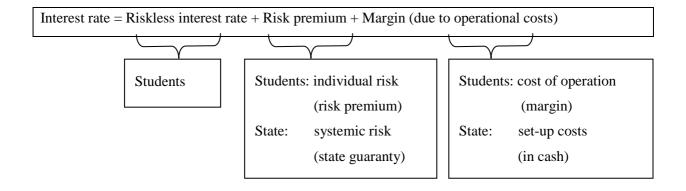


Figure 2.

(290) Given the fact that a significant part of risks and operational costs are taken over by the state (in form of state guaranty and upfront financing of the setup costs), the risk premium and margin paid by the students are reduced to a properly low level that makes student loans fairly attractive from borrowers' point of view, especially in comparison with bank loan rates available on the free market without collateral.<sup>45</sup>

#### 1.3. Providing financial funds

(291) Wide competition of investors is desired, that means that all possible investors have to be targeted from Bulgaria and from abroad, being individual and institutional (banks, mutual funds etc.). The proper device of this wholesale lending can be the followings:

(i) issue of student loan bonds on the domestic or foreign debt markets,

 $^{45}$  In Hungary: Interest rate on student loan = risk free rate (7%) + risk premium (2%) + margin (1%) = 10% while bank loan rate = over 20% and rate = 0.00 more rate = 0.0

- (ii) loan agreements or credit lines with big banks,
- (iii) receiving investments from pension funds, etc.
- (292) For the reasons set above, a student loan institution, as an agent for the collective, can borrow on behalf of the cohort. Specifically, it could borrow at a rate not much higher than the government's cost of borrowing if an explicit state guaranty is provided as in Hungary, because in this case their investment can be considered practically riskless from investors' point of view. Students pay the riskless rate on which a cohort risk premium is superimposed, plus a margin due to operational costs. State can decide to what extent and in what form it shall intervene in order to reduce the risk premium and the margin to be paid by the students. Wholesale lenders will be interested if the proposition makes commercial sense, to whit,
  - (i) security (state guaranty);
  - (ii) predictable timing of repayments (fixed, traditional cash-flows);
  - (iii) a market rate of return (corresponding to the risks investors are bearing).
- (293) If only some preselected Bulgarian retail banks were involved in the financing, then the competition would not be complete and the financing system would be suboptimal in the sense that the financing cost would be much higher than in the above-proposed wholesale model.

#### 2. Customer service and administration

(294) We have seen that the number of clients (students and borrowers) can gradually increase to 600-700 thousands in 20-30 years. This leads to the importance of client service and administration. This task consists of several subtasks such as (1) information and marketing; (2) processing of documents and data; (3) running bank accounts.

#### 2.1. Information and marketing

(295) Needy students coming from poor families are usually extremely risk-averse. The risk aversion is due to cultural factors but also to lack of information. Student perceptions, and risk aversion can and should be changed with targeted marketing highlighting the benefits of loans for students. (Because of the remaining, culturally inherited risk aversion of needy students, the student loan system has to be completed with sensible grants based on means testing.)

#### 2.2. Processing of documents and data

- (296) This task includes contracting, handling contracts and keeping personal accounts up-to-date. These tasks necessitate either wide client service infrastructure or implementation of high-technology Internet data-warehouse. While a mix of these solutions is also possible we analyses the two basic models (traditional and e-business). In both of the models the key point is the security and the protection of personal data.
- (297) Domestic retail banks relying on their existing infrastructure can offer traditional personalised client service. The advantages of this solution are (1) personalised meetings can help information and marketing processes; (2) meeting with students has significant value for banks that can motivate their participation. The education and the motivation of the bank staff are crucial.
- (298) In the e-business model a high-technology data-warehouse is built up and contracting is proceeded via Internet. The main advantage of this solution is its cost-efficiency. Careful design and implementation is very important. It can be costly in the short run but in the longer run this can be the

cheapest way of data proceeding.

#### 2.3. Running of bank accounts

- (299) The lifetime value of the cohort to retail banks is enormous.
  - The minor (because short-run) benefit is the student's unspent current account balances.
  - The major benefits are the value of the student's lifetime custom unspent balances, borrowing (to buy a house), and saving (e.g. pension accumulations).
- (300) Retail banks will be anxious to participate provided the proposition makes commercial sense, to whit,
  - a proper return to shareholders, especially in the form of market access to lifetime customers;
  - PR benefits.
- (301) Thus, retail banks would be very keen to capture student customers at an early age. They are willing to pay for the right to participate in the student loan system. If a quasi-government entity administers students' bank accounts, it would reap these benefits; but once a student graduates (if not before), he/she would open an account with a private retail bank. In effect the government would be 'giving away' students for nothing, totally wasting the potential benefits, and thus grossly violating its mandate to get the best possible deal for students. It is indisputable that those retail banks whose competitive bids qualify them for membership of the loans 'club' should disburse student loans. The government is in an enormously strong bargaining position: for market-share reasons no retail bank will want to be left out. The point is critical a bank, which loses its share of a cohort of students, has lost those potential customers forever. The government is thus a monopoly seller in the same way as with the sale of licences to operate a mobile phone service.
- (302) There is a case for altering the procedure in year 1. Because speed is essential, there is a case for opening negotiations with a single bank, which would then assist with implementation, both in administrative and PR terms. If this approach is adopted, however, it will be important to have regard for regulatory constraints concerning competition law. Thus, even if a deal is struck with a single bank for the first year of the scheme, there is a case for allowing other banks to join the 'club' on the same terms, even in year 1.

#### 3. Collection of repayments

#### 3.1. Repayment rules

- (303) The collection of income contingent repayments is very similar to the collection of taxes and social insurance contributions. Regular income verification is needed; therefore the involvement of the tax authority is inevitable. State has natural monopoly to collect income contingent repayments because of its special rights and the economy of scale.
- (304) The repayment rate can vary around 6-8% of the gross income as the international practice shows. This element should be carefully designed to assure the recovery of the debt before retirement on one hand, while not jeopardising the living of the graduate on the other.
- (305) In the Hungarian system the repayment rate is 6% for everybody, but the lender institution has the right to raise it up to 8%. If the repayment rate increases, the amount of the repayment increases too, so the repayment period will be shorter. However, pure proportionality is fairly rare in the worldwide practice. For example, in Great Britain income continent repayment begins only above a certain threshold while for example in the Netherlands there is a reverse situation: repayment becomes income-contingent below the given threshold. In Hungary the threshold is the actual minimal wage and borrowers have to repay 6% of the minimal wage or of his own income, which is maximal. This is

an important feature that contributes significantly to the efficiency of the collecting mechanism: borrowers have to repay in all cases: even if their income is less than the minimal wage. It may seem too demanding or unfair at first sight. Obviously, it has significant advantages from the lender institution's point of view. They can always have contact with the borrowers; regular repayment obligation makes the borrowers more disciplined, and makes the administration relatively easy and cheap. While the nominal amount of the monthly minimum repayment is fairly low (equals approximately the price of an average book), the probability that borrowers will not be able to achieve full repayment before retirement is significantly reduced. Borrowers understand that this is a loan and not a grant, and if they do not repay, someone else in the risk cohort will have to pay the bill. All these advantages emanating from the minimum repayment requirement make the system more efficient in financial terms and allow for more favourable loan conditions (higher allowance, lower interest rate etc.) After all, borrowers profit from this seemingly strict regulation.

Furthermore, there is a clear tendency on the labour market almost in every country that an increasingly smaller portion of individual income comes from work-based earnings: loose, contractual relationships prevail more and more over permanent, full-time employment. These contract-based, temporary earnings are difficult to charge and in other welfare systems (health care systems, pension systems etc.) it is an actual issue to require a minimum contribution even in case of unemployment or inactivity, saying that they obviously have some financial supplies to live from.

(306) A frequently raised issue is whether it is a good policy to let the employer assume the burden of student loan repayments of his employees, and deduct this amount from their tax base. On one hand it can be an efficient incentive to repay, but on the other hand it diminishes the tax income of the state. The answer depends on the relative strength of the two opposite effects.

#### 3.2. Role of tax authority

- (307) The role of the tax authority can be either direct or indirect. In the direct system the whole student loan collection is backed upon the tax collection mechanism:
  - (i) employers deduct monthly instalments and transfer it directly to the tax authority,
  - (ii) tax authority administers individual accounts and intervenes in case of omission,
  - (iii) at the end of the tax year borrowers make individual settlement,
  - (iv) tax authority passes all the repayment cash-flow toward the lender institution(s).
- (308) In the indirect system the tax authority provides only reliable information about personal incomes to the lender institution(s). The lender institution receives and administers repayments, manages omissions and defaults.
- (309) It is of doubtful legality, if personal data about incomes can be delegated to the lender institution that is profit seeking and competitive. For the sake of the protection of personal data, it is inevitable to establish an intermediary institution (if it is not the tax authority itself) to administer the scheduled and the real repayments.
- (310) In the heart of the whole collection mechanism lays the issue of the repayment moral. The efficiency of the system heavily depends on the question if borrowers can repay, want to repay and/or feel forced to repay at all. From this point of view it is crucial that the agent that has the task of collecting repayments be effectively motivated in the success. It is important to emphasise that full state guaranty behind each individual debt seriously harms all the incentives of the collecting agent. In the first years of the operation one can witness if and how borrowers are disciplined and committed to fulfil their obligations. Bad behaviour is intoxicating, if it happens that borrowers several times successfully escape, then the others will follow the example, and this can easily turn into a vicious circle that breaks down the whole system. Fortunately, the positive feedback is also prevailing in the good direction; the culture of responsiveness and correctness can be established and spread over if the student loan institution takes its mission seriously.

(311) In the Hungarian system the tax authority is only indirectly involved in the collection mechanism. The state-owned Student Loan Company is in charge of collecting income contingent repayments from the graduates with the assistance of the tax authority. They have approximately 250 thousands of clients (150 thousands of students and 100 thousands of graduates) while the department of collection consists only of some 30 employees. If a borrower omits an instalment to repay they send a letter of alert him, and after 6 months of non-repayment his contract becomes dissolved, the claim becomes due in a lump sum, and the tax authority will encash it. (Moreover his name will be added to the interbank list of bad borrowers.) Thanks to these measures the repayment moral in Hungary is fairly impressive: less than 2% of the contracts are dissolved per year for the reason of non-repayment, and also in these cases the tax authority succeeds to recover a significant part of the debt.<sup>46</sup>

#### 4. Professional and political regulation and control

- (312) It goes without any doubt that a central institution that represents the public interest concerning the student loan system has to be in charge of regulation and control. This is a twofold task, and these two aspects tend to be quite opposite to each other in the practice.
  - (i) The objective of the *professional regulation and control* is to keep the system on its equilibrium path in a changing environment. Equilibrium essentially means financial stability in this context, but in a wider sense it refers to the capability of the system to fulfil its mission in the long-run. Parameters of the system (interest rate, repayment rate, monthly allowance, eligibility criteria etc.) should be flexible with reasonable limitations in order to make the system capable of adjusting to the ongoing demographic, economic (and to some extent) political changes. The continuous monitoring of the system is essential. It includes forecasting, modelling, controlling and feedback modifications. All of the monitoring and control procedures have to be free from particular and short-run interests of profit-seeking players.
  - (ii) The objectives of *political control* are to determine the mission of the system, to harmonise the interests of the stakeholders, to assure that the student loan system is effectively adjusted to the higher education strategy of the country.
- (313) It is desirable to keep the balance between the two sets of aspects in relation with a scheme that promotes meaningful discussions and compromises, since professionals can be characterised by a prudent and rather parsimonious attitude which may result in a prudent but from policy point of view insignificant marginalised system. On the other hand politicians and policy makers are always tempted to be generous without thinking much about longer-run consequences.

#### 5. Putting it all together: the institutional model

#### 5.1. Delegation of tasks

(314) Tasks (financing, information and marketing, client service and administration, and running of bank accounts, professional and political control) are not necessarily attached to each other. They should be optimised separately. Each task has to be delegated (outsourced) to the stakeholder that is supposed to be the most efficient to solve it. The system has to be organised in such a way that allows exploiting all potential positive external and synergy effects in order to make the student loan conditions as favourable as possible to students.

#### (315) We can conclude that:

(i) Financing funds should come from the capital markets in form of wholesale lending. To keep down the financing costs the best solution is to issue open market debt instruments with standardised maturity and conditions that are familiar to investors.

<sup>&</sup>lt;sup>46</sup> The detailed description of the Hungarian collection mechanism can be found in the Supplementary section, B.

- (ii) State has to cover a certain part of the risks and operational costs in order to encourage students and investors. The optimal mix is country-specific but we suggest to delegate expected risks to the students' community while unexpected systemic risks should be born by the state. At the same time state can help the implementation of the system by financing the set-up cost of the necessary institutions. The normal costs of every-day operation can be paid by the students themselves, provided that costs are sufficiently low in a well-designed and well established system.
- (iii) The main providers of information and marketing can be: state, universities, union of students, banks and other stakeholders. A global, well-targeted marketing strategy is needed together with the involvement and motivation of all stakeholders.
- (iv) In all cases processing of documents and data necessitates the establishment of a high-technology data warehouse. Contracting and client service can be organised either in a traditional way using retail bank's existing infrastructure or directly in an electronic way via internet connection.
- (v) The running of students' bank accounts definitely has to be left to the bank sector, this task being their core activity. The selected, highly ranked customer portfolio of future graduates is extremely valuable to them for several reasons. It can motivate them to participate in the tasks related to marketing and client service; and also to provide favourable bank account conditions to students.
- (vi) The collection of repayment is the very essential task. Tax authority should be involved directly or indirectly. Income contingent repayment raises the issue of the defence of personal data. Profit seeking banks must not have access to direct information on individual incomes.
- (vii) A Student Loan Centre has to be set up to represent public interests and to exercise control rights both in professional and political sense.

#### 5.2. "Retail Bank model" versus "Specialised Institution model"

- (316) The success of the student loan system heavily depends on the financing method. Basically there were two basic requirements to meet. (1) Financing fund has to emanate from private resources in order not to burden the state budget. (2) Financing cost has to be kept on the lowest level possible.
- (317) Let us examine the two competing models of financing. (a) Retail banks offer loans to students from their own funds as it is described in the Bulgarian Student Loan Draft<sup>47</sup>. (b) A specialised institution (Student Loan Center SLC) offers loans to students and refinances student loans by issuing debts on the capital market as in Hungary.
- (318) Both a) and b) models fulfil the requirement of private funding (1). But a specialised institution can achieve much cheaper financing because there is a much wider competition among investors if all the players of the capital market (e. g. domestic and foreign mutual funds, pension funds, insurance companies etc.) are involved and not only retail banks presented in the domestic market. The market is much wider and more transparent in the case of an open market bond issue than that of negotiations between retail banks and the state.
- (319) The second problem with the "retail bank" model is related to the repayments. It is obvious that banks are not able (and not willing either) to collect income-contingent repayments. First, because they have difficulties to monitor individual incomes (tax-authority would not provide this information for profit-seeking institutions), and secondly, because they are not used to manage loans of such a long maturity and of such a volatile cash-flow.
- (320) The third problem with the "retail bank" model is related to the state guaranty. Only a state guaranty can assure sufficiently low financing cost. In the "retail bank" model the state provides

<sup>&</sup>lt;sup>47</sup> But here we only talk about income-contingent repayment. We have already closed out traditional, fixed loans as not desirable solution in the 1. Chapter.

guaranty on the assets of the banks, namely on the student loans themselves. It means that if a default event occurred then a specialised state fund would immediately fulfil the commitment in place of the graduate. It is quite evident that with this asset-side state guaranty banks would not be motivated at all to quest for disappeared borrowers and to force the repayment, because it is much easier to call down the guaranty.

(321) The fourth problem with the "retail bank" model is related to the zero-profit operation. Naturally banks are free to offer students loans with risk assessment and market conditions in a profit seeking way. But in a system with state guaranty where risks are practically excluded, there is no room for profit. But if student loans operate in zero-profit way, this portfolio should be clearly separated from the bank's other activities, which can be difficult and questionable at the same time.

#### 5.3. Illustrating the functioning of an existing ICL model (Hungary)

(322) In Hungary first we designed a "specialised institution" model with direct involvement of the tax authority see Figure 3

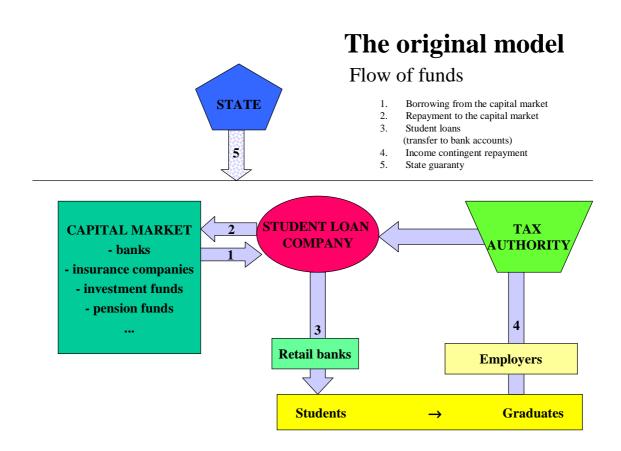


Figure 3

(323) But finally mainly for technical reasons we have accepted a model where the tax authority is only indirectly involved, see Figure 4

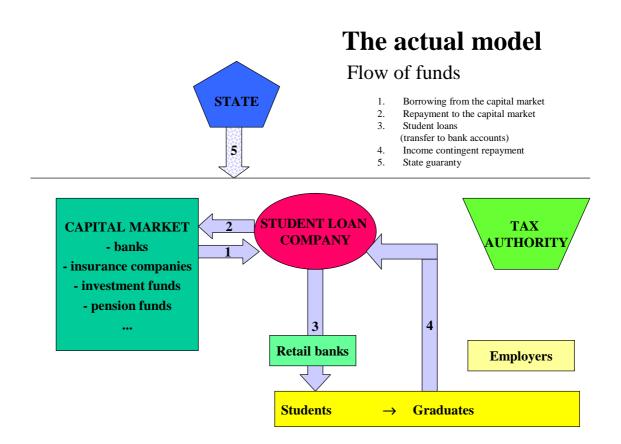


Figure 4

(324) SLC offers the student loan by involving private funds via open market bond issuance and stand-by credit lines. Student loans of long and indefinite maturity are on the asset-side of the institution's balance sheet, and refinancing debts are on the liability-side. Refinancing debts are mainly fix-income securities with cash flows similar to that of treasury bonds, see Figure 5

# The balance sheet of the Student Loan Company

Assets	Liabilities					
<b>Student Loans</b>	<b>Issued Bonds</b>					
INCOME CONTINGENT	FIXED REPAYMENT					
variable interest rate	fixed interest rate					

Figure 5

(325) The SLC transforms the private fund into student loans managing the liquidity risk, the market risk and the credit risk of the whole portfolio. The state provides explicit liability-side guaranty, which means that the guaranty can be call down only if SLC is not able to meet its obligations of repaying, its debts on the liability side because of systemic risks (civil war, mass emigration of graduates, serious economic recession etc.). In a normal situation if a given borrower defaulted the lender institution can still recover this loss from the repayments of the other borrowers and there is no need for state guaranty. State guaranty is called down only if the risk community of borrowers defaulted as a whole, which is a high impact but low frequency event. Access and loan conditions are universal without risk assessment (another feature that makes traditional bank loaning meaningless). The lender institution is the SLC. SLC determines loan conditions, administers the student loans and collect income-contingent repayments. Students have their own bank accounts, and SLC orders the student loan allowances to these accounts every month. Banks helps the SLC to collect the filled in application forms. They are very motivated to get new clients in this way and keep them as long as possible, so retail banks are competing by offering better and cheaper bank-account services and if they wish to finance student loans, they can buy student loan bonds on the capital market.

# Supplementary Section to PART III.

# Economic environment

# **Sources of information**

- Homepage of the Bulgarian National Bank
   <a href="http://www.bnb.bg/bnb/home.nsf/fsWebIndex?OpenFrameset">http://www.bnb.bg/bnb/home.nsf/fsWebIndex?OpenFrameset</a>
- Homepage of the Bulgarian Ministry of Finance
   Government Debt Management
   <a href="http://old.minfin.bg/inpage.php?id=781&language=english">http://old.minfin.bg/inpage.php?id=781&language=english</a>
- Homepage of Eurostat:

http://epp.eurostat.ec.europa.eu/portal/page?\_pageid=1090,30070682,1090\_33076576 &\_dad=portal&\_schema=PORTAL

- Balkan Monitor

http://icegec.hu/hun/publikaciok/balkanmon\_archive.htm

# Basic data (2005)

Population, total (millions)	7,70
Population growth (annual %)	-0,50
Life expectancy at birth, female (years)	76
Life expectancy at birth, male (years)	69
Poverty headcount ratio at \$2 a day (PPP) (% of population)	6,10
GDP (current US\$) (billions)	27,19
GDP growth (annual %)	6,20
GNI per capita, Atlas method (current US\$)	3 510

### Currency board (2008)

Exchange rate is fixed: EUR = 1.95583 BGN

# Foreign debt (end of 2007)

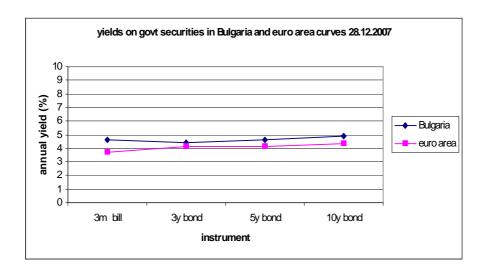
Bulgaria's gross foreign debt totaled 26.248 billion euro (\$38.529 billion) at the end of November last year, up by 30.5% from the end of 2006, the country's central bank said on Thursday. The end-November gross foreign debt figure was equivalent to 91.8% of Bulgaria's gross domestic product (GDP) projected for 2007. Bulgaria's long-term debt was 17.676 billion Euro at the end of November and short-term debt totaled 8.571 billion Euro, the Bulgarian National Bank said in a statement.

### Domestic debt (2007)

By end-January 2007 domestic debt totaled BGN 2,919,544.9 thousand in nominal terms. The share of government securities issues in total debt was 86.9 per cent (BGN 2,536,107.6 thousand).

### Treasury bond yield curve (end of 2007)

Bulgarian TB rates are very close to the Euro yield curve: approximately 50 bp of difference. The riskless rate is around 4,5 - 5%.



### **Interbank rate - SOFIBOR (2008)**

overnight (ON)	4.960
Spot week (SW)	5.273
2-week (2W)	5.425
3-week (3W)	5.675
1-month (1M)	6.376
2-month (2M)	6.477
3-month (3M)	6.660
4-month (4M)	6.743
5-month (5M)	6.818
6-month (6M)	6.890
7-month (7M)	6.899
8-month (8M)	6.974
9-month (9M)	7.056
10-month (10M)	7.158
11-month (11M)	7.306
12-month (12M)	7.562

# Base interest rate (2008)

It is around 4.5%.

# Inflation (end of 2007)

Bulgarian inflation eased back ever so slightly in December, from a 12.6% annual rate in November to a 12.5% in December. According to the National Statistics Office today the slight downward movement was produced by falling prices for telecommunications and for an easing up in the rate of increase on food and transportations costs. Nevertheless, Bulgaria's rate is still the second-highest in the European Union after Latvia.

# Bank loan rate (end of 2007)

The cost of consumer loans denominated in the local currency was up to 10% in late Nov 2007. A month earlier, the average rate was 9.9%. The uptrend was triggered in Sept when the central bank took steps to cool domestic credit growth by raising the minimum required reserves on deposits from 8% to 12%. The Nov gains mean consumer loan rates are back to where they started the year at 10%. The banks released 254.3 mln levs in consumer loans in Nov. The growth rate accelerated slightly to 45% from 41% in Oct. The share of consumer loans in total bank loans is down to 47.5% from 50% a year earlier.

# **Economic growth (end of 2007)**

Increase in consumption and intense investor activities are the main factors leading to economic growth in Bulgaria. Economists expect a 6.2 per cent GDP growth rate in 2007. High internal demand and the positive effects of the EU membership will further economic growth in Bulgaria in 2007. Pensions and salaries will also increase, which will expand the purchasing ability and expenditure of households. The investment potential remains high. The EU entry adds to the appeal of Bulgaria that already offers low production expenditure. At the same time the access to EU funds will also play a role. Improvements are expected in 2008, when the country's production capability will go up. The actual utilisation of EU funds is expected to begin that year, the report said. In March 2007 Moody's changed the outlook on Bulgaria's long-term foreign and local currency government bond rating Baa3 from stable to positive.

# Labor market indicators (2007)

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
Employed (1000)	2282	2289	2308	2320	2331	2343	2354	2353	1337
Unemployed (1000)	358	351	330	310	290	275	268	259	251
Unemployment (%)	9,7	9,5	8,9	8,4	7,8	7,4	7,3	7	6,8
Average monthly									
wages and salaries (BGN)	377	380	396	400	411	408	420	419	434

Clear tendency of increasing employment and salaries. The minimal wage is 220 BGN.

### Demography (end of 2006)

The population in Bulgaria was 7 679 290 in the end of 2006, shows data of the annual survey of the National Statistical Institute. The average density of the population is 69,3 persons on a square kilometre. For a year deaths compared to births have decreased with 39 460 people, which makes 0,5% of the total number. The number of women in Bulgaria is 51,5%, which means that to every 1000 men there are 1064 women. In the end of 2006 a total of 70,6% of the people were already living in towns and only 29,4 in the villages. There are changes in the age structure of the population, which is getting older. The average age of Bulgarians is now 41.4 years. This means that 4 820 000 people are in their working age. People living in the rural areas live longer than those living in the towns and cities. A total of 74 495 were born in Bulgaria in the past year, 99,3% of which were born alive. The number of babies born in 2006 compared with 2005 has risen with 2903 children. Birth rate in Bulgaria has already reached the rate level in several European countries such as Italy, Greece, Hungary, Austria, Lithuania, Latvia, Slovenia, Poland, Switzerland and Germany. The death rate is 113 438. A total of 32 773 couples have married for the same period.

# Part IV

# Experiences on student loan schemes and a comparative analysis

- (326) There is a number of student loan schemes around the globe. Salmi and Hauptman (2006) identified more than 60 countries with student loan schemes, Jonhston and Marcucci (2007) mention 70 government sponsored student loan schemes and OECD (2007) reports on 17 member countries with Japan starting its loan scheme already in 1943 and Hungary joining the group in 2001.
- (327) Below, we look at different loan schemes in terms of the characteristics that are important in regard to establishing a loan scheme:
  - (i) type of expenses covered by the loan (fees and/or living expenses),
  - (ii) size of the scheme (eligibility for the loan),
  - (iii) repayment mechanisms (mortgage vs. income contingent loan scheme),
  - (iv) interest rate,
  - (v) subsidisation and grace period,
  - (vi) administration of the loans (institutional set-up) with special emphasis of the role of the Government,
  - (vii) efficiency of the student loan scheme,
  - (viii) position of the student loan scheme on correlation with other instruments of student support.

# 1.) Size of scheme (eligibility for the loans)

- (328) The decision on eligibility for loans originates from the policy aims related to the loan scheme and to the resources that are available for the support of the loans. If the eligibility of the loan scheme is very limited then it is in our view in contradiction with the principle of universally available loans. Salmi and Hauptman (2006) identified five conditions around which governments usually limit the provision of loans:
  - (i) support of needy students vs. support to students regardless of their social and economic status,
  - (ii) support of undergraduate or graduate level students or students at both levels,
  - (iii) support to full-time students vs. support to full-time and part-time students
  - (iv) support to distance learners vs. support only to traditional students and
  - (v) support to the students studying at the public higher education institutions vs. to students of both public and private higher education institutions.
- (329) A lot of countries with a loan system do not require students to mean test in order to borrow money. Means testing is more typical for grants. There are, however, countries where the participation at the loan scheme is means tested such as Canada, Chile, China, Germany, Italy, Japan, Kenya, Poland or South Africa (Jonhston, B., D., Marcucci, P., N., 2007; Salmi, J., Hauptman, A., 2006; Vossensteyn, H., 2004).

- (330) Further, majority of the countries provide loans to both undergraduate and graduate students (e.g. Federal Perkins Loans in USA) while there are some countries that limit the loans only to undergraduate or graduate students (Jonhston, B., D., Marcucci, P., N., 2007). For example, in Scotland only undergraduate students are eligible for student loans (ibid.).
- (331) There are different approaches also towards full-time and part-time students. Part-time students are in general less covered by the financial support than full-time students. It is probably assumed that part-time students have more possibilities to work to cover their expenses. What we have seen from the data provided by Vossensteyn (2004) is that the support to part-time students is usually linked with paying the fees and only in limited ways to cover living expenses (see for example the case of UK or Latvia). In Denmark and the Netherlands part-time students are not eligible for loans at all (ibid.). On the contrary, Poland and USA provide loans to both full-time and part time students (Salmi, J. Hauptman, A., 2006). We agree in this area with Nicholas Barr (1993) who argues that loans should be provided also to part-time students in order to increase the openness of higher education to these students. This argument is supported by the fact that in several countries the number of part-time students forms a large group of the student body. For example, in Slovakia part-time students represent over 33 % of students at both public and private higher education institutions (Ministry of Education of Slovakia, 2007). In Poland more than 45 % students at public and around 80 % in private higher education institutions are part-timers, while in Finland 50 % of students are part-time students (Vossensteyn, H., 2004).
- (332) Supporting distance learners through loans is another issue that is not viewed the same way around the world. One approach towards the issue is that distance students have also costs related to studying hence they should receive support (Salmi, J. Hauptman, A., 2006). The differences between regular students and distance learners can be in living costs, as distance learners do not spend time directly at the campus (ibid.). However, distance learners may have other costs that are not typical for regular students. At the same time, they are charged fees for higher education that represent extra costs for them just like for regular students. The case is similar to part-time students. Salmi and Hauptman (2006) conclude that if one wants to be serious about supporting lifelong learning, then providing loans to distance students is very important. There are examples of countries providing loans to distance students. Oversees it is the USA that supports distance learners through loans and also grants (ibid.). In Europe, Germany includes distance students into the overall financial support system (Vossensteyn, H., 2004).
- (333) The last controversial criterion defined by Salmi and Hauptman (2006) was providing loans not only to students at public higher education institutions, but also to students studying at private tertiary education institutions. Some governments do not provide loans to the students in private higher education institutions, because they view it as subsidising private higher education (Salmi, J., Hauptman, A., 2006). On the other hand, there are governments that see it important to provide loans also to students at private higher education institutions. One reason to do so is helping the needy students (Norway). Another is supporting the choice of a student and the quality, i.e. best tertiary education institution attracts students no matter whether it is public or private one (ibid., OECD 2007). The availability of the loans to the students from private and public higher education intuitions is typical for Asian countries (South Korea, the Philippines, Thailand), but it also exists in other parts of the world (e.g. Kenya, Norway, Palestine, Poland, USA, Slovakia) (Salmi, J., Hauptman, A., 2006, Jonhston, B., D., Marcucci, P., N., 2007). We also support financing students at private institutions, but from more philosophical point of view, i.e. because loans should be universally accessible.
- (334) Beside these five criteria identified by Salmi and Hauptman (2006), there might be other conditions defining the eligibility for loans. In Belgium for example, loans are provided to students coming from families with more than three children (Vossensteyn, H., 2004). In Estonia loans are normally provided to full-time students, but part-time students who are trained to become teachers or are already teaching can also apply for the loans. There are also countries where loans are academically selective, i.e. performance-based such as in Japan the JASSO<sup>48</sup> First Class loans

\_

<sup>&</sup>lt;sup>48</sup> JASSO – Japan Student Service Organization

(Jonhston, B., D., Marcucci, P., N., 2007). Another possible limit is age. For example in Germany only students under 30 and in Hungary only under 35 are eligible for the state support (Vossensteyn, H., 2004). In Sweden, on the other hand, the students are eligible to apply for loan up to the age of 41 (ibid.). This age limit seems to us extremely high as it may cause that the borrower will not have enough time to repay his/her debt<sup>49</sup>. Another example of criteria is citizenship. Again, in Germany also citizens of other EU and European Economic Area countries are eligible for loans if they have place of residence in Germany, while for example in Denmark or Estonia student must be Danish/Estonian citizen in order to be eligible for loans (Salmi, J., Hauptman, A., 2006, Vossensteyn, H., 2004).

(335) The highest proportion of students benefiting from student loan schemes is according to OECD (2007) in Norway (100 %), Sweden (80 %), Australia (79 %) and Denmark (42 %). In the table below we extracted the eligibility criteria for these countries:

Country	Eligibility criteria	Proportion of students awarded the loan in % in 2004/2005 academic year		
Norway	Everyone in Norway.	100		
Sweden	Under 41 years old. Part-time students are eligible for reduced amounts of loans. Means testing only in regard to student's income, the support is reduced based on the income, but not eliminated.	80		
Australia	Citizenship or long-term residence in Australia. The applicant do not use up-front discount for tuition fees. Open to most of the students.	79		
Denmark	Danish citizens, full-time students, attended course must be recognised by state, over 18 years old.	42		

Sources: OECD Education at the Glance 2007, Vossensteyn, H., 2004,

# 2.) Type of expenses covered

(336) There are three approaches towards types of expenses eligible under student loans:

- tuition fees only (e.g. Chile),
- living expenses only (e.g. Hungary, Germany, Slovakia full-time students)
- tuition fees and living expenses (e.g. Slovakia part-time students, USA, UK, Canada, Kenya).

(Salmi, J., Hauptman, A., 2006; Jonhston, B., D., Marcucci, P., N., 2007, Amendment to Higher Education Act no. 131/2002)

(337) There are arguments for and against the use of loans to support living expenses. For example Salmi and Hauptman (2006) argue that student loans should be limited to tuition fees as these represent the investment component of what a student/his family spends for tertiary education, while opening the borrowing to cover living expenses will support the lifestyle of the student and not his/her further education. On the other hand, Johnstone and Marcucci (2007) believe that one of the important characteristics of a government sponsored student loan scheme is also sufficiency of the loan. This means that the loan should be sufficient to enable the student to participate in an appropriate form in higher education without unacceptable personal deprivation, unacceptable parental sacrifice or

\_

 $<sup>^{49}</sup>$  For details see the section on Theoretical background of this report.

spending unacceptable amount of time in term-time employment (ibid.).

The decision of specific government on eligibility of expenses to be covered by the student loan depends on the overall system of support of students (for details see the part on the "Position of student loan scheme in correlation with other instruments for student support" in this paper). In any case, the amount of the loan is limited in all three cases. In regard to the tuition fees it is limited by the limit of the tuition fees set by the government (UK) or if the government does not limit the tuition fees then it limits the amount of loan that can be taken out (USA) (Jonhston, B., D., Marcucci, P., N., 2007). In case of living expenses there are different ways of limiting the amount of the loan. For example, in Hungary, the amount of the loan can cover only half of the living expenses of a student (Berlinger, E., Gönczi, É. 2007). In Slovakia there are fixed amounts of the loans that can be taken out regardless of real costs of living and of fees (Act on the Students' Loan Fund No. 200/1997 Coll.). In the UK the amount of the loan dedicated to cover the living costs also depends on whether the student conducts his/her studies in the capital where the living costs are higher or in another city (Jonhston, B., D., Marcucci, P., N., 2007). In Norway, if one lives without parents then 40 % of the loan can be given as education grant <sup>50</sup> (Vossensteyn, H., 2004). In Denmark, on the contrary, the amount of a student loan is the same regardless of whether she/he lives with parents, but the amount of grants is lower for students living with their parents than for students not living with their parents.

(339) As we have argued in earlier parts of the report we believe that the student loan scheme should be universally accessible and it should be large enough to cover fees as well as reasonable living costs. Simultaneously, we are convinced that restricting loans by age limit and first study/first degree is useful in order to secure long enough repayment period (the age limit) and to limit one loan per one person (providing the loan for only one BSc, one MA, one PhD).

# 3.) Repayment

(340) The repayment can take two basic types forms: a traditional mortgage type repayment or income-contingent repayment.

# 3.1.) Mortgage type loans

(341) Mortgage type loans are according to Salmi and Hauptman (2006) repaid on the equal basis over fixed period of time and the repayments are usually made on monthly basis. The repayment period varies between 3 to 15 years (ibid.). An example of this type of loan is the Slovak student loan where payments are done on monthly basis regardless of the situation of the debtor.

(342) As mentioned in the previous parts of the report, the mortgage type loan has a number of fundamental problems such as more demanding administration, not enhancing access to higher education, increased number of defaults, etc. Solutions to the problems generate further problems both for borrowers and taxpayers (for details see the first part of the report). A much more suitable alternative to the mortgage type loan is the income contingency loan that we shall describe from the international perspective below. Despite this fact there are countries using the mortgage type schemes such as Slovakia or Germany.

# 3.2.) Income contingent repayment

\_

(343) Income Contingent Repayments are seen as more innovative mechanism of student loans. The repayments are calculated as a function of the borrowed amount and the income of a graduate after completing his/her education (Salmi, J., Hauptman, A., 2006). In the earlier parts of the report we have thoroughly explained how the income contingent loan schemes address capital market imperfections and what philosophical advantages they have. Here, we shall look at the experiences of different countries. There are two systems of income contingent repayments: mandatory and optional (Salmi, J.,

 $<sup>^{50}</sup>$  Whether 40 % of the loan will become a grant also depends on whether the student will pass the exams (Vossensteyn, H., 2004).

Hauptman, A., 2006). According to Salmi and Hauptman (2006) the Optional Income Contingent Repayment provides a possibility to the debtor to switch from a mortgage type repayment to Income Contingent Repayment and it is usually used in the case of people who are not able to repay their loans, i.e. once their income falls under certain threshold then the repayment is adjusted to their income (this type of loan schemes are to be found for example in the USA, Chile, but also in the Netherlands). On the other hand, the Mandatory Income Contingent Repayment means that the repayment will be from the beginning of repayment based on the income of the borrower after finishing the studies. The typical case of mandatory income contingent loan scheme is in the UK, Hungary or Australia.

# 3.3.) Mandatory Income Contingent Repayment

- (344) The percentage of earning that must go to the repayment can be fixed or progressive. Fixed percentage applies to everyone regardless of level of income while progressive approach demands repayment only above certain threshold and/or the repayment increases when income raises (Johnstone, B., D., 2005). Different countries choose different paths in this regard. Sometimes as can be seen in the following cases even the countries with income-contingent loan schemes use the income threshold to start the repayment even though as we demonstrated earlier it is unnecessary. Such examples of the income contingent loan schemes include countries like Australia and South Africa. The two countries have progressive approach with a defined threshold (Australia USD 27 444/year and in South Africa USD 10 115/year) and with an increasing amount of the income to be used to repay the loan once the income is rising (Jonhston, B., D., Marcucci, P., N., 2007). The debtor starts with the repayments at 3 % of the income and the amount paid from the income increases up to 8 % in case of both countries (ibid.). Great Britain uses the progressive approach in terms of applying a threshold (USD 23 320/year), but the UK keeps the same percentage of repayment all the time at the rate of 9 % without further increases (ibid.). On the other hand, Hungary represents an example of the fixed approach as the repayment rate is the same for everybody regardless of the level of income and it is 6 % of gross income (in the first two years of repayment 6 % of minimal wage), even though the lender in Hungary has the right to rise the repayment rate to 8 % (Berlinger, E., Gönczi, É, 2007).
- (345) The Hungarian approach of making the borrower repay under all conditions may seem at first not sensible, but it is based on several well grounded arguments:
  - (i) the lender has permanent contact with the debtor as the debtor has to repay all the time,
  - (ii) regular repayment makes the debtor more disciplined,
  - (iii) administration of loans is cheaper and easier as the lender does not have to keep track of who has passed the threshold,
  - (iv) while the amount of the repayment is fairly low (average price of a book), it still secures that the loan will be repaid before the retirement,
  - (v) it reflects the fact that loose working relationships, which are more difficult to charge, more and more prevail over the full-time permanent working contracts.
- (346) All the mentioned advantages consequently make the system more efficient and that allows providing more favourable loan conditions to the borrowers such as higher allowance or lower interest rate (Berlinger, E., Gönczi, É, 2007).
- (347) The progressive approach (South Africa, Australia) seems to be more convenient for high income earners who get a chance to repay their debts quickly while the fixed one (the Hungarian case) is more convenient for low income earners who are provided with maximum number of years and are saved from pressure of repaying high amounts.
- (348) Another closely related issue to the above discussion is the question of writing-off non-repaid debts. Stopping repayments is part of the protection of the low earners helping them to end the process (Barr, N., 2002). While Australia helps borrowers in the beginning of the repayment process (people

start to repay after reaching a certain level of income) it does not support writing-off the loan balances after passage of certain years. In Sweden the borrowers are supported at the end of the repayment process, a borrower's liability to repay is written-off after 25 years or in the age of 60 (Vossensteyn, H., 2004). In Netherlands and Chile the remaining debt is written-off already after 15 years which can be viewed as quite early in the career (Barr, N., 2002, Vossensteyn, H., 2004). In Estonia, there is a possibility to write-off the debt if the graduate decides to work in a state agency (Vossensteyn, H., 2004).

# 4.) Subsidisation, grace period

(349) There are always two sides of costs: costs of borrowers (students, their family, and their guarantors) and the costs of lenders. Who bears what costs is a political decision that depends on the aims of the loan scheme. As already discussed, the aim of the loan scheme may be to improve access to higher education and/or to increase the cost sharing (Salmi, J., Hauptman, A., 2006). The two aims are not necessarily exclusive even though the subsidies seem to be more justified in case of increasing the access (ibid.). In case of increasing cost sharing it is logical that the higher the subsidies are, the lower the share of costs on the borrowers side is. However, highly subsidised schemes can also harm the openness of higher education in the long-run. The idea is that the high level of subsidisation is in favour of present borrowers, but it is disadvantageous for the future ones, because it makes the loan scheme expensive. An expensive scheme may not be sustainable for long time and/or cannot be extended to a larger group of students (part-time students, distance students) as this could be fiscally costly, especially in case of countries in transition. Hence, the expensive loan scheme is also in contradiction with both aims of enhancing the access and of cost sharing. In addition if public money is spent on an inefficient loan scheme, then this money will be missing in the budget of higher education. Therefore another negative impact of the costly loans is the decrease of quality of higher education as without resources the quality of higher education is in threat<sup>51</sup>.

(350) There are several basic ways how governments subsidise such loans, i.e. they decrease the costs of the loan for the borrower. These are in the area of the 1) costs of the money to the lender expressed by interest rate 2) costs of default and 3) costs of administration of the loan scheme (Jonhston, B., D., Marcucci, P., N., 2007). Ziderman (2007) identifies two other built-in features that influence the cost of the loan scheme. First, there is no interest payment during the study and grace periods. The second feature is extended repayment horizon (ibid.).

### 4.1. Costs of default

(351) Johnstone and Marcucci (2007) argue that while the student should be engaged in covering the cost of money and the cost of administration, he/she shall not bear the cost of ultimate risk of default, because this would substantially increase the costs of borrowing and would make it inaccessible to the majority of students. One of the ways in which this can be solved is to involve more players to carry the risk of default. As discussed in the previous section of this report there are individual (low income, unemployment, etc.) and systemic factors (macro shocks, recession, etc.) causing non-repayment. While the government shall cover the risk related to systemic factors, the individual factors can be dealt with in different ways. In Hungary this is solved through shared liability of borrowers. In Slovakia each borrower has to have one co-signatory and must be insured within the group insurance of the clients of the Student Loan Fund in case of death or injury with the permanent impacts (Student Loan Fund, 2008). The costs of insurance are born by the borrower (ibid.).

If the government takes on also the risks related to the individual factors then it is a more subsidised loan scheme. In this case the costs of the risk of default tend to be hidden (Jostone, B., D. 2005). This is the case of for example in Estonia where the state is the guarantor of the loan (Vossensteyn, H., 2004). In Japan there is a possibility to choose in what way the share of the risk will be implemented. When students apply for the loan they can choose whether they want to have personal or institutional

\_

<sup>&</sup>lt;sup>51</sup> See for details the first part of the report: Theoretical background.

guarantee (Jonhston, B., D., Marcucci, P., N., 2007). If they choose the latter then they have to pay monthly insurance to the institutions. Another option, according to Johstone and Marcucci (2007), is that the risk is in the form of guarantee to a private or quasi-private lender who in the case of default collects from the government and the government has to try then to collect from the defaulted borrower. This is the case of Poland where private banks provide loans and collect payments and the loans are guaranteed by state. In case of default the state has to make the loan repayment (Vossensteyn, H., 2004). Such approach represents another example of hidden subsidy.

### 4.2. Costs of administration

(352) The administrative costs represent an area where state sometimes subsidises the loans and which should according to Johstone and Marcucci (2007) be covered by both the borrower and the state. In the case of Slovak Student Loan Fund the borrower is involved in the administrative costs by covering expenses related to repayment of the loan (The list of prices of services of Student Loan Fund, 2008). Such expenses include: the cost of running an account<sup>52</sup> and communication about the status of the repayment, preparation of the contract on the loan and changes in the contract, reminders on the repayments, postal services and alike. The Student Loan Fund has a precise list of services and exact cost of these services published on its web site, see www.spf.sk. Hungary, on the other hand, has a more simple system of flat fee for administration costs of 1 % of the debt (Berlinger, E., Gönczi, É, 2007). A heavily subsidised scheme such as the German one does not require students to contribute to the operation costs at all (Jostone, B., D. 2005).

### 4.3. Interest rates

(353) According to Johnstone (2005) there are five basic types of subsidisation of the interest rates raging from highly subsidised to completely unsubsidised interest rates. On the one end of the spectrum is the German BaföG assistance that charges no interest at all, hence the rate of interest is actually negative real rate of interest. Such large government subsidy is provided to all student borrowers (ibid.). Less subsidised loans are for example in Kenya and Ghana, where they charge a flat rate of few percentage points regardless of the interest rates on the market. Repayments under such schemes do not usually even cover the inflation, thus the returned money looses most of its value (Jostone, B., D. 2005). The third group of loan schemes is characterised by zero real, or inflation adjusted, rate of interest (ibid). This means that the borrower repays in real terms what he/she has borrowed. It is still a moderately subsidised scheme as money always has some real value which is higher than the prevailing rate of inflation (Jostone, B., D. 2005). Such loan schemes can be found in Sweden, Australia or UK (ibid.). The fourth possibility is to charge the government rate of borrowing that represents nominally unsubsidised interest (Salmi, J., Hauptman, A., 2006). The reasons why these interest rates are favourable for students even though it is practically unsubsidised are twofold. Firstly, the government borrows in large amounts, hence decreasing the price per one borrowed dollar (Jostone, B., D. 2005). Secondly, lending to a government is safe thus the risk of default is low as well as the risk premium (ibid.). The Netherlands represent a country that charges the government rate of borrowing to the student loan borrowers (Salmi, J., Hauptman, A., 2006). Similarly, in Hungary the financial cost of the loan is due to explicit state guaranty very close to the treasury yields (Berlinger, E., Gönczi, É, 2007). Finally, an unsubsidised student loan scheme is characterised by the interest rates charged on consumer debt generally (Jostone, B., D. 2005). Such loans are present in the countries without government sponsored loan schemes such as Czech Republic or Portugal (Vossensteyn, H., 2004).

# 4.4. No interest payment during the study and grace period

(354) Another form of subsidy is no interest payment during the study and grace period. The logic

-

<sup>&</sup>lt;sup>52</sup> These costs start being charged during the time repayment, i. e. after completing the higher education study (The list of prices of services of Student Loan Fund, 2008).

behind, especially in case of an income-contingent loan scheme, is that the borrower should repay the loan based on his/her income. However, while studying he/she cannot have full-time employment to generate such income (Salmi, J., Hauptman, 2006). Hence, borrowers are usually not obliged to repay the loans during their study. While in Slovakia the interests are not paid and not charged during the study, in Finland the borrower has to pay twice a year 1% interest during the studies while the remaining 2.5-3% interest is added to the principal of the loan that she/he starts to repay after completing the studies (Slovak Student Loan Fund, 2008, Vossensteyn, H., 2004).

(355) The length of grace period differs. If the grace period is longer, then the subsidisation is also higher. And if the grace period is generally available to all graduates regardless of their income then such subsidy is clearly not targeted and decreases the efficiency of the loan scheme. Based on our research we found out that Germany has one of the longest grace periods of 5 years (Jonhston, B., D., Marcucci, P., N., 2007). Somewhere in the middle of the spectrum of grace periods are Lithuania and Malta with two years grace period (Vossensteyn, H., 2004). On the opposite end is Finland where the graduate starts to repay immediately after finishing the studies (Vossensteyn, H., 2004). In Slovakia the graduate has two months after taking the final exam to start to repay the loan, but there is no interest rate charged during the studies (Slovak Student Loan Fund, 2008). In Japan and Sweden there is a grace period of six months (ibid, Jonhston, B., D., Marcucci, P., N., 2007).

(356) Besides the grace period, some income-contingent loan schemes expects the borrower to start to repay only after reaching a certain level threshold of income which can also be viewed as a certain type of grace period (see for details part on Repayment above).

# 4.5.) The issues related to interest subsidies

(357) Johnstone (2005) sees a problem with both too high interest subsidies rates as well as with very high rates of interest, i.e. low level or zero subsidisation. If the rates of interest are very high then debt loads are higher. This will consequently cause more defaults (ibid.). Such situations will imply political pressure to enhance the subsidies. On the other hand, high government subsidies stimulate the need for rationing in order not to subsidise upper middle class (Jostone, B., D. 2005). Rationing by means testing adds administration costs and opportunities for unfairness and corruption (ibid.). Thus, there is a need to find balance between this antagonist approaches. There should be some minimal subsidisation where the rate of interest would be high enough to provide for some level of recovery and would discourage unnecessary borrowing, thus would make the means testing unnecessary (Jostone, B., D. 2005). The case of New Zealand proves this to be true as after introducing new subsidies in the form of writing-off interests for full-time and low-income students in 2000, there was an increase in the number of students taking out loans and also increase in the overall level of student debt (Barr, 2002). The policy made it possible for students to borrow money and to invest them for private gains (ibid.).

(358) As it has been stated, the rates of interest shall not be too high in order not to cause higher indebtedness and consequently increased political pressure (Jostone, B., D. 2005). Lower than market interest rates; however, do not mean subsidised interest rates (see for details examples of zero interest rates above). Salmi and Hauptman (2006) identify as loan programmes with relatively high subsidy those programmes where a subsidy is 10 or more per cent of the loan provided. Examples of meanstested and relatively highly subsidised loans include China (subsidised), New Zealand, the Philippines, Thailand and the US (subsidised) (ibid.). In contrary, subsidies form less than 10 % of the loan in the commercial Chinese scheme and in the US non-subsidised loan scheme (Salmi, J., Hauptman, A., 2006).

(359) Finland seems to have an interesting loan scheme in regard to searching for balance of the interest rate subsidies. It combines targeting of the low income earners while keeping the hidden subsidies moderate (Vossensteyn, H., 2004). Only the low income earners are eligible to receive interest assistance, i.e. the subsidy is linked to the repayment period rather than the period of taking out of the loan. There is no grace period, the graduates start to repay after finishing the studies. The interest rate is agreed between the bank and the student (state guarantees the loan) (ibid.). As already described the student must pay 1 % of the interest rate twice a year already during the studies, while

the remaining part of the interest rate is added to the loan principle. In the beginning of repayment the interest rate is between 3.5 - 4 % (Vossensteyn, H., 2004).

# 4.6. Extended repayment horizon

(360) The value of the subsidy augments as the repayment period increases (Jostone, B., D. 2005). On the other hand, if the repayment period is too short then the repayment becomes a burden and will possibly be defaulted (ibid.). What happens in most cases is that after certain time the loan balance is written-off. An extremely short repayment horizon is in China even though it has increased from four to six years (Jostone, B., D. 2005). Still, six years is much shorter period than in other countries. Slovakia has also fairly short period of repayment, i.e. 10 years (Student Loan Fund, 2008). Usually the repayment period is between 15 to 25 years period starting after a grace period (Johstone, B., D. 2005, Johnston, B., D., Marcucci, P., N., 2007).

(361) Even if the loan scheme has an aim only to increase access to higher education and not to increase the sharing of the costs, a certain level of efficiency is needed. The reason is that if the hidden grants are extremely high (e.g. 72 % in Kenya, 88 % in Egypt) then it is more cost effective to provide non-repayable grants instead of loans (Jonhston, B., D., Marcucci, P., N., 2007). As also mentioned in the previous part of the report, the hidden subsidies in terms of bearing the risk and/or bearing the costs of running the scheme can cause that the scheme will be identified as public under the EUROSTAT classification, i.e. it will increase the public expenditures, making it more difficult to comply with the Maastricht criteria.

# 5.) Efficiency of the loan scheme

(362) We have already touched upon the reasons why it is important to have an efficient loan scheme, i.e. a loan scheme that is not very costly. An important argument is that if the scheme is not very expensive then it is possible to provide loans to a large group of students (Salmi, J. Hauptman, A. 2006). On the contrary an expensive loan scheme can be used only for limited group of students and/or for limited time as it creates fiscal pressure on the state budget. An efficient loan scheme is defined by high rate of repayment and by high rate of recovery. The high rate of repayment means that the borrower is asked to repay an amount close to real value of money that she/he has borrowed (Ziderman, A. 2007). High rate of recovery, on the other hand, indicates that most of the money invested into the loan scheme has been recovered including not only costs of the loans themselves, but also costs of defaults and of administration of the scheme (ibid.). What negatively influences both mentioned ratios are hidden subsidies (we have already talked about them in different parts of the comparative analysis and of the report): subsidised rates of interest, no interest payment during studies and grace periods, repayment in nominal terms and extended repayment horizon (Ziderman, A., 2007). The loan recovery is further influenced by the administrative efficiency of the scheme, i.e. defaults and administrative costs (ibid.).

(363) The countries where students repay substantial part of what they have borrowed include Finland (90 %), UK (88 %) and Japan – category 2 (85 %) (Ziderman, A., 2007). As it has already been elaborated above, Finland seems to have a loan scheme with limited hidden subsidies. If we look at the factors influencing the hidden subsidies, then we see that Finland does not have a grace period, the interest rates are partly paid during the studies and partly after the studies (they are added to the loan principle) and subsidies of interest rates are possible once the repayment starts and the borrower has low income (Vossensteyn, H., 2004). Terms of repayment and other credit terms are agreed between the borrower and the respective bank (ibid).

Now we shall examine the other two loan schemes based on the hidden subsidies defined by Ziderman (2007). In the UK the interest rate is subsidised only moderately (borrower repays inflation adjusted interest rate), the grace period is not excessive (until April after graduation) and the borrower has to pay until the loan is not repaid (or until reaching the age of 65) – even though this can be in small amounts as the repayment is tied to the income (Vossensteyn, H., 2004). The exception for repayment is when the borrower is below the threshold of income of USD 23 550 (Jonhston, B., D., Marcucci, P.,

N., 2007). The Japanese category 2 loan scheme is a mortgage type loan with fixed repayment automatically deducted from the borrowers account on a monthly basis (Jonhston, B., D., Marcucci, P., N., 2007). The grace period is short – 6 months, the student shares the risk of default through either institutional or personal guarantee, loans are interest bearing (prime rate) and maximum period of repayment is 20 years (ibid.).

(364) Ziderman (2007) has calculated that the average recovery ration of 26 programs is 49.15, i.e. the surveyed countries recover less than half of the resources invested into the loan scheme. The country with above average recovery ratio covering also defaults and costs of administration is Japan category 1 (50.43 %) and category 2 (68.29 %) loan schemes. The category 2 loan scheme is described above. The category 1 loan scheme has the same characteristics as category 2 except for the fact that it is academically selective, the interest rate is inflation adjusted and the loan is only for maintenance and not for tuition fees while the category 2 loans can cover also tuition fees (Jonhston, B., D., Marcucci, P., N., 2007).

# 6.) Administration of loans – Institutional set-up

(365) The success or failure of the student loan schemes depends on one hand on the parameters discussed above. On the other hand, it is important to have an effective implementation design in terms of the roles of different institutions involved in the execution of student loans. In this part we shall provide some international experience in the area of the role of government and other institutions. We shall also look at how countries deal with the dilemma of using existing retail banks versus setting-up new institutions to execute the loans.

# 6.1.) Role of the government

(366) The government has mostly a regulatory and policy design role. The government does not execute concrete activities related to student loans, except for the collection mechanism where some governments decide to collect the repayments through tax authorities (e.g. the UK). As the policy designer and regulator, the government has a very important role and in our view it needs to decide especially on:

- (i) the aim of the loan scheme i.e. increase access and/or increase cost sharing and based on that decide on <u>general</u> rules of eligibility of borrowers (all students, full-time students...) and on costs they can cover from the loan (tuition fees, maintenance,...); the concrete rules with technical specifications shall be left upon the executing institution,
- the type of scheme through which it will implement its goals: a mortgage type versus income-contingent type of scheme and basic features of the scheme: grace period if any, subsidisation of interest rate, repayment period, interest rates how they will be set/based on what parameters, threshold for repayment if any, amounts of regular repayments (e.g. in case of income-contingent loan what part of the salary shall be repaid regularly), after how long time the debt can be written-off and whether it should be written-off at all, etc.,
- (iii) what should be the role of the loan scheme in the overall student support system in relation to other instruments of student support,
- (iv) whether it will establish a "specialised institution" or will it use the existing retail banks to administer the student loans,
- (v) what will the role of the specialised institutions be (determine loan conditions, administering the loans, collect the payments, tap private resources for the loans, other roles such as for example means testing),
- (vi) whether the tax authority will be collecting the repayments from the borrowers,
- (vii) whether other institutions will be included such as, for example, higher education institutions and what will their role be collecting application of students, providing information on the status of the student, collecting repayments,

- (viii) other strategic level decisions.
- (367) The government in some cases (e.g. Germany, Slovakia) provides resources for the loans. In other cases such as Hungary it is up to the Hungarian Student Loan Company to look for further resources on the private capital market (Berlinger, E., Gönczi, É, 2007). As Johnstone and Marcucci (2007) note it is important that the loan scheme becomes independent from the government's current budget. What the government provides in all cases of the state sponsored loan schemes is guarantee in order to diminish the default risk. As discussed above, the extent of the risk of default that the government decides to cover differs between different loan schemes.

# 6.2. Specialised institutions versus retail banks

- (368) Salmi and Hauptman (2006) note that in the countries with:
  - (i) less developed institutional capacity, especially in regard to calculating and monitoring the accumulated debt and in regard to tax systems needed for collecting repayments on income contingent basis and
  - (ii) with public resources that are not sufficient in order to be able to wait until the incomecontingent repayment streams materialise

there is a rational to use the traditional amortised repayments engaging banks or other private sector entities with experience in loan servicing and collection.

- (369) On the other hand, Berlinger and Gönczi (2007) argue that while financing of loans must emanate from private resources, there are number of reasons why to use a specialised institution offering loans and refinancing student loans by issuing debts on capital market rather than assigning the task to the retail banks that would provide the loans with their own funds. The baseline of the argument arises from the fact that the loan scheme should be income-contingent. The two authors defined five reasons that let to establishing the specialised institution in Hungary the Hungarian Student Loan Company (HSLC):
  - (iii) HSLC can achieve cheaper financing than retail banks, because banks only have their own resources to use for the student loans while the HSLC when searching for private resources can take advantage of the competition between different investors from the capital market (domestic and foreign mutual funds, pension funds, insurance companies, etc.),
  - (iv) retail banks are not able and willing to collect income-contingent repayments, because it is difficult for them to monitor individual incomes (tax authority cannot provide data to profit-seeking institution) and because they are not used to manage loans of such long maturity and volatile cash-flow,
  - (v) in a "retail bank" model the state provides the guarantee in order to cover the default risk which diminishes the price of the loan for the borrower, but at the same time it motivates the banks instead of working to quest for disappeared borrowers to take the easier way call down the guaranty thus making the loan more expensive for the state,
  - (vi) the risks are usually excluded from the student loan schemes hence they are not very attractive for retail banks, because then there is no room for profit for the retail banks and even if they would want to offer the borrowers other products on commercial base it may be difficult to separate those products from the loan scheme which would cause further administrative problems,
  - (vii) finally, the "specialised model" was selected, because it is able to tap the private resources for the loans and to manage the liquidity, market and credit risk.

(Berlinger, E., Gönczi, É, 2007)

(370) The retail banks still play a role in the Hungarian system as the loans are sent from the HSLC to students via their bank accounts (Berlinger, E., Gönczi, É, 2007). Since the banks want to attract new clients they are motivated on the one side to help the HSLC with collecting the filled in applications and to offer the students best bank-account conditions (ibid.).

(371) The international experience in this matter is quite heterogeneous. The use of the retail banks is more often associated with the mortgage type loans (e.g. in Finland) while the specialised companies are able to operate both income-contingent and mortgage type of loans. For example, a "specialised institution" administers mortgage type loans in Slovakia (the Slovak Student Loan Fund), in Germany (BaföG) or in Lithuania (State Science Foundation) (Jonhston, B., D., Marcucci, P., N., 2007, Vossensteyn, H., 2004). An example of specialised company administering the income-contingent loan schemes besides the Hungarian HSLC is the South African NSFAS (Jonhston, B., D., Marcucci, P., N., 2007). In the UK there is also a specialised institution, called Student Loans Company; however this company does not collect the repayments. This is done through the tax authority (Jonhston, B., D., Marcucci, P., N., 2007, Vossensteyn, H., 2004). For details on share of responsibility between the government and other institutions involved in student loan schemes see also above.

# 7.) Position of student loan scheme in correlation with other instruments for student support

(372) From the international perspective it seems that loans coexist with other instruments of support. According to the OECD (2007) only Iceland, from the OECD members and partner countries, relies on public subsidies for tertiary education students solely in the form of loans. As it has already been described, loans have different aims in different countries, hence, the relationship between loans and other parts of the student support systems differ as well. The OECD (2007) notes in its report on education that the highest subsidies to students are provided by those OECD countries that offer loans. Thus, clearly, loans are complementary rather than substitutive in the student support system.

(373) In the table below we have identified four basic ways of co-existence of the loans and other instruments of the student support:

Country	Aim of the loan vs. other instruments of student support
<u>Australia</u> (loan is in the amount of the fee), <u>Austria</u> (only if a student is not awarded any other support and has already paid the fee), <u>Chile</u> , <u>Lithuania</u> (loan is in the amount of the fee), <u>Norway</u> (additional loan for those studying at private higher education institutions which are allowed to charge fees)	Loans for fees. The living costs are covered by other instruments.
<u>Denmark</u> , <u>Finland</u> (part-time students only if they do not work), <u>Hungary</u> (state-financed students), <u>Norway</u> (public higher education institutions) <u>Slovakia</u> (full-time students), <u>Sweden</u>	Loans for living costs as additional resources on the top of the grants, scholarships and other public subsidies – this is in the case that there are no tuition fees charged hence the student can use the loan whichever way she/he wants to.
Not determined part of the loan for fees:	Loans for fees and living costs.
<u>Canada</u> , <u>China</u> , <u>Estonia</u> (only full-time students are eligible for loans), <u>France</u> (those who do not receive means-tested or academic grants), <u>Germany</u> (fees related to education and fees at private HEIs), <u>Hungary</u> (fees for self-financed students), <u>Malta</u> , <u>Netherlands</u> (only full-time students eligible for support), <u>Poland</u> , <u>Slovakia</u> (part-time students),	
Part for the loans is determined and can be used only for fees.	
<u>Latvia</u> (only for full-time students), <u>UK</u>	

Belgium French and Flemish part – for students coming Loans to cover other costs of special groups from large families with 3 + children.

of students not covered by other instruments of student support.

NOTE: data on EU countries (except for Slovakia) are from 2004.

Sources: Amendment to Higher Education Act no. 131/2002, Jonhston, B., D., Marcucci, P., N., 2007, Vossensteyn, H., 2004.

- (374) In general it seems from our review that in case of absence of fees loans are viewed as additional resources for students to help them to cover living costs. In case those loans are directly linked to the fees, then there is very little relation between the loan and other subsidies as the other subsidies deal with living costs regardless of the loan. There are also cases where we can find conditioning relation between eligibility for loans and other support. This is in Austria and Germany even though the situation in the two countries is just contradictory. While in Austria the student is eligible for the loan only in case that she/he does not receive other support, in Germany one is eligible for the grant only if she/he takes out also a loan (Vossensteyn, H., 2004). This shows different approaches of the two countries towards the loans. In Austria they probably view loans as some extra help for those who do not fulfil any of the means-tested or merit based criteria. In Germany, on the other hand, the loan probably means that the student must be willing to share some expenses if she/he wants to receive state support that she/he will not have to repay.
- (375) What cannot be seen from the table above is the situation when loans turn into grants based on the academic performance, i.e. a student takes out the loan but if she/he performs according to the defined academic criteria the loan becomes a grant. This is a case of for example in the Netherlands, Norway or Sweden (Salmi, J., Hauptman, A., 2006). In this case, loans have somehow a similar role as academic based grants, i.e. to stimulate students to improve their performance rather than to increase the openness of the higher education to needy students.
- (376) Barr (2002) believes that if the government wants to include loans into the system to help enhance the access to higher, the subsidies in a loan scheme should be targeted and should take place after finishing the studies. In other words, the loans should be subsidised at the moment when a borrower needs it the most - during the repayment (Salmi, J., Hauptman, A. 2006). During the process of repayment, the subsidies should be based on the current income, i.e. in the event of a career break or of very low income it should be minimal<sup>53</sup>. The repayment should be conditional to certain groups such as graduates taking time off for travelling (Barr, N. 2002). While not paying the debt shall be unconditional for "defaulters" completely unable to pay in case of death, serious injuries and alike (see for details the first part of the present report). Further, the repayment shall be stopped after some years (he suggests after 25 years) which would ease the situation of the borrower in the end of the process (ibid.). Another way how to secure the loan repayment's not causing very high burden on the graduate is to set the repayments on lower levels as it is in the case of Hungary (Berlinger, E., Gönczi, É, 2007).
- (377) During the studies, according to Barr (2002), the needy students shall receive grants/scholarships not requiring the repayment after graduation. Barr (2002) further argues that the stress on the grants is crucial in the first year of higher education. This will create risk-free opportunity for a prospective student to find out whether she/he is good enough for tertiary education and would become well-informed about higher education. This way a student is able to overcome the information asymmetry problem, i.e. gain the idea what she/he is supposed to pay for and whether it is worth to invest the time and money for the respective person. The better informed the student is, the readier to take out at least a partial loan he is (Barr, N. 2002).
- (378) There is no universally agreed best approach of what should be the correlation of the student loans in regard to other parts of the student support system. However, what seems to be important everywhere is that the instruments of student support system shall complement each other. Not balanced student support instruments may not be used as it has originally been designed. In the Box

<sup>&</sup>lt;sup>53</sup> This is what we called earlier in the report the defaulters temporarly not able to repay.

below we demonstrate how an unbalanced use of different instruments of student support ended-up in decreased use of the student loans in Slovakia.

### Box 1.

### Mismatch between loans and other student support systems in Slovakia

In Slovakia for grants and indirect support mechanisms, as well as for loans, students had to be meanstested. All these support mechanisms were available only to full-time students, so they targeted only one group of students: needy full-time students. In October 2005 new merit based grants were introduced for over 10 % of full-time students and in April 2006 grants for needy students were almost tripled reaching roughly the level of the Slovak minimal wage. The criteria for obtaining the meanstested grant were relaxed, so the number of eligible students rose by nearly 2 % (from 7.8 % to 9.6 %). Further, in 2004 the level of the student loans was increased for the needy students from 600 Euro/year to 1200 Euro/year. As a result of this, a substantial increase in the means-tested support and of the concentration of the support on exclusively full-time students, leaving out 1/3 of the student body studying part-time, has led to a dramatic decrease of the interest of students in student loans.

In 2003/2004 the number of loans taken out by students was 5565 and it dropped to 1877 loans awarded in 2006/2007 (drop by 1/3) while the number of full-time students rose from 97 759 in 2003/2004 to 123 309 in 2006/2007, so it increased by 1/4. As a consequence of the declining interest of students in the loans, the Student Loan Fund decided to abolish the means-tests. In addition, in July 2007 the National Parliament passed an amendment to the Act on Higher Education introducing the fees for part-time students and opening the loan scheme for these students. A month after of opening the scheme to part-timers over 50 part-time students applied for loans. It remains to be seen to what extent the opening of the student loan scheme to part-time students will change the interest of students in taking out student loans and whether it will help enhance the openness of Slovak higher education through shifting the student support system from only one group of students (full-time students) to other groups of students.

Králiková, R. (2008), The Ministry of Education (2007), The Decree on Merit-based Grants 453/2005, Annual Report of Student Loan Fund (2007)

# Summary of the main conclusions on the Bulgarian proposal

- (379) Nowadays, Bulgaria seems to be in an especially favourable situation in respect of launching an income contingent scheme. Due to the forecast convergence processes, the real income growth rate is expected to be much higher than the real interest rate (being at present even negative) and therefore, provided that this tendency will be stable in the future investing in human capital (i.e. graduates' future income) would be a very clever state policy and also an attractive business option from an investor's point of view.
- (380) Before going into the details, our conclusions on the proposed law on student loan in general are as follows:
- (vii) we fully support the general higher education objectives and the main objectives of the law (access, equity, quality, competition), which the proposed student loan scheme aims to promote;
- (viii) we agree, that if the proposed retail banks based system will be introduced with a fixed-term loan repayment mechanism, then almost all of the main design elements will be necessary (precisely this is why we would not suggest to introduce such a scheme);
- (ix) we agree with (almost) all of the other design parameters of the law proposal, (e.g. we strongly support the unrestricted universal access to loans, the fact that the loan will cover all of the tuition fees, all of the regulation elements for protecting students as "consumers", the targeted nature of some supports, the writing-offs for mothers with a second or more children);
- (x) we think that except for those minor technical problems which this report will discuss later on the law proposal regulates the imaginary retail bank based, fixed-repayment (mortgage) type student loan in quite a sophisticated way;
- (xi) we would strongly suggest to avoid the following design elements of the scheme, if it is possible, though we fully understand that under the present circumstances it is difficult: (a) general state guarantee behind each student's loan (since it makes the scheme public, and it carries perverse incentives for collecting repayments), (b) general (untargeted) interest subsidy (since it is very expensive and inequitable) (c) fixed term repayment, (since it requires a state guarantee, interest subsidy and causes many other problems e.g. debt aversion, huge default losses etc. because it is inadequate for student loaning). To the best of our knowledge, these are exactly the killer type problems that will diminish the importantee any single objective for which the scheme is to be introduced and the ones that hinder the successful implementation the scheme.
- (xii) We support the draft law proposal in its intent to protect individual students by determining an interest rate they will be charged with, and also by determining the interest rate for the retail banks purpose. However, it is difficult to understand why and on what grounds an investor who bears neither any risk (full state guarantee), nor any operational costs (according to the law the government is going to pay all of these costs for those banks who are *willing*(!) to participate), expects to receive an interest rate which is significantly higher than a riskless rate (e.g. a treasury bond rate). According to the asset pricing theory, this is a clear arbitrage situation for the investors (in this case generated by the state).
- (381) It must be noted very strongly, that the above-mentioned points do not represent our value judgements, but are deeply rooted in the economic theory and in the practice and experiences of existing student loan systems as it presumably will be seen from the report.

### On the project as a whole – implementation issues do matter

(382) As we have already witnessed some failed attempts to introduce student loans schemes, as well as have participated in implementing a successful scheme, we would like to send a final message on the programme as a whole, particularly on the implementation issues:

- (i) Student loans are technically difficult; and they are particularly difficult if the idea is to finance them by private resources.
- (ii) Policy makers particularly politicians underestimate the difficulty; it is the job of the civil service to make it clear to the Ministers that such loans are not an easy or quick fix.
- (iii) The tasks involved in implementing student loans have always and everywhere been underestimated. It is easy to give out money to students the hard part is to collect it. It is not good enough to start distributing loans with the intention to fix the collection issue later -- the structure of collection has important implications for the design of the loan application, etc.
- (iv) An implementation is two-fold, (a) BUILDING a loan system and (b) RUNNING it. These are different elements. Policy makers virtually never allow enough time for (a).
- (v) Thus, the first step has to be a schedule that is realistic. When serious design and implementation was started in Hungary in 1999, the government had already decided in principle to introduce an income contingent loan system but debates on the details and implementation parameters of the loan continued for quite some time. The process of reaching an agreement on policy design and then building Diakhitel (the Hungarian Student Loans administration) took 2 years and it was possible to do it that fast only because (a) the government at the highest level were behind the scheme, (b) there was a very committed Hungarian team, and (c) they took very seriously the advice they received from foreign and Hungarian experts on the implementation, (d) moreover, the team was well equipped and about 50 external experts were also working on different aspects of the scheme in a cooperative way as a team.

# **ANNEX**

Answers to the specific questions raised at the Workshop on the Presentation of the Report on 26<sup>th</sup> March, 2008 in Sofia

# 1.) Student Loan Application process in the Hungarian system

In the year of launching the scheme (September 2001) students could apply for the student loans in all major post offices (in about 1500-1800 post offices all around the country out the total of 3200 post offices).

By now almost all of the retail banks take part in this process, therefore, students can also apply for student loans in their branches. Moreover, the Student Loan Company (SLC) is building up a cooperation network with the universities, and with the university level student representative organizations so that students can also apply for the loan (increasingly) at universities and/or student representative organizations' offices. (The Student Loan Company is a "high-tech" IT centre, located in an office building. It has no branches, and has only a small customer service desk at the headquarters. It utilizes banks' branches, post offices and university/student offices for the purpose of collecting loan applications)

The application "package" contains: a loan application form, together with the loan contract, and some information materials.

By the time of loan application, the student must have an operational bank account at whichever bank she/he chooses, and has to get a certification from the relevant university office (e.g. registry) which proves his/her student status.

The student should indicate on the application form the amount of loan he/she wishes to get, the schedule of the disbursement of the loan (in one lump-sum, or in whatever instalments), should give the bank account number where he/she wishes to get the transfer of the loan. Besides, the student should sign each of the loan contract copies. Here the identity of the student is (must be!) also checked. (The loan contract is already signed by the student loan company in a legally valid way). The student will leave one copy of the loan contract, the filled in and signed application form, and the certification of student status at the place of application. (i.e. a bank branch, post office, university office etc).

These applications will be immediately forwarded to the place of data processing. (Originally it was the main data processing and logistic centre of the Hungarian Post, nowadays other data-processing centres are also involved). Data processing occurs within days and the data immediately appear at the database of the Student Loan Company. Papers are forwarded for last check to the Student Loan Company. The SLC checks the processed data and the student's status with the respective universities. (The way of regular information exchange is well organized; this is basically an electronic data exchange). (The loan applications, loan contracts etc. are then physically stored in specialized document storing facilities, which should also have special security standards (e.g. these papers must be stored safely until the end of the loan's repayment, which might be even 20 years.) The whole application process is almost fully automatized, the process runs through the system within a few days.

If the database is ready and the student's status is checked etc., the SLC transfers the required money to the bank account of the respective student.

If the student has applied for a loan (i.e. made the application process) at a branch of a bank, the bank obviously offers him/her the "student loan account" product package – that is the biggest advantage

for a student in applying for a loan in a bank where she/he can also open the bank account at the time of application.

One person (in a bank branch, or post office, or university office, depending on where the student has applied) helps in filling the form, ensures that everything is filled in and the information is correct, checks the identity of the student (it is an important security measure!), checks the certification of the student's status and forwards the papers immediately to the place of data processing. The whole process takes one day.

Data processing is fully automatized (e.g. the way posts check posted letters), carried out by specialized firms with special large capacity scanners – on the basis of a contract with the SLC. (The number of persons involved is the business of this specialized firms, is minimal, since this is the main business of a special type of firms). The data go immediately to a preliminary database. Many automatized checks and control process are done by the firm, and when it is ready, it goes automatically (and electronically) to the database of the SLC. This data processing is typically carried out within a day. During the next few days, the Student Loan Company receives the processed papers, there is staff (cca 10 person) who make the last check and control of all applications, and check with the universities the student's status (double check). If it is ready, the database is closed. Then they send the papers to a special place of safe and secure storage. There are also (a very few) firms who are specialized for this particular task – they are contracted with the Student Loan Company. The main place of storage is one of the special units of the Hungarian Post, where for example most of the state bonds, non-issued but produced paper money, very sensitive documents and such are stored also under very strict security conditions. The place of this unit is not public for obvious security reasons.

Normally 2-3 days after the application has been sent, the student loan company is ready for transferring the money to the account of the student. As the account of the Student Loan Company is held by the treasury, the SLC sends a group standing order to the treasury, which transfers the money to the bank accounts accordingly. This is a fully automatized electronic process. However, for other, for example, funding reasons, some delays may occur, as the SLC never involves and deposits money prior to the transfer (i.e. for reasons of optimization and proper management of the portfolio, organizing funding etc.). Therefore, it may happen that the transfer of the first instalment of the actual loan will be, let say, 3-4 days later as it would be logistically possible.

The whole process has been designed and organized in a way that it should be as automatic and electronic as possible, be as secure as possible and involves as few persons as possible (in order to keep costs of this process as low as possible and in order to eliminate as much failure and security risk as possible).

# 2.) Disbursement and instalments of loans for tuition fees and for living costs

There is no tuition fee (officially) in Hungary. However, there are two types of students: state financed students (who have no tuition fee) and the so-called "self-financed students" (cca 50% of students) who have to pay a significant part of their costs of tuition (this is far from the full cost of teaching, but it is still high).

Both categories students are eligible for the loan, but self financed students are eligible for more: 40.000 HUF/month (during 2x5 months in each academic year, that is annually  $400.000 \text{ HUF} \sim 1600 \text{ EURO/year}$ ), while state financed students are eligible for 30.000 HUF/month with the same duration ( $300.000 \text{ HUF} \sim 1200 \text{ EURO/year}$ ). (1 EURO is cca 250 HUF, thus 30.000 HUF is cca 120 EUR, 40.000 equal cca 160 EUR).

There is one loan (in legal, contractual terms) for one student at a given period of time. The regulation is made in a way, that the loan can be taken out during the whole course of a training period, i.e. a BSc continued by an MSc, continued by a PhD (in this respect it is very similar to the Bulgarian law-technical solution). And it is also maximized in terms of how many semester a student can take out the loan – according to the official length of the specific degree course.

Each semester the student is eligible for the loan which is calculated as a monthly amount of the full loan divided into 5-month instalments for the number of months in a given semester. However, a student has the choice to take the loan out in one sum (from the beginning of the semester at a predefined date till the end of a semester), or to take it out in any freely chosen selection of instalments.

At the beginning of each semester (at the time of enrolment), the universities and the SLC check who is still a student and who is not enrolled during that academic semester –universities certify the fact that a person is a student. Until a pre-defined deadline a student may ask to change the conditions of the loan disbursement (the amount of money (they can take out less than the maximum)), or the scheduling of the disbursement). If a student who has an already signed student loan contract, and is still a student according to the university, and if she/he does not ask for suspension of the loan disbursement, or change in the formerly asked scheduling of the loan disbursement, the SLC takes it for granted that the student wants to continue the loan up-take with the same conditions as it has lastly been agreed upon and acts accordingly (i.e. transfers the money as it has formerly been agreed). However, the student can suspend the loan disbursement or change the amount or schedule of the disbursement. Moreover, even in the same semester when the student had already suspended or changed the disbursement condition, he/she can ask for changes if e.g. some life-circumstances have changed.

Those students who have to pay tuition (self-financed students) are eligible for 10.000 HUF/month more loan to support paying their fees. They have the option if they are going to finance their tuition out of the loan, to do it comfortably, by giving the Student Loan Company a sort of standing order and indicating it to the University. Universities and the Student Loan Company have bilateral agreements, that if a student gives such a standing order to the SLC, the university shall wait until the SLC disburses all of the money to the university's account. That is since there is no universal tuition fee, there is no dedicated loan for fees in the Hungarian system. However, in order to support self financed students, the system has entitled them a larger loan.

If there would be a universal tuition fee system, I would suggest the Student Loan Company and the Hungarian government the following:

- extend with an additional "tuition-fee loan" component the existing maintenance loan component which has the same repayment, interest rate etc. conditions as the existing one has:
- the difference between the existing maintenance loan and the new tuition-fee loan would be, that the maintenance loan is transferred to the bank account of the student, whereas the tuition fee loan would be directly transferred to the bank account of the university.
- As we have understood this is the solution (i.e. direct transfer of tuition fee loans to the universities accounts), that has been described by the Bulgarian student loan draft if it is the case, we strongly support the idea.

How do students receive their money? Each student opens a bank account at whichever Bank they feel comfortable with. Actually, retail banks are competing for students by offering them "packages" to make themselves more attractive for students, e.g. free credit cards, or low cost accounts etc. A student puts into the loan application formula the bank account number into which she/he wants to receive the money and the SLC transfers the money to that bank account. Moreover, the student can change the bank account whenever he/she wants, and as soon as he gives a new order, the Student Loan Company will transfer the loan to the changed bank account.

# 3.) Set up costs of the Student Loan Company

### What the state did in order to set up the system:

- created legal conditions for the student loans scheme;

- designed, built up, organized the system The then World Bank Programme for Higher Education Development (with a total budget of 250 m USD) contained a sub-component for designing and implementing a student loan scheme. The budget of this subcomponent was 1,8 m USD (out of the total of 250 m USD). This amount, more precisely in each year, one part of this total amount was budgeted in the Budget of the Ministry of Education. The spending (and the budget) on student loans out of this budget was insignificant in year 1998, a little bit more in 1999, about 60-70 million was spent in year 2000 (when implementation started to be serious), and the rest in year 2001, in the year of the establishment of the company and the launch of the scheme.
- provided capital for the institution operating the system (The Student Loan Company was established in April, 2001 as a closed shareholder firm, 100% state ownership), with a capital of 500 m HUF. That capital was increased by the end of the year by an additional 500 m HUF.
- in addition, the salaries of the key persons (who later became the top management of the Student Loan Company) were paid out of the Ministry of Education budget (3-4 persons were civil servants, the others (cca 5-6) the staff of the PMU of the World Bank programme).

**The setup costs:** Taken together, the set up cost of the Student Loan Company has been estimated to a 1,5 billion HUF, however, as some other items have been added – related to the set up period of the company—as a maximum the total set up cost was cca 2 billion HUF, for the years of 1998-2001 period. Since then no other budgeted state costs have occurred.

The detailed breakdown of the costs has been determined by the detailed project implementation plans – however this information is not publicly available. However, we think that this information must be enough for understanding the difference between a single 2 billion set up cost and an annually recurring min. 3 billion large cost of finance for interest subsidy.

The precise answer to the question: between 1998-2001: 1,8 m USD (cca 360 m HUF, that time) was budgeted in the Ministry of Education's budget in different sized annual instalments. In 2001 its last instalment was extended to 500 m HUF (cca by 300 m HUF) in order to have enough capital for funding the Student Loan Company (which is a closed share-holder company with 100% state ownership). By the end of that year (2001) another 500 m HUF capital injection was necessary, that was given to the SLC as a loan by the owner (state). Except for a few short-term liquidity type loans by the state, no more state money, particularly budgeted state money was involved. However the SLC has already (cca 2-3 years ago) repaid all of these types of state money with the proper interest charges, and since then no other state finance has been needed. Taken together: if the interest of the student loan would be subsidized by 2-3%, the annual recurrent cost of this "small interest subsidy" would cost every year 2-3 times more money (at the present size of the scheme and the total outstanding debts (150 billion HUF)), than the original single set-up cost of the scheme, which since then has become financially self-sustaining.

The detailed breakdown of costs is not available. In order to indicate the magnitudes: e.g. IT design and business process engineering etc. cost about 150-180 m HUF (in 2001), IT development (delivery of the system) was about 200-250 m HUF, the call center and mail center were an additional 50 m HUF, PR cca 50-60 m HUF, foreign consultancy was cca 100 m HUF, other consultancy (e.g. legal, financial, smaller special consultancies) was cca 100 m HUF etc. About 10 foreign and cca 40-50 Hungarian experts worked on the programme – all these costs, and the set up costs of the company, and the salaries of the staff (in sum: everything) was financed out of this 1,5-2 billion HUF set-up costs of the scheme. However, this data are publicly not available, and the detailed design of such an implementation project, the built-up of such a project, and particularly the breakdown of costs is definitively out of the scope of this paper.

# 4.) What does the loan include in terms of approved expenses?

Students may use the money from the loan for whatever they want to. There are no limitations or requirements to prove some of the expenses paid by the loan.

### **ANNEX 2**

# Slovak Student Loan Fund (SLF)<sup>54</sup>

The student loan scheme was established in Slovakia in 1995<sup>55</sup>. The first loans were provided by the SLF in 1997/1998. Up till December 31st 2006:

- o the SLF had 25 613 clients who took out 1 or more loans during their study<sup>56</sup>
- o the loan was provided to 38 727 students,
- o 61 445 loans in the amount of 1 283 934 210,-  $Sk^{57}$
- o 20 600 clients were repaying loans in December 31<sup>st</sup> 2006

### Resources provided by state to the SLF

The state provided altogether 700 million Slovak koruna from 1995 till 2003. The state has not provided any resources since 2003. The SLF lives out of previous installments and repayments of loans (in 2006 the repayment of loans was in the amount of 119 090 660,- Sk; the profit of SLF after deduction of taxes for 2006 was 6 343 898,- Sk, free resources of SLF in 2006 were in the amount of 882 296 627,- Sk).

The SLF does not need further resources from the state so far as the number of students interested in taking out the loan has decreased substantially. The SLF has a yearly income of about 11 000 000,- Sk from the repayments and about 2 000 0000,- Sk from the interest rates on the SLF's resources deposited in the commercial banks. If, however, the number of student loans would be around 5 000 every year, as it has originally been planned, then the SLF would need more resources from the state budget.

The outstanding debt of Clients of SLF by December 31st 2006 was 620 730 280,- Sk.

## The amount of loans

Between the academic years of 1997/1998 and 2004/2005 the loans were only in one amount: 20 000 Sk (600 EUR)/academic year.

From the academic year 2004/2005 the loan can be 10 000 Sk (300 EUR)/academic year, 20 000 Sk (600 EUR)/academic year, 30 000 Sk (900 EUR)/academic year, or 40 000 Sk (1200 EUR)/academic year. Between 2004/2005 and 2005/2006 the loans of 30 000 and 40 000 Sk were only for students from low income families. The loan of 40 000,- Sk was for the applicant who comes from the group of commonly assessed persons with income of the level of minimal subsistence per one person (156 Euro per one assessed person). The loan of 30 000 Sk was for applicants with an income per one member of the group of commonly assessed equal to minimum wage (246 Euro per one assessed person). Also the students who wanted to have better chances to receive a loan based on their financial needs can provide information on the income of commonly assessed members of the family.

98

<sup>&</sup>lt;sup>54</sup> The data in this note are from the Law on student, the web site of the Student Loan Fund, the 2006 Annual report of SLF and from meeting with the director of the Student Loan Fund on Thursday, Feb. 21st 2008.

<sup>&</sup>lt;sup>55</sup> Before 1997 a commercial bank "Slovenska sporitelna", provided student loans for years 1995/1996 and 1996/1997 – the state provided 200 million of Slovak krowns for these 2 years for 7263 loans.

<sup>&</sup>lt;sup>56</sup> One loan is for 1 academic year, i.e. 10 months

 $<sup>^{57}</sup>$  1 EURO = 33 Sk

Due to the low interest of students in the loans for the last two years anyone can apply for any amount of the loan.

The amount of the loan can be used for paying the tuition fees as well as for paying the living costs. The decision how much of the loan will be used for the fee and how much for living costs are completely up to the borrower.

The loan is disbursed in 2 payments (first is 14 days after signing the contract and the second in February). The loan is for the period of 10 months from September 1<sup>st</sup> to June 30<sup>th</sup>.

# Eligibility

Till January 1<sup>st</sup> 2008 only regular students in Bc. or MA study programs<sup>58</sup> – citizens of Slovakia, studying in Slovakia or abroad and foreign Slovaks<sup>59</sup> were eligible. From 2008 part/time students are also eligible for the loan. Also students from private higher education institutions are eligible for loans, but not many of them apply for the loan (see the table below for the details).

A student is not eligible for the loan if:

- the student has to repeat the same grade one more time and it has not been due to major health problems,
- the student moved to another faculty/university where s/he studies in a lower grade than in the original faculty/university,
- the student has interrupted studies during the past academic year with exception of the serious health problems (must be verified by the doctor) and of the participation on mobility program (must be verified by the faculty/university).

# Before 2005

Before 2005, when there was bigger interest in loans than the loans available, the loans were distributed among different universities and their faculties so that approximately at each faculty the same proportion of students received the loan. About 5,75 % of the students from each faculty could receive a loan.

There was a set of criteria for loan applicants. The criteria involved:

- very good academic performance (i.e. average of the grades is 1,5 while 1 is the best and 3 is the worst grade),
- lower ability to work,
- lower ability to work and serious health disability,
- beneficiary of grant for needy students (social stipend),
- the income per one assessed person from the family is less than minimal wage.

The applicant was supposed to fulfill at least one of these criteria in order to be in the group of students that had priority in receiving the loans. Only if not all the money was used by the people fulfilling one of the criteria above, then the other students could also be awarded the loan by the SLF. If there were some loans left from one faculty, then they were moved to

<sup>&</sup>lt;sup>58</sup> PhD students are eligible under different loan scheme also administered by the SLF. That scheme is targeting young teachers and as regular PhD students (not part time ones) have to teach as part of their program, they are also eligible for the loan.

<sup>&</sup>lt;sup>59</sup> Foreign Slovaks are people who were born abroad and live abroad, but are Slovaks.

another faculty of the same university with the highest interest of students. If there were some loans left from the university as a whole, i.e. all students from all the faculties of the respective university who were interested in the loans had received one, then the extra loans were passed to another university with the highest interest in loans. The same scenario was repeated at this university that received the extra loans from the first university – first the faculty with highest interest in loans received extra loans, then the money that was left was moved to the faculty with second highest interest in the loans and so on.

The loans were awarded based on the score that the student received according to the following criteria (who fulfilled the criteria a) had the highest score, the person fulfilling criteria under letter r) had lowest score):

- a) having serious health disability, being awarded grant for needy students, having average grade above 1,5
- b) having serious health disability, being awarded grant for needy students, having average grade below 1,5
- c) having serious health disability, the income per 1 member of commonly assessed persons is less than minimal wage, having average grade above 1,5
- d) having serious health disability, the income per 1 member of commonly assessed persons is less than minimal wage, having average grade below 1,5
- e) having serious health disability, having average grade above 1,5
- f) having serious health disability, having average grade below 1,5
- g) having lower ability to work<sup>60</sup>, being awarded grant for needy students, having average grade above 1,5
- h) having lower ability to work, being awarded grant for needy students, having average grade below 1,5
- i) having lower ability to work, the income per 1 member of commonly assessed persons is less than minimal wage, having average grade above 1,5
- j) having lower ability to work, the income per 1 member of commonly assessed persons is less than minimal wage, having average grade below 1,5
- k) having lower ability to work, having average grade above 1,5
- 1) having lower ability to work, having average grade below 1,5
- m) being awarded grant for needy students, having average grade above 1,5
- n) being awarded grant for needy students, having average grade below 1,5
- o) the income per 1 member of commonly assessed persons is less than minimal wage, having average grade above 1,5
- p) the income per 1 member of commonly assessed persons is less than minimal wage, having average grade below 1,5
- q) having average grade above 1,5
- r) having average grade below 1,5

Based on the score the SLF made an order of students, starting with providing the loans to the students with highest scores. It could happen that there were no loans left for the students with lower score if 5, 75 % of students of the faculty fulfilled higher scores.

### From 2006

.

For the last two years there were no selection criteria, because of the low interest of students in loans. There are also no limits for faculties/universities in terms of how many students are

<sup>&</sup>lt;sup>60</sup> Lower ability to work is a less serious health disability, but still it is some kind of disability that does not allow a person to do some types of jobs.

eligible from which faculty/university.

### Applying for loan

All the activities related to the decision on awarding the loan, payment of the loan to the student and repayment of the loan by the student are administered by the SLF.

Students apply for the loan at their higher education institution (at their faculty, or if the university is not divided into faculties then s/he applies at university level) at the so-called Student Affairs office. The application form is available on the web site of the SLF (www.spf.sk). The student has to provide all supporting documents proving the low income and/or physical disability.

The faculty/university checks the application, i.e. whether all the data provided by the student are correct. The employees of the faculty/university check:

- o whether the applying person is a student,
- o her/his academic performance during the previous year/results of final exams if the applying person has just finished bachelor's degree and is starting the MA level,
- o whether s/he is a beneficiary of a grant for needy students.

After this check they insert the data into the electronic database of the SLF. If they process more than 50 applications they receive a payment of approximately 12 Euro plus for each extra application above the threshold of the 50 applications they receive about 2 Slovak koruna (0,06 Euro)<sup>61</sup>. Even though the payment for the people at faculties/universities is rather symbolic it establishes certain formalized contact between them and the SLF. This contact later helps motivate them to report to the SLF on changes in the status of relevant student (e.g. if the student drops out from the school). The faculties/universities should be reporting the changes in student's status in any case, but there is no way to punish them if they don't do so. Therefore it is more useful to motivate them positively to cooperate. Since the applications are processed electronically already at the faculty/university level, this makes it possible to make the selection and awarding of loans in a fairly short time.

The <u>students</u> with the <u>status</u> of foreign <u>Slovaks</u> are assessed separately from other students and their applications are sent as separate group of applications in one mailing with all other applications. If these students with foreign Slovaks status are applying for the first time for the loan then they have to also attach to the application the photocopy of the passport and a decree from the Ministry of Foreign Affairs that s/he has such status/photocopy of the card of foreign Slovak.

If the student studies abroad then s/he has to send the application directly to the SLF. The application has to be supported by a document verifying that s/he is student of respective university. This document has to be translated into Slovak (with exception to the documents in Czech and in case of freshmen the documents that are approved by the National center of recognition of diplomas). If s/he starts first year of study then s/he has to also attach to the application the results of the final exams at high school. The SLF then performs the roles normally performed by the faculty/university described above. This is the case of 100 to 200 students per year (for details see the table below). The application deadlines are the same as for the faculties/universities that send the applications of students studying in Slovakia (July  $31^{st}$  and October  $20^{th}$ ).

-

<sup>&</sup>lt;sup>61</sup> This is paid by the SLF.

One can apply for loan also throughout the year<sup>62</sup> – however if one wants the whole amount of the loan then he/she has to apply by<sup>63</sup>

- o June 15<sup>th</sup> if s/he has passed all the exams and has fulfilled all the requirements assigned by the internal rules of the higher education institution to be able to continue the studies in the next grade – the faculty/university will send the applications to the SLF by July 31<sup>st</sup>
- October 10<sup>th</sup> if s/he is a first year student or s/he is student of second or higher grade and s/he has fulfilled all the requirements assigned by the internal rules of the higher education institution to be able to continue the studies in the next grade - the faculty/university will send the applications to the SLF by October 10<sup>th</sup>.

If s/he applies during the academic year, then the loan is proportionately smaller, i.e. if someone starts to take out the loan in 5<sup>th</sup> month of academic year, then s/he is only eligible for loan for remaining 5 months, not for whole 10 months.

The list of people who have been awarded a loan is published on the web site of the SLF. The SLF does not inform the applying student if it did not award her/him the loan. The loans awarded during the academic year are published on monthly bases (there is an update of awarded loans every month).

No later than 30 days after the SLF has received the application the borrower (if being awarded a loan) will receive 2 originals of the contract on the provision of the loan. S/he has to send back one contract signed by her/him and by the guarantor to the SLF no later than 30 days from the date when s/he has received the contract from the SLF. If the contract is not signed by the borrower and by the guarantor in front of the SLF employees, then the two signatures must be officially verified by notary or other similar institutions. The borrower has to attach to the contract all supporting documentation such as proof of being the student of respective faculty/university and proof of the income of 6 previous months of the guarantor (for details on the guarantor see below).

The loan is provided in 2 payments directly to the bank account of the student. The first payment of 50 % of the loan is delivered to the account of the student 14 days after receiving signed contract by the SLF (approximately by December 15). The second half of the loan is sent to the student in February of the following year<sup>64</sup>.

<sup>&</sup>lt;sup>62</sup> Before that there were more students applying than the loans available; the students were applying by October 10<sup>th</sup> of every year and only in exceptional cases when their financial situation deteriorated substantially during the year and the new situation was not caused by the student her/himself, then the SLF decided to provide the loan also during the year.

<sup>&</sup>lt;sup>63</sup> There are 2 deadlines for applying (15.6. and 10.10.), because the deadline in June was introduced in relation with the attempt to introduce fees for higher education in 2005. As these fees would have to be paid at the beginning of the school year the government introduced new deadline for application for loans so there is enough time to process the applications for loans and the student would have money available to pay for the fee. However, the fees were not introduced in 2005, but the deadline of June 15<sup>th</sup> remained in the law.

<sup>&</sup>lt;sup>64</sup> Before 2004/2005 the loan was paid out every month for 10 months of the academic year. In 2004 the government wanted to introduce fees and the loans were supposed to primarily cover the fees. The fees were to be paid twice a year so the government changed payment of the loans according to the planned payment of the fees - twice a year. Even though the fees were not introduced in that time and the loan is not tied to the fees the arrangement of 2 installments was kept. This arrangement is cheaper from the point of view of the administration of the loans.

The SLF informs the respective faculty/university about awarded loans while sending there the list of students who have been awarded the loans.

# The time line of application process for the loan

- application by the student for loan: June 15<sup>th</sup>/October 10<sup>th</sup>
- application sent to the SLF by the faculty/university, by student studying abroad: July 31st/October 20th
- decision on awarding the loan and receiving the contract from SLF by the student: November 20<sup>th</sup>
- student sends back the signed contract latest by December 20<sup>th</sup>
- first payment of the loan: latest by January 5<sup>th</sup>, but if student delivers his signed contract to the SLF immediately after receiving it from the SLF then s/he can receive first payment by approximately December 15<sup>th</sup>
- second payment February next calendar year.

If the student applies later than October 10<sup>th</sup> then he receives first payment 14 days after delivering the signed contract to the SLF.

### Guarantee for the loan

In order to apply for loan the student must have one guarantor who is less than 50 years old (it can be a relative) and has unlimited contract or has other regular income in the time of signing the contract for the loan. The guarantor must be a Slovak citizen with permanent address in Slovakia. The guarantor cannot be student, retired person, unemployed person etc.

Until 2005 the SLF wanted the student to have two guarantors. From academic year 2005/2006 instead of the second guarantor the student has to sign contract with a commercial bank (Wustenrot Bank) that insures the student for case of death (2 ‰ of the loan) or for case of injury with permanent consequences (1,5 ‰ of the loan). Signing the contract with this commercial bank is part of the overall contract for the loan. The insurance in Wustenrot bank is a group insurance for all the clients of the SLF.

### Repayment

There is 3 % interest on the loan, which starts to be applied in the moment when the borrower starts to repay the loan. On the other hand the insurance paid to the Wustenrot Bank mentioned above starts to accumulate from the moment that the student takes out the loan until the loan is repaid. The highest repayment (if one takes the loan of 40 000,-Sk) is 440-, Sk (13 Euro)/month. If the borrower pays regularly then s/he shall repay after 8,5 years.

The repayment shall start 2 months after last (state) exam or 1 month after the changes described in the following part. So if someone for example takes out loan only in the first year of study s/he must start to repay only after graduation. One can decide to repay parts of the loan or the whole loan before the repayment of the loan is due. In case of repaying the loan immediately after finishing the university, the borrower pays zero interest from the loan.

The loan must be repaid no later than 10 years after graduating the university, however there are some exceptions such as maternity leave (only if it is up to 5 years after graduation), priest service during the studies and continuing studying in the first study on higher level, i. e. student who has finished Bc. study and continues on MA level can ask to have her/his repayment postponed until s/he finishes the MA study. In these cases the student must ask for postponement of the repayment. In special cases the Board of trustees may decide to write-off

the dept. So far it has happened only in 3 cases which were extreme (brain tumor, death of debtor).

The SLF informs the borrower about outstanding debt on her/his account each year on December 31<sup>st</sup>. Once the borrower is approaching the last repayment, the SLF sends to the borrower the information that this is the last payment and after repaying that payment the borrower is removed from the SLF's database of the debtors.

### The duty of the borrower to inform the SLF on changes

The borrower has a duty to inform the SLF on changes such as: finishing the study or prolonging the study while changing the date of study completion in comparison to the date originally defined in the contract, moving from one faculty/university to another one, interruption of the study, being expelled from the study, repeating the same grade, leaving the study, change of address and/or change of the name (also in the case of the guarantor). The borrower shall inform the SLF latest 14 days after the change has occurred.

### Fees and other costs

The borrower must also pay fees related to the administration of the loan. The basic fee to be paid is the cost of the operating an account of the student and fee for providing statement of the account. Other fees are paid for services required by the student or for services arising from the fact that student is not fulfilling her/his duties agreed in the contract (e.g. sending a note that the student is late with the repayment – there are about 700 – 1 000 of such notes sent out every month). The list of prices of each service is available on the web site of the SLF: http://www.spf.sk/main.php?page=sadzovnik.

### **Problematic cases**

Approximately 1 % of debtors are not repaying according to agreed conditions and the SLF has to deal with these cases<sup>65</sup>.

The borrower shall pay the repayment every month on the 25<sup>th</sup> day of the respective month, if s/he is late by one day then the SLF may increase the interest rate by 1 % for the remaining debt, however the SLF first warns the borrower about being late with payment. If the borrower is late with 2 payments, i.e. s/he is late by 2 months, then the SLF has a right to demand in one installment the repayment of the whole debt including the associated costs with sending the warnings, paying the lawyer and alike.

If the debtor does not reflect on this request for payment then the SLF takes her/him to the court. The SLF has about 20 court cases per year and the whole process is fairly quick (several weeks). In its whole history the SLF won all the court cases, only one case<sup>66</sup> is not closed yet. There were all together 3 executions as result of court judgement.

The SLF is open to negotiations all throughout the process, also when the case is already at the court – if the debtor decides to make an agreement with the SLF then the SLF withdraws from the court and enlcoses an agreement on payments with the debtor.

### Costs of administration of the SLF

<sup>&</sup>lt;sup>65</sup> The figure is according to the director of the SLF

<sup>&</sup>lt;sup>66</sup> This case is almost 10 years old and it is a debtor that enclosed contract not with SLF but with the Commercial bank operating the loans in 1995-1997.

The SLF may use 6 % of the yearly budget + inflation for its administration costs (managing the fund). The salaries of the employees of SLF (excluding the taxes) may not exceed 35 % of resources for administration, i.e. 35 % out of 6 % of the yearly budget.

## The management of the SLF

SLF does not form part of the Government, but the Government, i.e. the Ministry of Education, has direct influence over its work. SLF also submits the annual report approved by the Board of trustees to the Minister of education, to the Parliament and to the National student council.

o SLF has 3 bodies: Board of trustees (7 members), Director and Supervisory board (3 members)<sup>67</sup>:

- The Board of trustees is main decisive body with 7 members. 4 members are appointed by the Minister of education and 3 by the National student council; the Board **approves**: the statutes, the budget of the SLF, the yearly financial statement verified by the auditor, annual report, appoints/dismisses the Director of the SLF<sup>68</sup> and sets his salary, the fees charged by the SLF. The members of the Board can put forward proposals and are obliged to participate at the meetings of the Board. The members of the Board are appointed for 2 years and serve two consecutive terms. Both the Minister and the National student council take long time to appoint its representatives to the Board. This may hinder the operation of the SLF.
- The Director is a statutory body of the SLF and he is an employee of the SLF and is accountable to the Board of trustees. The Director **proposes the budget** to the Board of trustees. The Director is **mainly responsible for** carrying out the decisions of the Board of trustees, for managing the accounting, for preparing the annual report and the yearly financial statement, for preparing statutes, for closing the contracts with the borrowers, for checking whether the conditions of the contracts are followed, for enforcement of debts from the borrowers and for administrative operation of the SLF (HR management, financial resources and property management).
- The Supervisory board has 3 members: 2 members appointed by the Minister of Education and 1 by the National student council. The members of the Supervisory board are appointed for 2 years and serve two consecutive terms. The Supervisory board shall supervise the work of the SLF and its financial management.

There are 12 employees of the SLF. The employees of the SLF cannot be members of the Board of trustees and of the Supervisory board. The employees of SLF are responsible for standard operation of the SLF e.g. preparing background documents for all three bodies of SLF, collecting the requests from students for the loans, communication and administration related to the registering of the clients, re/payment of the loans, communication with the faculties/universities, with banks and other relevant organizations and alike.

The attorney of the SLF, the software designer and the network administrator and the accountant are self-employed and are paid based on contract. This is cheaper for SLF as it does not have to pay the social insurance and taxes for these people. The attorney is paid for

<sup>&</sup>lt;sup>67</sup> I described only the most important responsibilities of individual bodies.

<sup>&</sup>lt;sup>68</sup> Mr. Zburín has been the director of SLF for the whole existence of the SLF.

standard work by monthly fee, however in case of additional tasks such as participation at law suites he is paid extra, but these costs are covered by the respective borrower not by the SLF.

# The legal framework

The SLF was set up by the law on Student Loan Fund no. 200/1997. The law on higher education no. 131/2002 states that the student loans provided by the SLF represent one tool of the direct support of the

Overview of the provided loans:

Academic	Total no. of		Disbursed				
year	students/no. of regular students <sup>69</sup>	TOTAL no. loans	With students studying in Slovakia	With students studying abroad	With students with the status of foreign Slovak	loans in Sk	
1995/96	88 508/	4398	4398			136 688 205	
	72 525						
96/97	97 600/	2865	2865			55 256 005	
	78 045						
1997/98	107 349/	5286	5286			104 624 000	
	82432						
98/99	117 159/	4960	4960			98 100 000	
	85742						
99/00	125 773/	4988	4988			98 380 000	
	88192						
00/01	132 558/	4926	4854	65	7	96 544 000	
	90446						
01/02	140 561/	4785	4703	79	3	93 958 000	
	92140						
02/03	146 966/	5093	4952	137	4	100 068 000	
	97932						
03/04	152 969/	5565	5374	188	3	108 800 000	
	97759						
04/05	160 040/	3985	3802	183		96 780 000	
	107 022					_	
05/06	177 714/	3052	2900	150	2	75 605 000	
	114 554						
06/07 data	196 866/	1877	1769	106	2	23 955 000	
on Dec. 31st 2006	123 309						

Originally, the SLF **planned to give out every academic year** about 5 000 loans, i.e. 100 million of Sk.

<sup>&</sup>lt;sup>69</sup> Only from 2008 the part time students are also eligible for loans. Until 2008 only regular students were eligible, this is why we put also the number of regular students so it can be seen how big was the eligible group of borrowers vs. the overall number of students.

# **Demand of students**

Between 1995 - 2004 there was higher demand for loans than the supply – it varied from couple of hundred more students to up to more than 2000 students more interested in loans than the number of loans available. As it can be seen in the table below from 2004 the demand of students is much lower than the supply of loans.

	2000	2001	2002	2003	2004	2005	2006	2007
No. of denied applications for loans	2 464	664	128	585	156	254	0	0

### References to the Part IV

Act on the Students' Loan Fund No. 200/1997 Coll.

Amedment to Higher Education Act No. 131/2002 Coll. approved on July 3<sup>rd</sup> 2007.

Barr, Nicholas (24 April 2002), *Funding higher education: policies for access and quality*, London: House of Commons Education and Skills Committee, Post – 16 student support, Session 2001-02.

Nicholas Barr (1993), 5.2 Higher Education, The Economics of Welfare State, Third edition Oxford University Press, pp. 351 – 360.

Berlinger, Edina and Gönczi, Éva (2007), An Efficient Student Loan System: Case Study of Hungary.

Jostone, Bruce D. (2005), *Higher Educational Accessibility and Financial viability: The Role of Student Loans*, the paper was prepared for the World Report on Higher Education: The Financing of Universities II International Barcelona Conference on Higher Education, Global University Network for Innovation (GUNI) Barcelona, Spain, May 24-25 and November 28-30, 2005.

Jonhston, Bruce D. and Marcucci, Pamela N. (2007), *Worldwide Trends in Higher Education Finance: Cost-Shering, Student Loans, and the Support of Academic Research*, UNESCO Forum on Higher, Education, Research and Development, pp. 23 – 29.

Králiková, R. (2008), Interview with Mr. Lubomir Zburin, the Director of Slovak Student Loan Fun on 21 February 2008, not published.

Ministry of Education of Slovakia (2007), The Report on Higher Education 2007

OECD (2007), Education at the Glance 2007. pp. 232 – 252.

Salmi, Jamil and Hauptman, Arthur M. (September 2006), *Inovation in Tertiary Education Financing:* A Comparative Evaluation of Allocation Mechanisms, World Bank, pp. 28 – 45, 49 – 54, 66 – 69, 89 - 91.

Vossensteyn, Hans (August 2004), *Student financial support. An inentory in 24 European Countries*, Background report for the project on the portability of student financial support. C4HV 225.

Slovak Student Loan Fund, <a href="http://www.spf.sk/main.php?page=vseobecne">http://www.spf.sk/main.php?page=vseobecne</a>, The general instructions in regard to the student loans from the Student Loan Fund, accessed 1. 3. 2008

The list of prices of services of Student Loan Fund <a href="http://www.spf.sk/main.php?page=sadzovnik">http://www.spf.sk/main.php?page=sadzovnik</a>, accessed 1. 3. 2008

Ziderman, Adrian (2007), *Student Loan Repayment and Recovery: New Findings*. Bar-Ilan University Israel, <a href="http://www.fhe.fm-kp.si/">http://www.fhe.fm-kp.si/</a>, accessed 26. 2. 2008.