Financing Higher Education in South Eastern Europe

Albania, Croatia, Montenegro, Serbia, Slovenia

Financing Higher Education in South-Eastern Europe: Albania, Croatia, Montenegro, Serbia, Slovenia

Martina Vukasović (Ed.), Mihajlo Babin, Vanja Ivošević, Predrag Lazetić, Nemen Miklavič

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REVIEW I
UNIVERSITIES REMAIN A CONTESTED TERRAIN

Despite a rich and colourful mix of traditions and histories, most universities around the world today share remarkably similar goals and objectives. There is almost universal recognition that universities are vital for promoting the social, cultural and economic development of nations. They are charged with preserving, transmitting and advancing knowledge through teaching, research and service to their communities. It is also generally accepted that universities can best fulfill these missions if they are autonomous and free of religious, political, ideological and corporate influences. Even if not always respected, most universities widely acknowledge that academics must enjoy academic freedom — that is, the right to teach, research, publish, and participate in the governance of the institution without restriction or censorship.

However, across much of the world today there is growing concern in many corners that the ability of universities to fulfill their missions is being compromised by a number of drivers. The massification of higher education is putting increased budgetary pressures on governments. This in turn has provoked often heated debates about cost-sharing and diversification of funding through private financing, with concerns being voiced over the potential impact of these measures on equity of access and the integrity of academic work. In addition, demands for greater accountability and efficiency, as well as concerns about quality are leading many governments to experiment with new funding arrangements based on performance indicators that may compromise academic autonomy. Finally, the growing commercial cross-border provision of higher education, and the inclusion of education in international trade agreements like the WTO's General Agreement on Trade in Services (GATS), is reorienting the traditional academic mission. Universities worldwide are becoming commercialized and privatized to meet the demands of the new international marketplace. The result is that higher education is increasingly seen as a "private good", a commodity that should be subject to the logic of the market.

The current publication touches upon all these issues, but from the unique perspective of countries in transition that have received little international attention to date. Yet, as readers will see, the policy developments and debates in the countries included in this study, while embedded within unique national and historical contexts, are in fact extremely relevant to an international audience. The key questions being tackled in these countries are, to varying degrees and in their own ways, being posed across the globe.

The issue of higher education funding is an item high on the policy agenda of many capitals. As Martina Vukasović convincingly argues, however, what funding models are most appropriate for a system will depend in large measure upon the values and objectives that policymakers and stakeholders ascribe to higher education in each national context. If the primary goal of universities is seen from an instrumentalist perspective as one of producing talented graduates for the labour force, then the tendency will be to emphasize the private benefits that individuals accrue, thus seemingly justifying higher private contributions. On the other hand, if one views higher education as producing broader social benefits such as higher levels of civic engagement and stronger social cohesion, then the argument for higher levels of public funding would seem to hold true.

While the authors explicitly do not advocate one funding model over the other, rightly noting that there is no one-size-fits-all approach, the consequences of different policy choices nevertheless need to be considered carefully in light of experiences elsewhere. In this respect, it is worth highlighting that the dominant funding trend both in the countries under study and globally is clearly toward higher levels of private financing, through fees charged to students as well as private grants, donations and sponsored research. This "user-pay" approach, often characterized euphemistically as "cost-sharing", in fact singles a fundamental shift. Higher education is increasingly redefined as a private good that primarily benefits those who attend and graduate from university.

The consequences are significant, as the contribution by Vanja Ivošević and Klemen Miklavič notes. For students, the danger is that their family income, not their academic ability, will increasingly determine whether they can attend university. Set against this backcloth, it is extremely troubling to learn that in the EU, only the Netherlands, the United Kingdom and Latvia charge higher fees than Serbia, Croatia and Montenegro. This highlights the need to gather more data on the socio-economic status of students.

The concern about the potential impact of fees and on equity of access is the subject of much debate internationally. Increasingly, the Australian model of income-contingent loans, touched upon by Vukasović in section 2, is held up as a successful and progressive model to be emulated.[1] The theory is that such loans, because their repayments are tied to after-graduation income, help alleviate risk concerns and, because they are either directly provided or guaranteed by the government, eliminate liquidity constraints. However, it is important to note that there remains ongoing disagreement over the equity implications of income-contingent loans. In most cases, the income threshold below which loans are forgiven is quite low. Compared to those who can afford to pay the full cost of their education upfront, students in need who have to borrow end up paying

1 The development of income-contingent student loans to finance higher education was one of the key recommendations in a recent OECD thematic review. See P. Santiago, K. Tremblay, E. Basri, and E. Arnal, Tertiary Education for the Knowledge Society, Vol. 1 (Paris: OECD, 2008), pp. 240-241.

far more for their education as a result of the interest charged on their loans. Consequently, as Derek Price has argued, an income-contingent loan system can work against social equity goals:

> Low and lower-middle income students…[who borrow and] who successfully attain a college degree are paying more for post-secondary education and thus receive a lower return on their investment in higher education. In colloquial terms if you entered college in the smallest boat, you're probably in the smallest boat after you graduate...[I]ndividuals may achieve upward mobility relative to their family's circumstances by receiving a bachelor's degree while at the same time the structural pattern of inequity among social groups during the life course continues to reflect race, ethnic, class, and gender characteristics.[2]

The trend toward "user-pay" also has important implications for universities as well. Students are increasingly seen as customers with a resulting competition amongst universities to attract fee-paying customers. Nowhere is this more evident than in the race to tap into the emerging international student market. With increased student mobility, many governments and academic institutions have sought to develop new revenue streams by enrolling full-fee paying international students. Again, Australia has led the way in this respect, with its public institutions now drawing 25% of their revenues from international student fees. However, some negative consequences of this are now beginning to be felt, particularly as enrolments have dropped. Many Australian academics and administrators now worry that their institutions have developed a dangerous dependence on international student fees that has pressured them to compromise academic standards. A former vice chancellor of the University of Queensland, has warned that many Australian universities have reduced their entrance standards in order to raise overseas enrolments, appointed part-time staff to teach those students, and made do with inadequate infrastructure.[3]

The other push toward new funding arrangements involves the embrace of industrial and corporate sponsorship, particularly with respect to the funding of university-based research. On the one hand, there is nothing particularly new about this. In fact, as long ago as 1918 Thorstein Veblen expressed the concern that in the United States, "the intrusion of business principles in the universities goes to weaken and retard the pursuit of learning, and therefore to defeat the ends for which a university is maintained."[4] However, this "intrusion" has clearly accelerated since Veblen's time as more and more academic institutions

2 Derek Price, Borrowing Inequality: Race, Class and Student Loans (Boulder, CO: Lynne Rienner Publishers, 2003), p. 5.

3 Luke Slattery, "Australian Universities Fear a Dangerous Dependence," The Chronicle of Higher Education, Aug. 8, 2008 , Volume 54, Issue 48, p. A15.

4 Thorstein Veblen, The Higher Learning in America (New York: Sagamore Press, 1957; originally published 1918), p. 165.

development deeper links with the private sector. Concerns about this deepening corporate penetration into universities have been more recently and more colourfully expressed by Jennifer Washburn who warns that: "a foul wind has blown over the campuses of our nation's universities. Its source is…the growing role that commercial values have assumed in academic life."[5]

As noted in section 3, the rise in sponsored research funding from private industry in the countries under study has raised fears of academic malpractice. Indeed, these fears seem to be justified. Industrial sponsorship can bias research in ways that do not serve the public interest. Financial ties to industry can also unduly influence the outcome of research. In a now famous study of the matter, Stelfox and his colleagues, using the example of research on calcium channel antagonists for treating cardiovascular disorders, revealed that university-based researchers were much more likely to report positive findings for the drug under investigation if they had a financial relationship with the manufacturers of these drugs or received support from others in the pharmaceutical industry.[6]

There are also more subtle ways that industry funding can influence research outcomes. The need to secure industrial sponsorship often means that researchers are encouraged to undertake studies on the basis of whether they can get outside funding, not necessarily on whether the studies are scientifically important. In the area of medical research, for instance, that means researchers are encouraged to undertake more studies on drugs and devices that hold promise of profit, and less research into the causes and prevention of disease or into effective treatments for diseases common in developing countries where the prospect of profit is minimal. The point is that the university funding models a country or an institution pursues can have unintended consequences. Policymakers and stakeholders need to be fully aware of those consequences in order to engage in informed debate. This is why it is so important, as the authors underline in their conclusion, that all stakeholders be involved in the policy process.

This trend toward privatization of financing touches upon another set of questions more directly related to the countries under study. This involves the implications of international trade agreements on the regulation of higher education. Of the countries included in the study, Albania, Croatia and Slovenia are members of the World Trade Organization, with Serbia and Montenegro currently in accession talks. Of the former group, all have taken substantial commitments in the General Agreement on Trade in Services (GATS) to liberalize higher education. In practice, this means the three countries have legal obligations to ensure that foreign providers, including for-profit institutions, are guaranteed "market access" and are treated the same as domestic institutions. While it is

5 Jennifer Washburn, University Inc.: The Corporate Corruption of American Higher Education (New York: Basic Books, 2005), p. ix.

6 H.T. Stelfox, G. Chua, K. O'Rourke, and A.S. Detsky, "Conflict of interest in the debate over calcium channel antagonists," New England Journal of Medicine, 1998; pp. 101-105.

unclear from the current study the extent to which offshore institutions are active in these countries, the fact that such extensive commitments have been taken points to ways that policy space may be constrained by GATS trade rules. For instance, it would be illegal under the GATS for governments in these countries to impose quotas on the number of offshore universities allowed to operate or to prohibit foreign for-profit institutions from being established. Potentially, under GATS rules of non-discrimination, public subsidies provided to domestic private institutions may have to be extended to foreign ones as well.[7]

Finally, the case study by Mihajlo Babin and Predrag Lažetić is notable for its detailed description of what, from an outsider's perspective, is truly a complex, convoluted and intricate process for establishing academic salaries in Serbia. But, more importantly, it points to some very serious challenges facing Serbian universities. The academic profession is at the heart of the university, and no academic institution, particularly in a world characterized by increased academic mobility and competition for talent, can ever hope to be successful without a capable and committed professoriate. Central to achieving this is assuring that academics enjoy academic freedom and decent terms and conditions of employment, including adequate remuneration. The Serbian case raises some critical questions about whether the current remuneration system is appropriately rewarding academics, and if not what impact this may have on the future development of universities in the country. From an international perspective, the prognosis is not promising. As a recent review of international academic salaries concluded:

> We are convinced that successful universities and academic systems must offer their academic staff adequate and assured salaries, along with the option to pursue a full-time career path with appropriate guarantees of long-term employment. Without these conditions, no academic institution or system can be successful --- let alone achieve world-class status.[8]

In the end, perhaps the most important contribution of this publication is to remind us that universities remain a contested terrain. On the one hand, many are places where, as a result of funding policies and internal management practices, core academic values are being threatened. On the other hand, there remains resistance and debate over what the proper role of the university should be.

At her inauguration as president of Harvard in 2007, Drew Faust presented her audience with her vision of the proper role for a university:

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7 For more on GATS and higher education see D. Robinson, "The GATS: What's at stake for higher education? Education Canada (Fall, 2006).

8 L.H. Rumbley, I.F. Pacheco, and P.G. Altbach, International Comparison of Academic Salaries: An Exploratory Study (Boston College: Center for International Higher Educations, 2008), p. 9.

> A university is not about results in the next quarter, it is not even about who a student has become by graduation. It is about learning that molds a lifetime, learning that transmits the heritage of millennia; learning that shapes the future…. Universities make commitments to the timeless, and these investments have yields we cannot predict and often cannot measure…[that] we pursue…in part "for their own sake," because they define what has over centuries made us human, not because they can enhance our global competitiveness.

It is a rare thing today to hear such statements from many university presidents. But it underscores for me the degree to which we cannot hope to protect the integrity of academic institutions and promote quality learning unless we fully embrace that vision for all universities. That remains our common challenge.

David Robinson
Associate Executive Director
Canadian Association of University Teachers

REVIEW II
FROM TUG-OF-WAR TOWARDS A STUDY OF POLICY

The history of higher education institutions in the countries under study can be depicted from the financing point of view as an ongoing tug-of-war between the states and the university. The later were constantly complaining about a lack of resources. The state on the other side, in order to alleviate this pressure, was from time to time introducing certain organisational reforms. It is hard to say whether any of these reforms were supposed to improve the university economy by raising efficiency. Nevertheless, they kept the universities busy and temporarily side-tracked them from financial issues. Yet, throughout those years, there was no serious analysis concerning possible financing policy. Hence, the presented study was not only needed, but can be considered highly overdue.

Another argument in support of the aforementioned statement becomes apparent upon inspecting the content of the study. The authors approached its structuring in an undisputedly rational way. They opted to start with theoretical considerations influencing higher education funding. This would lay down the concepts from which different models might have been developed. Those concepts would then be identified in a following chapter that explores actual higher education policy in the countries in the region. Finally, those findings were to be highlighted through several representative case studies. The presented text clearly shows that the authors are well grounded in theoretical aspects of higher education policies and that they put in an impressive effort to follow this consistent approach.

Yet, the resulting study is a compound of three different chapters whose lack of correlation cannot be overlooked. In spite of the evident effort the authors put into the analysis of the higher education laws in the region, they were not able to place them within a theoretical perspective of various policy aspects. The main obstacle was the fact that those laws do not reflect any decisive policy. The laws, more or less, prescribe ad hoc procedures that combine old practices with newly defined reform. This is further revealed in the third chapter where it is clearly depicted that every higher education institution can freely implement its own policy regardless of actual legislation. Hence, the presented text itself turned out to be the crucial evidence of the ultimate need to provide the region with the first relevant study on financing policy.

As clearly stated in the introduction, the authors' basic intention was to provide stakeholders with "material for widening and deepening the ongoing

discussions …". While there is no doubt that the presented study fulfils this goal, this overview hopes to push it further by highlighting aspects where deeper debate would be most required, as well as enriching it with additional factors worthy of consideration.

Opening discussion — who has the mandate and responsibility?

While this study succeeds in delineating the questions that need to be addressed, a useful step would have been if the authors had attempted to allocate among the various groups of stakeholders the responsibilities for steering such a discussion. This seems to be of particular importance as the various requests put before the university (to enlarge its traditional mission in promoting free research and scientific education, to provide higher education based on research, and to include the promotion of utilising new knowledge), have become the crucial dividing point between the political strategy-makers and universities. In light of this divide, it is important to establish who should initiate this debate, and whose responsibility it is to tackle this issue.

The crucial problem faced by higher education institutions is to find a way to reconcile traditional higher education, corporate culture and democracy. If society deems that the institutions are capable of fulfilling this goal they should be given a clear mandate, but then the state and other stake holders have to accept the requests that are going to be put before them. Conversely, if the academic community is reluctant to accept, or is directly averse towards this new paradigm, then society, or more likely the government, has to shoulder the mandate for steering the whole process. Otherwise, futile discussions might go on forever, or direct accusations might be exchanged, while the entire process remains at stand still.

Defining concepts — The new higher education paradigm

The beginning of the first chapter extensively covers the conceptualizations of the role, functions, and impact of higher education. Starting from commonly-held perspectives it moves towards contemporary views sparked by new phenomena such as massification of higher education, globalisation and the creation of the knowledge society. Fully aware that the paradigm shift caused by globalisation and the knowledge society has shaken the higher education system in its core, the authors were right not to focus only on the economic aspect, but to offer a wider conceptual perspective relevant for different stakeholders.

Moving on to system-level funding, the authors pointed out one of the unresolved questions of whether higher education should be considered as an expenditure or investment. Concentrating on this issue seems to be fully justified by the fact that, in spite of formal acceptance of the concept of the knowledge

society in which knowledge is considered a basic resource, most stakeholders in the region are still debating about the level of expenditure in higher education. Consequently, the possible relationships between the state and the market, presented in the study might be helpful in understanding the need for society to invest into higher education.

To facilitate the decision upon the investment model, the study presents thorough analysis of the mechanisms for allocating public funds. Different facets of the input or output, and supply or demand-oriented models are clearly underlined. At this point the authors might have stressed that this refers only to teaching activities. The question whether in view of the requests put to higher education institutions public funding should, at least, partly support research and innovative activities, remains unclear.

While it is true, as indicated in the study, that in most instances public research funding comes from different sources, and through different channels, it has nevertheless to be included in the core funding, if for no other reason, then for the fact that the quality of doctoral studies will strongly depend on it. Hence, it would have been worth exploring whether research funds should be allocated on a purely competitive basis, or whether a certain percentage, aimed at consistent planning and development of the research activities through master and doctoral programs, should be allocated upon the submission of an appropriate strategy. In addition, it seems that the fact that presently a substantial portion of the research funds is simply added to existing salaries, instead of being used to open research doctoral positions, together with the unresolved inherited relationship between the universities and research institutes called for more in depth analysis of the related issues.

Another link possibly missing in specifying financing mechanisms concerns knowledge transfer. Namely, if the institution is expected to actively participate on the knowledge market then it has to allocate certain funds to market analysis, stimulating demand, organizing supply, supporting exploitation of intellectual property etc. Though this will be accomplished through the development of incubators, science parks, innovation camps and similar institutions which will potentially become a source of revenue, there is no doubt that some mechanisms are needed for their development.

The final part of the first chapter, which opens the issue of funding to the student perspective is of particular importance in those countries under study going through a transition period, where resources are rather scarce, and social inequity combined with a relatively low enrolment rate calls for significant support to students. The extensive presentation of different financial models regarding student loans and scholarship offers a comprehensive platform for defining the most appropriate solution.

Data is of no significance if the information is not needed

Throughout the entire text, and in particular the third chapter, the authors underline the lack of relevant data. Though this can be partly attributed to the lack of a proper information system, it also reveals a more serious problem. Typically, in any system, data is collected in order to gain information about the behaviour of the system, which is then compared with the desired one. Based on the obtained results it is then possible to intervene, that is, to devise measures which will lead the system towards the desired outcome. Thus, data mainly serves to establish adequate feedback. However, the proper functioning of any feedback system presupposes the existence of a desired goal. If this is missing, any data, regardless of its scope and precision, becomes completely irrelevant.

This remark appears justified through the overview of existing higher education legislation in the countries under study. As revealed in the study, apart from the general statement about the role of higher education, there is no indication on the parameters through which this role is going to be evaluated. Needless to say, missing parameterisation implies lack of any mechanisms that can foster different aspects of the stated role. Consequently, no one is compelled to collect any data. Moreover, the lack of data helps the fuzzyfication of the entire higher education system. On one hand, this covers up the fact that the system is steered without a proper strategy, in an unknown direction. On the other, it prevents comparison to other systems whose data is readily available.

To this end, the effort the authors put in acquiring and presenting certain quantitative data and comparing it with known benchmarks is highly commendable. There is a hope that the lag identified in many aspects of the education process will induce the beginning of serious analysis of the higher education systems in each of the country. This in turn might yield the development of relevant strategies and proper monitoring of their implementation.

Comparative analysis of the national systems reveals significant differences in certain areas. It is not clear why the authors restricted themselves to simple notification, and abstained of any critical analysis, or even explication of the possible consequences those differences might yield in relation to the existing overall trends and tendencies. Thus, the striking difference in the treatment of ISCED 5A and 5B programs in Slovenia with regard to other countries is noted without any comment, though the hampering of vertical mobility towards the master programs seems to be directly opposed to the concept of lifelong learning.

Autonomy or neglect

When tackling of the issue of autonomy, the authors start from the so called “communist period in which institutional autonomy was virtually non-existent”. While this might be true for some other countries in Eastern Europe, it is rather difficult to accept this statement with regard to HE education institutions in the

countries that used to be part of the SFRY. In the mid-sixties a "self-government" model was introduced at all faculties. State control gradually declined, particularly within the faculties of natural sciences, bio-medical sciences and engineering. In a way, there was tacit consent that each faculty would mind only its own profession and would not interfere with the wider educational academic policy or to that matter any policy at all. In return, they had steady, though limited, financing, while their work was never questioned. Thus, it might be said that those faculties enjoyed full autonomy within the boundaries posed by financial resources, but on the other hand it might be considered that they were fully neglected as well. Left to their own, each developed as it deemed appropriate, but none has been forced to establish any notion of accountability.

In addition to self-government, in the mid-seventies a new concept of organising institutions known as "organisations of associated labour" was introduced. The university and its faculties were organized in the same way as any enterprise. All employees became members of the so-called "workers assembly" which was to be the major decision-making body and in which all members had equal voting rights. While at some faculties this phase created complete managerial chaos, it also offered an opportunity to develop entrepreneurial activities. In a way faculties were free to open to the market, and some of them profited from it. This period can be considered as the beginning of the entrepreneurial era at the universities in the region, and can provide an explanation for the subsequent development of some faculties including the presented example of the Faculty of Electrical Engineering, University of Ljubljana.

The presented material clearly shows that the notion of autonomy, or to be more precise the relationship between the universities and the state has undergone significant, though different, changes in the countries which are under study. While Slovenia and Croatia, through intermediary bodies, are exhibiting a certain interest towards their development in higher education and imposing some accountability on public universities, in Serbia universities are still left to themselves. Even the Serbian National Council for Higher Education, which should act as the main strategic body is comprised solely of academics. Clearly, the Serbian government has decided to transfer the mandate for reform to the academic community. As already pointed out in the study, this might be the sign of the utmost confidence, but also of a complete disinterest bordering with neglect.

Conformism in practice — confronting with the state or taking from students

Contrary to a non-conclusive analysis of the overall system the authors are right to advocate the benefits of lump-sum financing, and indicate the problems that arise from itemized budgeting and institution "spoon feeding". There it seems that the whole region is interlocked within the disintegrated, or more to the point, non-existing university. Until this legacy problem is resolved it

is hard to expect that any funding mechanism might yield satisfactory results. Financing individual faculties poses a problem even from the methodological point of view, since there is no existing model outside the region to which this can be compared. Therefore, the presented Slovenian model is of particular interest, not only due to its elaborate formula that is gradually introduced, but also since it is on the verge of overarching the disintegrated university. Thought the fact of its recent introduction prevents an analysis of its effects, this is an example worthy of future exploration and comparison with the previous funding mechanisms.

Regardless of which model is implemented, there remains the fact that all higher education institutions are underfunded. The sum allocated through the budget cannot cover the institutions' needs if they are to provide proper education and research. This is even truer for Serbia[1], where every year almost over 20% of the allocated sum never reaches the universities. Faced with the debt so incurred by the state, the academics can opt to confront it. However, the legacy of tacit consent with the state, has indicated a different approach. It is much easier and definitely void of any consequences if the missing sum is covered through increasing the number of tuition-paying students, increasing the tuitions and invention of administrative fees for all students. This practice has obviously spread throughout the region (with the exception of Slovenia). While one can understand that the state, being aware that it is not adequately funding higher education institutions, is tacitly supportive of these activities, it is surprising that any reaction from society went missing.

The aforementioned attitude of the state is further visible in allowing the institutions to fully dispose of additionally incurred funds, including, as already mentioned, research funds. This, as pointed out by the authors, leads towards semi-privatisation of the public institutions. It is even emphasised in Serbia, where the higher education Law of 2002 stipulated that the equipment and other goods that an institution acquires through its own funding will be treated as its own property. Hence some faculties are gradually establishing mixed ownership of their resources.

In the absence of clear strategy everything is possible

The final chapter presenting the three case studies reveals that in the absence of any clear strategy or structure almost everything is possible. Though the authors have clearly succeeded in choosing three representative case studies, even cursory analysis of around 80 public faculties that exist as legal entities within the 5 state universities shows that each and every one of them is a separate case study significantly different from all others. Inasmuch as diversity

1 It might be the case in other countries as well, but it is not explicitly stated in the presented material.

can be considered an advantage, in this particular situation it is rather evidence of the chaotic state of the Serbian higher education system.

As a result of the case study analysis the authors have proposed a very interesting triangle of interacting aspects of the financial distribution model. While not denying the importance of any of the three isolated factors, the experience gained over time within the higher education institutions in Serbia, compels me to underline the importance of the base line which reflects the "rationales and beliefs of institutional decision makers". When an institution is left to itself only the notion of solidarity and concern of the institution well-being can yield positive effects. To those that can achieve this attitude the presented study will definitely be of assistance in deciding upon the proper policy.

By way of conclusion — the missing outcome

The significance of the fact that the intensive discussions of higher education financing mechanisms began at the moment when the paradigm started to shift should not be overlooked. At a time when each European university could have been defined as an "institution that teaches and examines students in many branches of advanced learning, awarding degrees and providing facilities for academic research"[2], there seems to be a clear public responsibility to provide for these activities. However, changes in the socio-economic environment induced significant changes in the conceptualisation of the whole process. It is inevitable to recognise that knowledge is changing rapidly, and that the learning process is taking place not only within an institution, but outside it as well, in a formal or informal way. In other words, the whole education process is centred on the skills, understanding and abilities that an educator helps students to develop. If we expect that in the future only three types of jobs will be offered: problem identification, problem solving and idea brokering, then the higher education system has to prepare young generations for them.

Thus, before deciding upon a financing mechanism, we are faced with the fundamental question of the type of the higher education institution we want to create. Up till now, it seems that the possible outcomes point towards institutions that can be loosely defined as teaching (mostly vocational), research, entrepreneurial and innovative universities. This diversification is already present and can be observed throughout Europe and beyond. Consequently, the corresponding financing mechanisms are also diversified. Teaching activities remain undoubtedly one of the binding aspects of all different models, and are still recognized as predominantly public responsibilities. Yet, it is clear that they call for a different financing mechanism that depends on the adopted institutional model, and one that has to be incorporated within the other financing schemes.

2 The Oxford dictionary 1998 edition.

In the view of the aforementioned facts, the presented study refers mostly to financing of teaching activities. This was inevitable, since all the universities in the countries under study consider themselves to be research universities, or to be more precise, covered by the classical definition of university. It remains yet to be seen whether they all can develop to fit into the future research university model, whose outline is nowadays emerging. In that sense, the presented study may have raised public awareness towards those facts. Until society recognises that the paradigm has shifted, and that the new outcomes have to be defined, no financing, or to that matter, any other educational model would fit its purpose. It is said that the paradigm is also a support, so that shifting it might feel deadly. Nevertheless, it seems even more deadly not to recognize that the support went missing.

Srbijanka Turajlić,
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Martina Vukasović

1.
INTRODUCTION

1.1 Background and rationale

There were two main motivations to launch the work on financing of higher education in some of the countries of the former Yugoslavia and the South East Europe. First, there is a noticeable lack of information about these countries, in research literature international comparative studies on higher education in general, and economics of higher education in particular. Second, and even more worrying, this lack of information is very much present inside the countries themselves, amongst policy makers and various stakeholders, seriously jeopardising development and implementation of comprehensive and coherent higher education policies. Lack of readily available data, unclear objectives of higher education coupled with almost no focus on evaluation of outputs of higher education and generally poor situation with regards to education economics are all characteristic for countries under study.

Beyond these immediate local concerns, another motive existed. The bulk of literature on financing of higher education is purely economic in nature. While one could argue that this is only natural, since financing of higher education is, primarily, a question of economics, any monodisciplinary perspective on a particular policy problem is limited *per se*. The economic approach tends to simplify specific social and political processes (e.g. student choice behaviour, exclusion in education, policy development and implementation, relationship between the state, higher education institutions and other stakeholders etc.). This is quite natural, since these processes are not in the focus of economics as a discipline. However, they should be the focus of attention of a variety of stakeholders, especially if they want to develop a more appropriate arrangement for financing of higher education. For these reasons, the following publication, especially in the theoretical chapter**,** tries to offer to the reader a multidisciplinary view of higher education in general and financing in particular. Furthermore, an attempt was made to present the complexity of the problem of financing and the diverse consequences specific solutions may lead to, especially when specific social, cultural and political contexts are taken into account.

As will be evident from the concluding chapter, it was not our intention to prescribe *the best model*, even though it would be quite tempting to do so, especially if faced with a number of individuals and organisations, some of which are very vocal, who have succumbed to the temptation. The key intention

was to provide material for widening and deepening the ongoing discussions on financing of higher education in the region and to offer a solid overview of the current situation, for "domestic" and international audience alike.

Having this in mind, there is a necessity to analyse briefly the key characteristics of policy formulation in higher education, as well as to ponder on the process of change in higher education. The latter is of specific importance, since the countries under study are not in the position to develop a new financing mechanism (or their higher education systems) from nothing. They are forced to devise plans how to reform the existing ones and therefore should have an understanding of where reform processes (being a particular form of change processes) may lead them.

1.2 Higher education — policy formulation and change

In terms of policy development, the key question to ask is to what extent any conceptualisation of policy formulation can capture the full reality of a process: a process often labelled as "messy", marked by a multitude of actors (both traditional and non-traditional stakeholders), in which changes seldom occur as a result of a centrally determined design (Enders, Jeliazkova and Massen, 2003) and which concern a complex social sub-system that, by definition, can not be regarded as isolated from its environment. Nevertheless, for the purposes of this study, it is useful to consider a conceptualisation offered by Enders, Jeliazkova and Massen (2003), in which several stages of policy formulation are identified:

1. problem perception,
2. problem (re)definition,
3. policy formulation,
4. policy implementation,
5. policy evaluation or cessation.

The progress through the stages is not necessarily linear and numerous entry points and loops are possible. Furthermore, the stages do not take place in a void, but should be understood in a wider (public) policy context.

The key reason for offering this conceptualisation in the opening chapter is so it can serve as guidance for the different actors in policy formulation, particularly those involved in development of policies aimed to reform, i.e. to initiate and support "a structured, non-incremental deliberate process of change (most likely top-down initiated and steered)" (Enders, Jeliazkova and Massen, 2003: 16). Already in the first stage — problem perception — the different actors need to be aware of the complexity of the problem and possibility of conflicting perceptions on what the problem is. The perception of a problem (and consequently the problem definition) is the first stage in which power relations are at play and in which some conflict management might be necessary. Secondly, policy formulation, from identification of goals and target groups to development of specific policy instruments, is a critical stage in which it is of

particular importance that the set goals and target groups do correspond to the problem perception and definition. In addition to this, it should be recognised that different kinds of policy instruments can be used to achieve similar goals and that the choice between them also involves estimates of effectiveness of each of the instruments in a particular context. The classical categorisation of policy instruments into legislation, money, organisation and control is characteristic for systems in which policy making is mostly interventionist in nature and characterised by a top-down approach (Enders, Jeliazkova and Massen, 2003: 10). This is also the usual "way" in the countries under question (not only in education, but also in other sectors), having in mind their historical background and challenges of democratisation and decentralisation. Finally, when it comes to policy evaluation, most countries also struggle with this phase, since often the (public) attention focuses on problem definition and, in better cases, on policy formulation, while implementation and evaluation of impact of a particular policy is problematic, largely due to inappropriate development of policy instruments, lack of monitoring of policy effects or lack of consideration of external influences.

This brings the topic of change in higher education to the forefront. The first question is related to how higher education institutions (and students and staff) act within the process of change: do they rather passively respond to governmental policies and try (or pretend) to implement them or they are actively trying to influence governmental policies in line with their own specific interests? It should be said that one institution can seem rather passive in one situation and very active in another, try different approaches in order to secure optimal outcomes for itself (Gornitzka, 1999). Awareness on the side of policy makers that institutions in a particular country have predominantly one or the other approach is very useful for the entire policy process. Adequate involvement of institutions in the process may prove to be very important for the successful implementation of the policy and maximise the impact, because the policy will have both adequate distribution of ownership and valid and relevant justification (Bovens et al., 2001).

Another key characteristic of the process of change of higher education is related to outcomes and effects. As many researchers claim (Clark, 1983; Musselin, 2005), change in higher education is slow and incremental due to significant inertia and bottom heaviness of the system (further elaborated in the theoretical chapter). Furthermore, due to the complex inner structure of the system (or the institution), including both visible, i.e. formal structures and informal ways of operation, change is seldom linear. On top of this, one can not isolate higher education from other public systems, or individual units within the system from each other, and one can not prevent interaction and interference of different policies, there can be a number of unintended and unforeseen effects. This essentially means that the final impact of a particular policy (here simplifying the process and allowing for a clear identification of the "end" of a policy and adequate assessment of the impact) can be quite different from

what was intended at the beginning. Finally, change in higher education is more about layering the new on top of the old (Musselin, 2005) than about substituting the old with the new. This means that, for example, even though new degree structures in line with the Bologna Process are in place and there is much ado about shifting from teacher centred to student centred learning, the actual practice of teaching and learning is likely to be very much the same as it was in the pre-Bologna era. It takes significant time for the change, initiated on the top of the system (e.g. ministry) to trickle down to the bottom (e.g. classroom). In this process of *trickling,* goals and objectives of policy are translated and transformed, reaching their final (?) destination to some or significant extent different than at the start.

Therefore, the intricacies of change in higher education should be adequately understood when the relevant stakeholders discuss possible changes to be introduced in the way higher education is financed. This is also essential for more successful implementation. In this way, the policy instruments can be developed in such a way as to be most effective, e.g. by way of shifting them up or down one level, depending on where the change is intended to happen and what is the nature of impact envisaged.

1.3 Glossary

For reasons of clarity, a number of terms used throughout the publication should be explained.

Financing

Financing is used when referring to any sort of income, while *funding* refers to income from the state budget, i.e. public funds. Along those lines, *core funds* refers to funds obtained from the state, while *own income* refers to income gained through charging various fees or cooperation and contracts with third parties.

Level

In terms of level, *macro level* is used to designate the system; *mezzo level* refers to institutions¸ while *micro level* refers to departments or individual chairs. Having in mind, as stated above, that the faculties are independent legal entities, when information provided concerns faculty level, this is clearly indicated.

Mobility

Horizontal mobility refers to mobility between different institutions within the same study cycle, while *vertical mobility* refers to the situation in which a student moves to another institution (home or abroad) to complete the next cycle (e.g. bachelor studies completed in institution A and master studies in institution B).

Higher education institution

The terms *state higher education institution* and *public higher education institution* are used interchangeably, since the legislation in the region does not distinguish between the two, although it should be noted that in most cases the literal translation from the local language would be "state higher education institution".

ISCED levels

In order to distinguish properly between different types of higher education, the International Standard Classification of Education (ISCED-97) is used to define the levels and fields of education. Higher education is classified in the levels ISCED 5 and ISCED 6. While ISCED 6 level refers to advanced research qualifications, ISCED 5 level is divided into two types — ISCED 5A and ISCED 5B, in some literature referred to as tertiary type A programmes and tertiary type B programmes. ISCED 5A refers to what is commonly understood as first degree studies at a university, although ISCED 5A programmes also include the second degrees like the master programmes. ISCED 5B programmes are typically shorter than those of ISCED 5A and focus on practical, technical or occupational skills for direct entry to labour market and therefore are more related to higher education in non-university higher education institutions.

1.4 Sources of information and methodology

In terms of sources for comparative study on financing of higher education in the countries of the region, the key instruments were a questionnaire sent to individual experts in the region (see chapter 3). This was supplemented with analysis of other documents (legislation, other regulation, reports of ministries or other governmental structures, publications and reports of other experts etc.). The institutional case study (see chapter 4) used semi-structured interviews as well as internal documents of faculties in question. The availability and reliability of information on financing of higher education was a significant challenge for both the regional and institutional analysis. The consequences of lack of proper monitoring and analysis of higher education are addressed in the related chapters (3 and 4) as well as in the conclusions.

1.5 Outline of the publication

The publication has three key parts. The first (chapter 2) is dedicated to theoretical considerations about financing of higher education and draws extensively on literature from various disciplines (economics, political science, sociology etc.). The key intention is to offer to international and domestic

audiences alike, a comprehensive "guide" through the issues surrounding financing of higher education, both from system, institutional and student perspective as well as to point out to characteristic models and their (possible) effects on higher education. Chapter 3 is dedicated to comparative analysis of financing of higher education in Croatia, Slovenia and Serbia and to a lesser extent (due to lack of information) in Albania and Montenegro. The chapter also follows the basic structure of the theoretical chapter, dealing firstly with systems of financing higher education, then analysing financing from the institutional perspective and finally from the student perspective. Chapter 4, the institutional case study provides an insight into the financial operations of three different faculties belonging to a university in Serbia. The key intention of this chapter is to explore the differences between the three different faculties in approaching the issue of financing of higher education, as well as development of their own institution in specific conditions characterised by a disintegrated university and outdated system of allocation of public funds to higher education. This chapter also provides a detailed description of the regulation on funding of higher education in Serbia. The concluding chapter offers a summary of findings, but also includes a discussion on how to develop the appropriate model of financing of higher education. The latter could be useful for governments, institutions and other stakeholders in guiding the process of development of new mechanisms for funding and financing of higher education.

1.6 Authors and associates

The team which produced this publication consisted of: Mihajlo Babin (Serbia), Vanja Ivošević (Croatia), Predrag Lažetić (Serbia), Klemen Miklavič (Slovenia) and Martina Vukasović (Serbia, editor). The work was extensively supported in various ways by Zoran Grac, Bojan Komnenović and Marija Mitrović from the Centre for Education Policy (Serbia). The authors are particularly grateful to individuals who provided information from Albania and Montenegro, namely: Elona Mehmeti (Albania), Biljana Mišović and Branka Žižić (Montenegro). The authors would also like to thank Srbijanka Turajlić and David Robinson for sharing their invaluable expertise and reviewing the text from the national and international perspective. Finally, the authors would like to thank in advance to all those experts on (financing) higher education who would be interested and willing to provide critical comments to this text. Any error in terms of data, information, analysis, conclusions and recommendations is solely the responsibility of the authors.

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2.
THEORETICAL CONSIDERATIONS REGARDING FUNDING OF HIGHER EDUCATION

The main purpose of the chapter on theoretical consideration regarding funding of higher education is to offer a comprehensive background for the debates on the most appropriate model for funding of higher education. Public debates on the most appropriate model are often limited to minute discussions of particularities, without taking into account the "big picture": the role of higher education and the conditions in which higher education operates. In addition to this, analysis of the consequences of one or the other funding model is very rarely given, even though vast literature on higher education (from economic, as well as sociological and political science perspectives) offers plenty of material for such analysis.

With this in mind, the chapter starts of with common conceptualisations and new trends in terms of role, functions and impact of higher education, in order to provide a solid context in which to discuss specific funding arrangements on various levels. Specific attention is given to the assessment of the extent to which higher education in the countries under study fits into the theoretical conceptualisations, which system is affected by the new trends, although more detailed analysis is provided in the chapter on regional analysis.

The following three subchapters treat the macro – system, mezzo – institution and micro – student level of funding of higher education, with specific focus on possible consequences arising from one or the other approach in funding of higher education.

The last subchapter offers a brief analysis of some interesting aspects of funding of higher education in four countries around the world (Australia, Denmark, Norway and United Kingdom), in order to illustrate both the variety of the approaches, as well as the documented effects specific funding arrangements have.

2.1 Roles, functions and impact of higher education: common conceptualisations and contemporary trends

There are numerous conceptualisations as to what is, or should be, the role of higher education. The multitude of these conceptualisations reflects, first and foremost, the multitude of higher education stakeholders, but also the complexity of expectations from higher education, which are coming both from

the outside and from the higher education community itself. Furthermore, these conceptualisations are dynamic; they change in time and space and may be significantly different in different socio-political contexts.

Literature offers various perspectives on the roles of higher education. Burton Clark (1983), starting from the idea of knowledge as the main building block of higher education, argues that transmission, refinement and production of knowledge are the key roles of higher education, that is "*knowledge is the material. Research and teaching are the main technologies.*" (Clark, 1983: 12). His later work (Clark, 1998), includes reflections on the changing environment in which higher education operates and, consequently, diffusion of borders between higher education and the society. Nevertheless, knowledge is still considered as the main building block, or the main material of higher education. Having in mind that the main material is processed on the grass-root level (by the individual academics and students, small research units etc), one can conclude that higher education is "bottom-heavy" and therefore difficult to change, both in terms of speed of change and in terms of depth of change. In addition, this also implies that higher education institutions are naturally fragmented on the basis of disciplinary division lines, which pose significant challenges in terms of both organisational integration and introduction of inter or multidisciplinary units. Choice of the most appropriate funding model for higher education is very much affected by the fact that change and integration are the most important challenges of higher education. Funding model can be chosen to facilitate change and integration of higher education. However, the extent to which a specific funding model can be implemented in a given higher education system is primarily determined by the extent of change required by that very higher education system. The more funding mechanisms are different from the present arrangement, the more change their implementation requires.

A more functionalist perspective would focus on results or outputs of higher education. One of such perspectives is Castells (2001) consideration of four functions of higher education: formation and diffusion of ideology, formation and selection of dominant elites, generation of new knowledge and training of bureaucracy. He also claims that these functions are contradictory to each other and that one of the biggest challenges for a higher education system in general and a particular higher education institution is to reconcile these conflicting tasks. Alike Castells, Martin Trow, one of the first authors interested in the process and effects of massification of higher education, focused on expected results of higher education and identified the following two functions of higher education (Trow, 1970):

- the autonomous function, which includes transmission of high culture, creation of new knowledge and selection, formation and certification of elite groups and
- the public function, which includes mass higher education and provision of knowledge to society.

A somewhat simpler view is that shared by some higher education researchers (e.g. Mora and Vila, 2003) and various stakeholders: *"the traditional missions of higher education institutions are to teach students, to carry on research and to provide services to the community"* (Mora and Vila, 2003: 168). And finally, some of the aforementioned stakeholders (e.g. Council of Europe, see Weber and Bergan, 2005), starting from their ideas about what should be the purpose of higher education (partly initiated by the increasing focus on more utilitarian aspects of higher education — employment), suggest that higher education should: prepare for life as active citizens in a democratic society, prepare for sustainable employment, offer opportunities for personal development and provide a broad and advanced knowledge base.

2.1.1 Impact of higher education

Instrumentalist and utilitarian perspectives on higher education, although reductionist in terms of understanding the social reality[1], are particularly present in the discussions on what the most appropriate funding mechanism for higher education is. Thus, arguments in favour of one or the other funding mechanism are based on perceived or actual impact of higher education, especially in terms of the share of public or private contributions to higher education. The following few paragraphs will present some of the views on higher education and its impact: on economic development, on social development and on personal development.

In terms of economic development, higher education is often seen to increase productivity, primarily through the increase of human capital, i.e. more and better educated workforce. In addition to this, within a knowledge economy, production of knowledge, together with effective and efficient transfer of knowledge to industry (in broad terms) is seen as one of the key factors of economic growth in developed countries (Mora and Vila, 2003: 176). Finally, it is often said that better educated population is connected with lower expenditures in other public sectors: e.g. better educated people tend to use health system less often since they would possess more information and knowledge on sickness prevention, if faced with unemployment they tend to stay unemployed for shorter periods of time thus relying less on welfare support etc. However, one should be careful as to what extent such views are relevant for countries under study since some of them are in the midst of economic (and social) transition, faced with high unemployment rates, sometimes divergent policies of reform of different public sectors and a tendency (and pressure) to copy solutions from other countries without appropriate analysis of sustainability or applicability of such solutions.

1 For the critique of an approach that relies solely on economic factors see e.g. Torres, 2002.

In terms of social development, one of the traditional roles of higher education, particularly universities, was building of the national identity. Even though this may be decreasing in relevance with contemporary shifts and processes such as globalization or Europeanization[2], it is still to a significant extent perceived as relevant for a number of newly independent states originating from countries in the region which very recently experienced a period of war and political turmoil. Precisely for this reason, another (possible) impact of higher education is of particular relevance: promotion of attitudes and values and critical thinking.[3]

Another aspect of higher education in terms of both social and personal development is the issue of social inequalities and effects (higher) education. There are two main "schools" of thought with respect to the effect education has on social stratification. One sees education as the tool for social mobility, which can enable or facilitate individual advancement on the social ladder, thus improving their socio-economic status (and hence the quality of life) and shifting them from the less privileged social class origin to the more privileged social class destination[4]. This is especially present in the governmental policies and strategies for poverty reduction, economic development, increasing social cohesion etc. Such perspective also has some resonance in both the human capital theory and the signalling hypothesis (Weiss, 1995) since both of them attach an important role to education and training in terms of attaining more privileged occupational status (even though the ways of attaining a higher occupational status are quite different). In terms of the role attached to higher education in specific, it is claimed that, since primary education is universal and secondary education is almost universal — it is the higher education stage that is decisive in facilitating or enabling social mobility, especially since the professions connected to the higher occupation status almost always require a higher education qualification (Collins, 1979). Opposing to that is the understanding of education as the tool for social reproduction. Numerous studies show that throughout the educational system, student's socio-economic background plays a strong role in determining whether or not s/he will advance through the educational system or will drop-out (HEFCE, 2005; Marks, 2005; Power, 2000; Wong, 1998). There are, however, differences with respect to the strength of the influence of the socio-economic background depending on which educational transition is in

2 One could argue that one of the driving forces behind the Europeanisation of higher education is building of a European identity, thus shifting this traditional perception of higher education to a higher level, but maintaining the essence.

3 Here one caveat should be offered: on the one hand protests of part of the academic staff and students indeed contributed to the democratisation of the countries in the region; on the other hand other national institutions focused on education, culture and science (e.g. national academies of arts and sciences) were extremely instrumental in rising of nationalism.

4 It is important here to stress that the majority of studies related to social classes define them in terms of the occupational status (Archer et al., 2003; HEFCE, 2005; Muller and Karle, 1993, Wong, 1998).

question. While some argue that the influence will diminish in later transitions (e.g. from secondary to higher education), others claim that the influence will remain but will affect access in terms of type of (higher) education institution and perceived prestige of the programme, not in terms of access as such. One of the key figures in theorising this problem, French sociologist Pierre Bourdieu sees the whole education (system) as a tool for social reproduction (Bourdieu and Passeron, 1990): since the education system will be formed and organised by the (social) group that is in the possession of power, it will also seek to reproduce the same distribution of power in the society and hence, reproduce social inequality[5]. Bourdieu goes on to define various forms of capital (Bourdieu, 1986) which contribute to this reproduction: social capital, cultural capital and economic capital. What is specific in Bourdieu´s considerations, compared to common considerations of inequality based on economic inequality is the focus on less obvious forms of capital such as cultural capital and social capital. The conversion of social and cultural capital into economic capital, and vice versa, is less tangible, making it more difficult to organise a system of education which will be immune to these forms of capital, thus preventing education to become truly socially neutral.

In the last decade or so it is possible to observe a considerable amount of research on higher education from an economic prospective. This research is not limited to the funding of higher education but tends to address higher education in general. Often the emphasis is put on what benefits an individual will obtain through higher education, some approaches within the field of economy focus on private returns on investment in higher education. A number of analysis of private returns shows that, generally speaking, higher education graduates are earning more than those with lower educational attainment, although one should bear in mind that differences exist across countries and between different fields of work. Higher education graduates are more likely to get employed (although the connection between educational level and job satisfaction is more complex) and stay unemployed for shorter time. Similarly, the improved health status, including health of children and their social and intellectual development can also be seen as non-monetary benefits for the individual (Mora and Vila, 2003). Finally, following Humboldt's idea of *Bildung*, one can also observe the impact (higher) education has on personal development. In her research on persons from various socio-economic backgrounds Haggis (2003) identified a variety of perceptions of learning, including some clearly connected to the idea of personal development and personal fulfilment: learning as *"expansion, new ideas, fascination, sharing knowledge"* or *"enjoyment, satisfaction of curiosity"* and even *"strategy against tragedy, to counter an existential void"*.

5 Some authors (Morrow and Torres, 1994) use stronger concepts than "inequality" — they claim that the education system is reproducing various forms of *domination* and *subjection*.

2.1.2 Contemporary trends

These various conceptualisations not only offer an insight into diversity of disciplinary or stakeholders' perspectives on higher education as well as the underlying paradigms (utilitarian, functionalistic, deterministic), but also exhibit a difference with respect to treatment of massification as an "inside" or "outside" element. While Trow, for example, essentially "shaped" the popular function when faced with the ongoing massification of higher education (in US), Mora and Vila do not address massification directly, but include it in the analysis as an outside factor which affects how teaching, research and service are conducted. To what extent massification is seen as "inside" or "outside" element in a particular context by particular stakeholders (government included) will affect shaping of the policy for higher education and, consequently, the choice of funding instruments. Furthermore, it is important to adequately understand the level and nature of massification in specific countries. Massification of higher education includes not only the first wave of massification which is primarily driven by increasing demand from traditional age groups (absolute increase in the gross-enrolment ratio), but also the second wave of massification in terms of diversification of the student body to include non-traditional age groups (Lucas, 2001; Raftery and Hout, 1993). The latter is not yet felt in the countries under study (see chapter 3), but is observable in other countries in Europe which have already achieved universal higher education and are faced, on the one hand with negative demographic trends and, on the other, with considerable capacities of the higher education system which are seldom easily dissolved. Furthermore, compared to massification in developed countries, massification of higher education in the countries under study takes place in different social and political context, essentially without the support of the welfare state and with already rather stretched public funds. Therefore, it would be interesting to observe whether the difference in context will also lead to difference in the outcome(s) of massification.

None of these above mentioned conceptualisations explicitly refers to the role of higher education in creating, or contributing to a knowledge society, even though in all of them production of new knowledge and knowledge transfer are in the focus. However, the idea of a knowledge society gained significant political influence and is seen in many societies and by many governments and intergovernmental structures as the most important strategic goal. For example, key concepts in the EU's Lisbon strategy are knowledge economy, learning society and innovation. In order to further develop EU as a knowledge society, several major initiatives were developed with the idea of the so-called *knowledge triangle*[6]: education, research and innovation such as the European Institute of Technology. Other initiatives, such as the European Research Council or the Seventh Framework Programme also stress the need for a strong link

6 http://ec.europa.eu/research/eurab/pdf/eurab_07_010_advice_energising_europe_knowledge_triangle_april07_en.pdf (accessed on 23 September 2008)

between research and innovation. Another example is Norway as of recently has a *Ministry of Knowledge* (literal translation from *Kunnskapsdepartementet*[7], usually translated as *Ministry of Education and Research*). The World Bank has developed two benchmarking tools in an attempt to assess the level of implementation of a knowledge-based economy and knowledge society – the *Knowledge Economy Index (KEI)* and the *Knowledge Index (KI)*[8]. KEI is based on four "pillars": Economic Incentive Regime, Education, Innovation and ICT and include 83 variables (structural and qualitative), while KI uses three pillars (education, innovation and ICT). While it is debatable to what extent the choice of variables and construction of indexes is useful for comparison, it is interesting to observe the importance attached to education and research in such rankings, as well as the attention and importance attached to the rankings in general by a variety of national and international stakeholders.

In some sense knowledge is effectively being divided into three categories: expertise, credentials and intellectual property (Fuller, 2001), ordered here by the increasing extent of alienation of knowledge from the "knower". Trends in which education and knowledge start to be of a high commercial interest and acquire an exchange value is often referred to as commodification of education (Naidoo and Jamieson, 2005). Knowledge is increasingly perceived to be one of the key production factors, it figures as a major export product (e.g. Australia) and a tradable service, it is subject to negotiation under the General Agreement on Trade in Services[9] and it is commercially protected through the intellectual property rights. Furthermore, it is possible to observe considerable changes in higher education and research funding arrangements (including a stronger attention to performance, especially in higher education), focus on quality assurance mechanisms (also focusing on outputs and performance) and the pressure towards entrepreneurialism in research and higher education (which inspired the term "academic capitalism", see Slaughter and Leslie, 1997), all of which challenge the traditional idea of higher education.

Additional trends affecting higher education and affecting the decision on the most appropriate funding model are Europeanization, internationalisation, Europeanization and globalisation. The concept of *internationalisation* is used to denote the process of becoming (more) international (Gornitzka et al., 2003: 24). It assumes that the nation states (or countries) or individuals of these nation states (countries) engage in cooperation or coordination of certain activities, thus shifting these activities, to a certain extent (depending on the level of "internationalisation") from a national setting to an international setting. With respect to higher education and contemporary changes taking place, it would be useful to distinguish between *old internationalisation (old I)* and *new internationalisation (new I),* following Gornitzka et al. (2003), albeit

7 http://www.regjeringen.no/en/dep/kd.html (accessed on 23 September 2008)

8 http://info.worldbank.org/etools/kam2/KAM_page5.asp (accessed on 23 September 2008)

9 www.worldtradelaw.net/uragreements/gats.pdf (accessed on 23 September 2008)

with a stronger division between the two: old internationalisation refers to internationalisation "done" by individuals, e.g. individual student and staff mobility, research cooperation which is initiated by individual scholars etc; and new internationalisation refers to a more institutionalised internationalisation, i.e. to situations in which internationalisation is seen as a strategic goal and in which specific governance structures are created to organise such internationalisation. Europeanization of higher education here refers to the moving of some of the decision-making powers to a higher (European) level, whether there are clearly identifiable institutions or the decision-making is more organised through an open method of coordination (Olsen, 2002). A primary example of Europeanization is the Bologna Process. With that in mind, Europeanization can be seen as new internationalisation, but limited to the European continent. Globalisation can be understood as (following Beerkens, 2004: 24): a process of dis-embedding the university from its national context. This definition also implies that, if there is globalisation of higher education than there is growing integration of higher education process and structures beyond (or apart from) the nation states which eventually leads to (or will lead to) denationalisation of higher education (Gornitzka et al., 2003). To what extent this happens, not only in the countries under study, but around the world, remains to be seen.

The question now is to what extent the countries under study are affected by these changes and how the role of higher education is understood.

Serbian Law on higher education, adopted in August 2005[10] (and including changes in line with the Bologna action lines) states that the goals of higher education are (article 3): transmission of scientific, professional and artistic knowledge and skills; development of science and enhancement of arts; provision of scientific, professional and artistic offspring; provision of equal opportunities in higher education and lifelong learning for individuals and significant increase of the share of the population with higher education attainment. Similar to this, Albanian Law on higher education[11] in article 2 speaks of establishing, developing, protecting and transmitting knowledge through teaching and scientific research; developing and enhancing arts, physical training and sports; training "high cadres" and preparing new scientists. Croatia has an Education Sector Development Plan 2005-2010[12] which does refer to the role of education in catering the *"needs of local culture, economy and a society based on knowledge and democratic principles"* (p. v). Croatian Law on higher education[13] assigns the usual teaching, research and service missions to universities, colleges and scientific institutes (article 3). In the Montenegrin Law on higher education[14], the proclaimed aims are (article 2): *"to establish, improve and develop knowledge, science, art and culture"; "to transfer*

10 http://www.mps.sr.gov.yu/upload/dokumenti/visoko/Law_on_Higher_Education.zip (accessed on 23 September 2008)

11 http://www.cepes.ro/hed/policy/legislation/pdf/Albania.pdf (accessed on 23 September 2008)

12 http://public.mzos.hr/fgs.axd?id=10287 (accessed on 23 September 2008)

13 http://public.mzos.hr/Default.aspx?sec=2276 (accessed on 23 September 2008)

14 http://www.ucg.cg.ac.yu/zakti/zakon.pdf (accessed on 23 September 2008)

general, scientific and professional knowledge through teaching and research"; "to provide possibilities for acquiring higher education throughout life" and "to establish and develop international cooperation". Slovenian Development Plan[15] does address the importance of education and training in increasing *"Slovenia's global competitiveness"*. The Master Plan for Higher Education[16], stresses issues such as quality and access to undergraduate and postgraduate higher education, and sees that kind of education as *"a key instrument of economic, social and cultural development and an important guardian of national identity and the Slovene language as its integral part"* (p. 2).

In terms of impact Europeanization and internationalisation have on higher education in the countries under study, it should be stressed that, while all countries do participate in the Bologna Process and therefore their higher education can be considered to be "Europeanised" to some extent, old internationalisation (in terms of cooperation between institutions and exchange of individual scholars and students) is still very limited.

As can be seen, in all countries the roles of higher education do correspond to the theoretical conceptualisations mentioned before. It should also be noted that most countries have not (yet) included the idea of a knowledge society in their national strategic and policy documents. The question remains to what extent higher education policy in general reflect (and support) these proclaimed goals? Further question is to what extent these different conceptualisations of the role of higher education are reflected in higher education policy instruments.

Following Hood's categorization of policy instruments (1983) — information, money, legal official power and organisation[17] — funding is often seen as one of the more effective instruments a government may use to affect society, both in terms of scale and scope of investment (in societies in which higher education is considered an investment and not an expenditure) and in terms of allocation mechanisms. This is especially visible in situations in which legislative changes (underlying more general reform plans) are not followed by appropriate changes in funding mechanisms.

As a final remark relevant for the context in which funding of higher education is discussed, it would be useful to consider the differences between higher education and earlier stages of education in terms of their "position" in the society. Primary education (and secondary in an increasing number of countries) is for the most part universal (although this may not hold for some developing countries or extremely marginalized groups in transition and developed countries, e.g. Roma) and very often obligatory. For these reasons, it is under stricter

15 http://www.slovenijajutri.gov.si/fileadmin/urednik/dokumenti/Slovenia___s_Development_Strategy.pdf (accessed on 23 September 2008)

16 http://www.see-educoop.net/education_in/pdf/nac-prog-visok-solstva-slo-enl-t02.pdf (accessed on 23 September 2008)

17 Hood (1983) actually developed the "so-called" "NATO-scheme" for categorising policy instruments: Nodality (information), Authority (legal official power), Treasure (money) and Organisation.

governmental control (in terms of curriculum and organization), on the national and sometimes on the local level as well. In some cases, it is also under a stronger influence of the family or church (Clark, 1983: 3). On the other hand, higher education is voluntary (although some may see in the process of massification a pressure to pursue higher education, regardless of personal aspirations, see Trow, 1970), still exhibits significant autonomy from the government (essence of which will be discussed in the section on autonomy in this chapter) as well as from other segments of the society (possibly excluding specific higher education institutions, such as those founded by a church). This difference also implies different funding philosophy and accompanying mechanisms, primarily in terms of the share of public and private contributions to higher education, which are then reflected in the relationship between the state and the market. All of this is discussed in more detail in the following subchapter on system level funding.

2.2 System level funding

System level funding in this text refers to the scale and scope of expenditure on higher education from both public and private sources, as well as the analysis of allocation mechanisms of public funds. With respect to this, specific subchapters address the issue of diversification of funding sources and the relationship between the state and the market.

2.2.1 Higher education — expenditure or investment?

Many comparative studies on funding of higher education refer to public and private *expenditures* in higher education (Schwarzenberger, 2008; Strehl et al., 2007). Even though this formulation does not necessary imply treating higher education as an expenditure, it is nevertheless interesting to briefly list several questions related to the possible consequences of an *expenditure* or an *investment* focused perspective on higher education:

- Investment implies a clear expectation of significant benefits in the future. Therefore, if higher education is seen to be a public investment (by the society in general or the government in particular), does this also mean that greater importance is attached to the expected public returns to higher education?
    - Will the public be motivated to invest more and better?
- Contrary to this, can we see the perception of higher education as a public expenditure to be a perception that attaches less importance to public returns and greater importance to private returns?
    - Is this the perception that is leading to decreasing percentage of public budgets allocated to higher education and increasing expectations of private contributions to the costs of higher education?

The trends around the world possibly offer some guidance in answering these questions.

The demands for the diversification of funding sources for public higher education have been frequently discussed in the last few decades. On the one hand limited public funds and, on the other hand expansion of higher education, brought about a decrease (at least in relative terms, i.e. with respect to number of students) of the share of public expenditure for higher education. They have also pushed, and often through legislative changes supported, public higher education institutions into diversifying their funding sources. The diversification of funding sources and decrease of the public share in institutional budgets often initiates discussions on what makes a particular higher education institution "public" – founding body, governance structure, proclaimed mission or something else?

Eicher and Chevaillier (2002: 90) refer to the increase of "private resources for higher education" as "privatization", at the same time admitting that it is a simplified categorisation of a variety of different methods of diversification of funding sources. The new sources (new in general or in terms of their relative share in the total institutional budget) may include fees charged to students (explicitly for tuition or implicitly in the form of various administrative fees, up front or as some form of a graduate tax), consultancy contracts, research contracts beyond the usual national research funding, provision of various learning programmes to non-traditional student populations, renting of facilities etc. However, it is interesting that the discussions on whether to and how to diversify sources of funding for higher education often presuppose student contributions as the main (if not the only) additional source of income, without adequate consideration of other possibilities, e.g. stronger ties with the industry, and their consequences, e.g. strengthening the link between higher education and innovation processes. In any case, the key dilemmas stemming from the decrease of the public funding of higher education are closely interrelated with the following questions:

- what is the role of higher education in society
- what are the values and beliefs related to it and, therefore
- what are the main arguments in favour of public or private support for higher education?

Economic literature recognises "positive externalities", monetary and non-monetary[18], from higher education. These *"range from the contribution of advances in knowledge to economic growth and increases in the flexibility of labour markets to the transmission of literacy, aesthetic and cultural values, and more efficient political participation"* (Eicher and Chevaillier, 2002: 74). In addition to this, and taking into account sociological analysis of higher education and mechanisms of social reproduction (see section on impact of higher education in this chapter or Vukasovic, 2007), a (higher education) system properly tuned to address problems in access, progress and completion of socially disadvantaged is also considered to contribute to social cohesion, by diminishing inequalities

18 These are addressed to a certain extent in the section on "impact of higher education".

stemming the original socio-economic background and democratising the society beyond simple structural issues. Such public benefits are the foundation of the argument for the society (via the state, i.e. the government) to support higher education (Eicher and Chevaillier, 2002). On the other hand, the economic perspective tends to emphasise the private benefits from higher education: similar to other stages of education, although to a greater extent, individuals benefit from higher education in terms of higher income and social status, lower chances of prolonged unemployment, better quality of life (in economic and non-economic terms alike, see section on impact of higher education). However, private benefits are not seen to be limited to individuals, but also include private enterprises, since *"education reduces the need for training and the costs of retraining when shifting to new products and technologies, while specific training and research programmes may increase productivity"* (Eicher and Chevaillier, 2002: 74).

The economic reasoning based on the discourse of private and public benefits from higher education, both in monetary and non-monetary terms, as well as in conjunction with the decreasing share of the public "purse" available to education, is the basis of arguments in favour of various cost-sharing arrangements. Cost-sharing usually entails splitting of costs of higher education between the public (via the state) and the student and his/her parents (note again the limiting of the scope of possible private sources to students and parents). This will be discussed in more detail in the section on student funding.

2.2.2 What is behind % of GDP?

Comparative studies in economics of higher education are primarily about percentage of GDP allocated to education (or higher education. On these terms, all countries in the region seem to be lagging behind the internationally recommended targets of 6% of GDP for education[19]. While, on average, countries in the region spend around 4% GDP on education (except Slovenia which spends 6% GDP): Iceland spends 8% GDP, Korea a bit more than 7% of GDP, Finland a bit more than 6% of GDP (OECD, 2007). Generally speaking, most of the funds for earlier stages of education (primary and secondary) come from public sources[20].

In terms of expenditures on higher education, the situation is as follows: Denmark, Finland, Norway and Switzerland are at the top of the table regarding

19 As recommended by UNESCO. In addition, there are recommendations with respect to investment into higher education (2% of GDP, see Communication from the Commission to the Council and the European Parliament: "Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation", COM (2006) 208 final, Brussels, 10. 05. 2006.

20 Amongst the countries included in the OECD's Education at a Glance 2007, Chile has the highest proportion of private funds for earlier stages in education (a bit less than 30%), followed by Korea (around 15%) and countries such as Australia, Germany, Mexico, New Zealand, Switzerland and US.

public expenditure on higher education — all countries spend 1.5% GDP or a bit more. However, if one includes private expenditures as well, at the top are[21]:

- US, in which close to 3% GDP goes into higher education, two thirds being from private sources;
- Korea, with approx. 2.3% GDP for higher education, however, with private expenditure approx. 3.5. times higher than public;
- Chile, with a bit more than 2% GDP in total, of which 85% is private expenditure;
- Israel, almost 2% of GDP, public share being a bit more than half and
- Finland, around 1.7% of GDP, with negligible private share.

Countries in the region spend less on higher education, from 1.26% GDP in Slovenia to 0.72% in Croatia. However, there are no publicly available data on HE spending as % of GDP for the countries under study (except for Slovenia), which means that these amounts should be taken with reservation. This issue is further discussed in chapter 3.

Even though countries may appear very similar in terms of their total expenditure on higher education, as can be seen from data given above, there can be vast differences in terms of the public-private distribution. However, to be able to understand the sources and consequences of such differences, special attention should be paid to what is understood as public and private expenditure. Some countries, e.g. Norway, apart from allocation funds directly to higher education institutions, also have a well developed state loan system, i.e. some funds go directly to students. This can raise the public expenditure as percentage of GDP to numbers as high as 5.3% (Schwarzenberger, 2008: 128), even though public expenditure on institutions as is 1.4% GDP. In addition, some public expenditure may be "hidden", i.e. not explicitly included in the higher education budget, e.g. various student-specific taxes and other tax exemptions (as in the Czech Republic, Germany and the Netherlands), various forms of subsidies for health and transportation (although in some countries this is an integral part of higher education budget, often under the label of "student welfare services"), other forms of support directed to households (usually student's parents) or to students. Countries under study exhibit a considerable lack of transparency and systematic approach to higher education funding issues, which also makes it extremely difficult, if not impossible, to properly identify all expenditures from public as well as from private sources (please see chapter 3 for a detailed discussion of the lack of reliable information).

2.2.3 Steering higher education: the relationship between the state and he market

Specific funding arrangements are part of the higher education steering mechanisms, or more concretely, they to a great extent determine the role of the state with respect to higher education. The literature recognises two basic

21 Source: UIS.

positions of the state with respect to higher education: the state is controlling higher education and is heavily involved in (rational) planning or the state is supervising higher education by providing a rather loose regulatory framework and allowing the institutions to self regulate the rest of their activities (Gornitzka and Maassen, 2000)[22]. Essentially, this is the question where on the continuum state vs. market once can place specific arrangements for steering higher education. It should be noted here that one can find two main approaches referring to the market end of this continuum. Some economic literature refers to the market in higher education as such and then goes on to explain why a higher education market can not be considered to be a market in strictly economic terms (Teixeira et al., 2004) while other literature strictly uses quasi-market as the term (Niklasson, 1996). It is also interesting to see that economic literature tends to justify the role of state in steering of higher education due to the existence of market failures (Eicher and Chevaillier, 2002).

The usually used argument in favour of market mechanisms is that *"competition among buyers and sellers and between the two groups is supposed to lead to the best possible use of available resources"* (Eicher and Chevaillier, 2002: 73). Political convictions aside, there are several problems with using the terms "buyers" and "sellers" in higher education. Following the economic line of reasoning, the "buyer" of higher education is an integral factor of the "production" of higher education — the quality of outcomes of higher education depends on the student as well, putting the student in a situation very different from the usual consumer. Some (CPB/CHEPS, 2001: 44) would even argue that a student is both a producer and a consumer of higher education[23].

At least for these reasons, it would be more appropriate to use the terms "providers" and "users". There are specific assumptions about conditions in which this competition among providers and users (in case providers are understood as higher education institutions and users as students) as well as between them takes place that do not hold for higher education.

1. It is questionable to what extent there can be competition between providers and users of higher education if it can be used by several people in a non-competitive manner, i.e. in its entirety and at the same time. A group of 10 students will essentially receive the same higher education (in terms of quality) as a group of 11 students. Naturally, this will not hold for a group double the original size, but this question is more connected to the factors affecting quality of higher education.

22 There are more complicated models of steering in higher education, taking into account the other dimensions (not just the positions of the state with respect to higher education). The most frequent in the literature are the so-called Olsen models (Olsen 1988, quoted in Gornitzka and Maassen, 2000): sovereign (rationality-bounded), institutional, corporate-pluralist and supermarket steering model.

23 The fact that not only individuals (as in potential graduates) have "private", or rather "non-public" benefits from higher education, further complicates the distinction between "buyers " and "sellers", or between "providers" and "users", since private enterprises may be considered as "buyers" or as "users" of higher education as well.

Some funding arrangements motivate institutions to enrol high numbers of students, thus decreasing the quality of higher education. Such effects will be discussed later on, in the section dedicated to allocation mechanisms (Eicher and Chevaillier, 2002).

2. The idea of "best possible use of available resources", i.e. the allocative efficiency also assumes that users possess valid and reliable information about their higher education, both in terms of quality as well as in terms of expected benefits from higher education. Information on quality of higher education is problematic at least in two ways: different people would have different conceptions of what is considered to be quality higher education, for various reasons, including differences in expectations and motivations to continue into higher education. The statement *"we can not define quality, but we recognise it when we see it"* (precisely illustrates the differences in understanding of quality (also present in research literature, see Harvey and Green, 1993). Furthermore, even if there would be a consensus of what is considered to be quality higher education, the problem of valid and reliable measurement arises. Another problem with regards to information concerns expected benefits. As Eichler and Chevaillier state (2002: 73): *"Information available to students is also imperfect in another way. The ultimate outcome of education is spread over time and could be affected by many events, most of which cannot be foreseen."* Economic analysis of private rates of return tends to over-simplify this by extrapolating expected averages in earnings in the future on the basis of observations made about the present situation of the labour market and economy as such. Also, as was stated earlier, the benefits from higher education will depend on the user, since his/her actions will influence the end result of higher education as well.

The above listed examples of the economic arguments against the (quasi) market approach to higher education policy are used as well as for arguing in favour of continuing position of the state in steering higher education. To what extent this steering should be at arms' length is an issue of much debate. Advocates of the market approach in higher education would argue that state should set the rules of the game and act as, essentially, ex-post facto evaluator of the outcomes. They would see this not only favourable for the higher education sector, but for other public sectors, e.g. health. This is primarily motivated by the perception that the traditional model of governance in public sectors has failed. According to Peters (2001), the traditional model is characterised by: an apolitical and institutionalised civil service, clear hierarchy and rules, permanence and stability and equality[24]. It should also be stressed that the

24 On the basis of this, it could be argued that governance of higher education in most countries under study could, and to a certain extent still can, be characterised as traditional (although the issue of apolitical civil service is not that clear in a mono-party socialist or transitional context).

perception of the desirable role of the state, i.e. the desirable alternative to the traditional model depends to a large extent on the principal problem diagnosis as well as on the perceived public interest. Neither the diagnosis of the problem, nor the definition of what constitutes public interest is clear and straightforward, unburdened by ideological or political convictions. This will inevitably affect the choice between the four alternative models (or hybrid of the models) "offered" by Peters (see Peters, 2001 or Maassen, 2003[25]).

2.2.4 Mechanisms for allocation of public funds

In order to provide an adequate overview of possibilities and to widen the debate about the appropriate mechanisms for allocation of public funds to higher education beyond proposals for minor adjustments of the present arrangements, it would be useful to ask the following questions (CPB/CHEPS, 2001):

- What is the channel of allocation?
- What are the conditions of allocation?
- What is the base on which the amount of allocation is determined?

Allocation channel

Allocation channel is about who receives public funds. There are basically two main possibilities: students and higher education institutions.

Most systems are essentially mixed in terms of allocation mechanisms, since even when institutions receive funds directly from the state, students and their families may receive some (hidden) support (this was briefly mentioned in the section on investment in HE and will be further discussed in the section on funding from student perspective). Nevertheless, the two extremes in terms of allocation channels are:

- on one side *vouchers* given to students (to all or a certain portion of students, chosen on the basis of previously set and transparent characteristics) which they can give to the institution of their choice and the institution will cash it in, or
- on the other side *directly financing higher education institution*, under specific conditions (allocation conditions, see below) and on the basis of specific criteria (allocation base, see below).

The voucher system essentially gives students the power of choice as to which institution to choose (Jongbloed, 2006: 41). This also implies that the

25 It should be mentioned that Peters (2001) also noted that shifts from the traditional to the alternative models in various countries happened in two waves:

- the first one in 80s and early 90s, which was mostly ideological in nature and was characterised by a strong push towards the market and
- the second one in late 90s and the beginning of the 21st century, more pragmatic in nature, and focusing on the "repair" of the shifts made within the 1st wave of reforms.

amount of public funds received by a certain institution would heavily depend on its ability to attract students. Certain programmes within specific institutions would not attract as many "voucher carrying" students as some other and this may cause problems in internal redistribution of funds. Furthermore, this essentially puts the student very close to a "buyer" position (although s/he is not buying the higher education service with their own money, but with the money provided by the government, albeit gathered from taxes) and implies significant marketisation of the higher education sector. One would argue that this will give institutions more freedom from the state, especially since funding (as the key instrument for steering) will no longer by directly controlled by the state. However, one should also be aware that the higher education sector will become vulnerable to market failures, especially in systems which are not strong in assurance of quality of higher education and transparency and reliability of information. Some institutions may be better in marketing the quality of higher education than in providing that quality. In addition, not all higher education programmes cost the same, both in terms of the actual material costs (e.g. medicine is more expensive than political science), and in terms of the perceived value of prestige of a particular higher education institution. In order to avoid such problems, a voucher system would therefore have to be sufficiently sensitive to such differences, although it is not clear whether this would make it unnecessarily complicated. Furthermore, not all programmes are equally "popular" in the student population. This may lead to excessive demand for attractive programmes and very low interest for others, which may eventually lead to their disappearance, even though they are deemed necessary (for the institution and the system alike) and may be of good quality[26].

In terms of increasing the freedom of students to choose, student choice behaviour studies (Ball, 2002; Zietz and Joshi, 2005) show that one can not assume that students would make a rational choice about the institution and the field of study. Choice whether and what kind of higher education to pursue is affected by a complex combination of personal expectations, motivations, aspirations all of which are influenced by family, peers, siblings, media, teachers, role models etc. Another issue related to the voucher system are the criteria used to determine which students will be entitled to receive vouchers and which will not. To what extent these vouchers will be merit and/or needs based is a question not limited to the academic discussions on funding of higher education, since this is connected to the relative importance given to goals such as excellence, equity, efficiency etc. It should also be stressed that entirely merit based criteria are often blind to inequalities accumulated in earlier stages in education (Bourdieu and Passeron, 1990; Morrow and Torres, 1994; Müller and Karle, 1993).

Allocation conditions

Allocation conditions are primarily discussed in cases in which funds are given to higher education institutions. They refer to the choice of whether the funds will be given as a lump sum or the government will determine (in

26 A more detailed debate on vouchers is available from CPB/CHEPS, 2001: 87-88.

more or less detail) which part of the funds should be used for which type of expenditure. This does not necessarily mean that eventually these amounts are spent in the prescribed manner; especially if institutions have other sources (students, industry) of income[27]. They can also include the decision as to what share of funds will be fixed and what will be dependant on whether the institution fulfilled certain criteria (discussed in more detail under "allocation base"). The variable share of funds may be used as a tool for increasing competition between institutions with an idea of increasing performance in certain chosen aspects of higher education. Fixed share of funds is considered to provide a certain degree of continuity and stability for institutions.

Lump sum funding is considered by a number of stakeholders to benefit institutions in terms of: increasing their autonomy from the state, increasing the possibility to make choices about development, internal structure and external positioning. However, this requires that institutional decision-makers have sufficient capacity and legitimacy to reach and implement such decisions and that there is consensus throughout the institution concerning the strategy for development.

Allocation base

Allocation base refers to the criteria and mechanism used to determine the amount of public funds to be transferred to a particular higher education institution. The mechanism may be: funding formula, contract and/or negotiations between institution and the state (i.e. government). Many countries in the region have funding formulae in which a specific set of input or output factors is given a certain weight (often depending on disciplinary differences). The funding formula may include a fixed share and a variable share, possible effects of which have been explained above. Contracts between higher education institutions and the state are often "signed" for a certain period of time during which both parties have certain rights and obligations. In simple terms, government is obliged to provide the funding and institutions are obliged to provide teaching, research and/or service. Contractual arrangements are predominantly focusing on output of teaching, research and/or service. When it comes to negotiations, these involve a more partner like relationship between higher education institutions and the state or intermediary bodies such as the national councils for higher education, funding councils for specific areas and disciplines of study (especially in case of research) etc. The starting point for negotiations is often the amount given to the institutions in the past. During negotiations, certain demands to the institutions in terms of input, and more often, output can be put on the table. It should be stressed that certain allocation arrangements use a combination of all allocation mechanisms.

More interesting choice concerns input and/or output criteria. Input criteria often include number of enrolled students (in the first year of study), number

27 Explicit and implicit cross-subsidisation is discussed in the section on Institutional level funding.

of teaching and non-teaching staff, space, etc. Output criteria for teaching function can be number of credits awarded, number of graduates, number of graduates continuing higher education (on a master or PhD level), duration of study, completion or drop out rate etc (Jongbloed and Vossensteyn, 2001). Output criteria for research and service can include various measurements of research productivity (e.g. citation, patents, PhD degrees, international collaborations) and service (e.g. number or value of contracts with third parties)[28]. The relative importance to be assigned to input and output criteria is not a simple choice, and, as other choices, depends amongst other, on the expected role of higher education. However, it is clear that criteria entirely based on input are not an effective way of ensuring desirable (or expected) results of the higher education process. If, for example, amount of public funds is determined on the basis of the student enrolled into the first year of studies, institutions may tend to enrol as many students as possible. To a certain extent this may be justified with the "economies of scale" idea, although it easily turns into overcrowding and therefore decrease in quality. This may mean that the criteria to enter higher education would be decreased, sometimes leading to rather strict conditions for enrolling into the next year of study. This naturally would increase the drop out rate as well as the actual duration of studies. On the other hand, complete focus on output, especially since no set of output criteria can adequately capture the entire impact higher education can and should have, may lead to decreasing quality of higher education — if institutions are given more funds for more higher education graduates they may tend to maximise the amount obtained by "speeding" the students through their degree programmes, by lowering the workload and criteria and adopting inappropriate assessment methods. On the other hand, a particular choice of output criteria can also reflect the importance attached to wider societal goals (see section on examples).

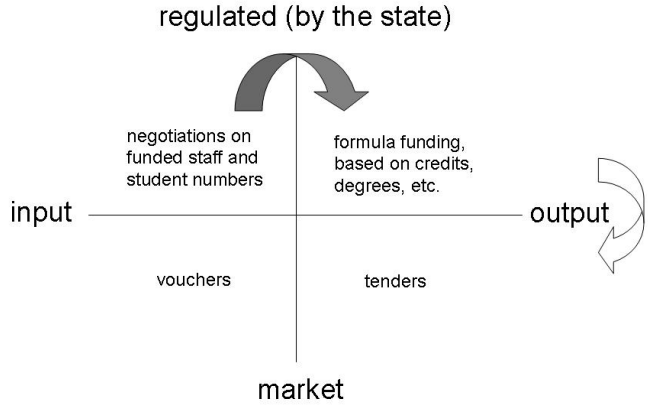

Figure 1: Classification of funding mechanisms, adapted from Jongbloed (2003)

28 A more detailed debate on output based funding is available from CPB/CHEPS, 2001: 86-87.

Figure 1 presents a schematic classification of funding mechanisms according to two dimensions:

a. to what extent higher education is steered by the state or the market and
b. what the key criteria for allocation of public funds to higher education is.

Some illustrative examples for four resulting group (input-state, output-state, output-market and input-market) are provided.

Some research shows that in many countries there has been a notable shift from predominantly input-based to output-based funding mechanisms (indicated by the gray arrow). Some countries have moved to (or are in the midst of debates about) more market oriented mechanisms (indicated by the white arrow on Figure 1). Nevertheless, it should be stressed that the classification presents a sketch of the actual situation and that it would be difficult to accurately place actual funding mechanisms in either of the four groups, since funding models (alike governance models, Gornitzka and Maassen, 2000) are in reality always hybrids of theoretical models.

2.3 Institutional funding

In terms of distribution of funds, from public as well as from private sources, within the institution, a lot depends on the internal institutional structure, governance and culture. Having in mind the difficulties in acquiring information about the intra-institutional financial arrangements within the region, the following section will provide an overview of potential sources of income and key expenditures of an institution, as well as possibilities for cross-subsidisation of different aspects of higher education.

As was stated earlier, a significant share of income for state higher education institutions[29] comes from the public, although a decreasing trend can be observed, internationally and in the countries under study. Public funds are predominantly given for teaching and research activities. Usually these two are separated, since state budgets for education and research are usually separated as well and the funds are allocated on the basis of different criteria and through different funding channels. Generally, mechanisms for research funds tend to be more competitive and more output based than teaching funds, although there are often limited research funds which are fixed and allocated in a non-competitive manner.

Public funds dedicated to teaching are usually intended for covering (part of) teaching staff salaries, (part of) maintenance and improvement of the teaching

29 The term used here is “state higher education institutions” since this is closer to the literal meaning of the terms used in the region under study. “Public higher education institutions” are considered to be a larger set of institutions which serve some public purpose, but are not necessarily founded by the state. They can be founded by a church, for example.

infrastructure and equipment and for general organisational costs not explicitly connected to teaching (administrative staff salaries, general maintenance costs etc.). As was explained in the previous section, these funds can be given as a lump sum or they can be "spoon fed", thus giving more or less freedom to institutions to re-allocate certain portions of funds as they see fit.

Other sources of funds for institutions include tuition fees collected from students. In many European countries that do have tuition fees, the amount charged to students does not correspond to the actual costs of teaching, i.e. the state is subsidising part of the teaching even for students who pay tuition fees. In some countries, particularly in the region (see chapter 3, and also in some former communist countries), part of the students of public institutions are funded by the state and part are paying tuition fees. Criteria for determining who will pay and who will not, and how much, may vary. The state can have more or less influence on this, which will be discussed in the next section on state-institutional relationship. Effects of tuition fees on access, progress and completion in higher education will be discussed in the section about student financing. However, it should be stated that in many cases (especially in countries under study), institutions can use the money collected through tuition fees for activities not directly contributing to the increase in quality of teaching. In some countries institutions do not charge explicitly tuition fees, but do charge students with some administrative fees which are then used to increase the share of the budget intended for teaching. Some countries in the region (e.g. Serbia, chapter 3) tend to be very creative in defining a variety of administrative fees for students in an attempt to increase the overall institutional budget.

Service to society, e.g. via consultancy or research contracts for public (national or local) authorities, is another source of funds for institutions. These contracts may include support for environmental, education, health or social welfare programmes of the authorities. Service can also include participation in cross-border or international projects focused on increasing cooperation, mutual understanding (especially in post-conflict areas, such as the region under study). Lifelong learning programmes for the adult population (not necessarily as higher education) may also be a source of income for universities. When these are organised with support of the local or national authorities they would fit under the "service" label, although it is possible that the institution develops such programmes on its own, without the organisation or financial support of the authorities. Institutions may be eligible for international funds (e.g. EU funds) both for improvement of teaching (e.g. TEMPUS or Lifelong Learning Programme funds) or for research (e.g. FP7 funds). Consultancy or research contracts with private enterprises and industry can also be one of the sources of income for an institution. However, such possibilities differ from discipline to discipline (or from department to department) in terms of nature and amount, essentially making some departments or groups within the institution less capable of generating such type of income, which potentially may lead to intra-institutional conflicts in terms of re-distribution of these funds.

There are various other sources of income for the institutions, including long-term or short-term renting of the facilities for various commercial purposes. This is possible in countries in which legislation allows for such an arrangement, although in many cases there are clear demands that these arrangements must not jeopardize the key functions of the institution — teaching and research.

In terms of expenditures, these naturally include:

- infrastructure maintenance and improvement;
- costs related to teaching and research — salaries of staff, necessary materials and equipment (including laboratories or libraries), costs not included elsewhere but dedicated to the development of new or improvement of old programmes;
- costs related to administration, inter-institutional and/or international cooperation etc.

Having the structure of income and expenditure in mind, the question is to what extent it is possible to have some cross-subsidisation within the institution, both between different functions (e.g. income from tuition fees is subsidising research) and between different programmes (e.g. consultancy contracts of the ICT department are used for subsidising archaeology). The possibility depends to a large extent on the freedom of the institution to freely allocate the funds it receives from the government, i.e. on the control mechanisms for spending of funds and evaluation of outputs. If the control is focused predominantly on whether the expected outputs have been created or not, it would be possible for the institution to re-distribute some funds internally to the extent that it does not jeopardise the results. However, in case of sufficient transparency of cross-subsidisation (which is not the case in the countries under study, see chapter 3 and 4) this could also be an argument for the government to change the level and conditions of support for the next funding period. Cross-subsidisation, as well as economies of scope, depends on the internal structure, level of integration of the institution, procedures as well as culture within one institution. In the case of very fragmented institutions, as is the case in the region in which individual faculties within one university are separate legal entities with separate budgets and direct link (in terms of funding) with the government (see chapters 3 and 4) this is extremely difficult, next to impossible.

2.3.1 Funding, academic freedom and institutional autonomy

In each of the countries under study (as well as in many other European countries) the principle of academic freedom and autonomy of higher education institutions is well defined, both in constitutions as well as in legislation regulating higher education. Furthermore, institutions from the countries under study are also signatories of the Magna Charta Universitatum[30], which also underscores autonomy and academic freedom (freedom in research and training) as fundamental principles of higher education. The concrete key “ingredients”

30 http://www.unibo.it/avl/charta/charta.htm (accessed on 23 September 2008)

of autonomy and academic freedom may be formulated in slightly different manners, depending on the historical background and social context. For example, while partisan political and religious activities within higher education institutions are explicitly forbidden by law in almost all of the former communist countries (including the countries under study); this is not the case in other European countries. One of the key theorists on these issues, Berdahl (quoted in Meek, 2003) defines academic freedom as the *"freedom of the individual scholar in his/her teaching and research to pursue truth wherever it seems to lead without fear of punishment or termination of employment for having offended some political, religious or social orthodoxy"*. From this it seems that academic freedom is an absolute value, although ongoing debates on ethics of e.g. stem cell research are drawing limits to it. However, if taken literally the principle of institutional autonomy is not an absolute even in theoretical literature: *"no higher education institution has complete autonomy… Higher education institutions will always be subject to some demand to be publicly accountable, whether the institutions themselves are public or private. Society has too much of an interest in higher education to allow 'pure autonomy' (which always was probably myth) to prevail."* (Meek, 2003: 7). The point that there is, and that there should not be absolute autonomy is interesting, since it clearly underlines the importance of state steering in higher education, in order to assure public benefits from higher education. It is therefore interesting that, to some extent as a reaction to the former communist period in which institutional autonomy was virtually non-existent, the state role in higher education steering has decreased to a significant extent (although some cynical observers may see this as state's intentional decline of responsibility for higher education; see Jelinčić, 2007).

Berdahl (Meek, 2003) sees institutional autonomy through two groups of issues: substantive and procedural: substantive being concerned with *what* and procedural with *how*. In this respect, one can also try to seek out the "essential ingredients" of institutional autonomy (Ashby, 1966: 296, quoted in Meek, 2003), which basically relate to Berdahl's procedural issues:

- freedom to select staff and students and to determine the conditions under which they remain in the university;
- freedom to determine curriculum content and degree standards;
- freedom to allocate funds (within the amounts available) across different categories of expenditures.

As we can see, one of the key aspects of institutional autonomy is the autonomy in financial matters. Having in mind the funding arrangements now present in the countries under study, institutions seem to enjoy a rather low level of financial autonomy with an exception of Slovenia (see chapter 3). Even though they may have different ways of allocating funds within an institution (especially funds received from a variety of private sources, see chapter 4) it is questionable to what extent these allocations are a result of some strategic decision making or a simple consequence of continuous attempts to make ends meet[31].

31 Other key ingredients of institutional autonomy are questionable as well, especially if academic staff has the public servant status and if institutions are "forced" to change

Another issue to be reflected upon regards the point of reference of autonomy, i.e. who should the institution be autonomous from? So far, we have been discussing autonomy from the state.

However, with decreasing public funds and increasing pressures for diversification of funding sources, another question emerges: should institutions also be autonomous with respect to other funders as well? How (if at all) to ensure this side of institutional autonomy? This is of special relevance for industry funded research and how this may affect academic freedom. Furthermore, when asking for more autonomy are institutions essentially asking for more market mechanisms? There is a variety of policy documents (e.g. EUA) stating that more autonomous institutions are more responsive to changes in the environment, thus more successful in keeping up with international competition. The questions for further debates are, first of all, to what extent this idea of "more autonomy = more responsiveness" is true in different contexts and for different institutions. Furthermore, what is even more complicated since it is a questions for the political domain, is it the desirable arrangement for public higher education institutions?

In addition, the issue of autonomy is closely related to the issue of accountability of (public) institutions. Many policy documents of various stakeholders underscore that the relationship between autonomy and accountability should be one that is complementary and not one that is conflicting. A number of questions therefore emerge. How to ensure that the higher education institutions are accountable to the public (which still provides a substantial share of income) or to the students? Should the fact that the public provides a substantial share of income be the only justification for accountability to the public? Connected to this is the question: in case there are tuition fees in public institutions, who decide on the amount to be charged? This is especially relevant having in mind the consequences of introduction of tuition fees (especially when these are not followed by changes in the student support system, which is more or less the case in all countries under study. Furthermore, who and how determines the level of tuition fees has implications on the extent to which the state can influence higher education, i.e. it reflects the level of marketisation of higher education. Equal tuition fees for different study programmes means that the fee does not correspond neither to the actual costs of a particular study programme nor to the expected benefits upon graduation, essentially diminishing the market like nature of the arrangement. Such an arrangement, especially when not followed by a well thought of and functional grant or loan scheme, is also more equitable (the issue of equity is discussed in detail in the section on student level funding). The market like nature of the arrangement can be seen to be more prominent in the cases in which the state sets the maximum amount allowed. However, it is interesting to observe that in such cases (e.g. UK) most of the institutions tend to choose the maximum amount anyway, again diminishing the market like nature of the arrangement (although it is debatable

their study programmes in line with the Bologna Declaration.

to what extent this is a short-term development). Finally, equal tuition fees for different programmes within one institution imply that there is substantial cross-subsidizing within the institution or that such cross-subsidising is at all possible.

Finally, when referring to institutional autonomy (and therefore to internal institutional organisation), a special regional feature comes to the front — in almost all countries under study (apart from Albania), faculties within a university enjoy a high level of autonomy from the university or are independent legal entities. This independence is primarily practiced through financial autonomy from the university level: faculties received all their income directly, from the public, from the students or from third parties alike. One immediate question then comes to mind: can we truly speak of autonomous universities in this context? Do universities essentially exist as institutions or they are a "loose confederation of faculties" (Jelinčić, 2007)? Or, when do "loosely coupled systems" (Weick, 1976) become essentially disintegrated? More connected to the focus of this study, how can funding arrangements (both in terms of allocation of public funds to institutions and internal institutional redistribution) contribute to a good balance between integration and disintegration (i.e. not lead to extreme centralisation), thus supporting (and not hindering) quality teaching, research and service? The goal here is not to offer ready made answers, but to point to some of the important questions that should be asked in the process of developing (new) funding arrangements for higher education.

2.4 Funding of HE from a student perspective

In terms of funding of higher education from the perspective of an individual student, there are two main perspectives to be taken into account. The bulk of literature on funding is economic in nature, analysing student income and expenditure and effects certain funding arrangements have on student choice, affordability, equity and efficiency. Having in mind that any mono-disciplinary perspective on an issue is bound to be limited, a sociological perspective on issues surrounding access, progress and completion of higher education is presented as well. In order to be able to foresee to a certain extent possible consequences of different funding arrangements and diminish unintended results, it is of utmost importance to have at least these perspectives in mind.

When analysing whether or not higher education is affordable, economic analysis starts from looking into the sources of student income and the level and scope of student expenditures. Very often, in public debates, the student expenditure side does not properly include all of the costs incurred from higher education. For these reasons, it is useful to make an overview:

- costs related to tuition — this includes the tuition fee, as well as costs incurred for books, materials, equipment etc.;
- administrative costs — this includes various administrative fees, paid to the institution (and/or department) and in some cases to a national

structure. This often includes membership in student unions;
- costs related to living while studying – including accommodation (for students living away from parents), food and subsistence, transport, health, leisure etc.

In countries where there is a "tradition" of higher education research, especially in terms of economics of higher education, there are readily available data (mostly averages) for all of the above mentioned costs. In countries under study (see chapter 3) there are rough estimates at best. The economic perspective also includes an analysis of the so-called opportunity costs (e.g. earnings foregone due to the choice to study and not to work), although this analysis is often just an estimate, even in cases where economics of higher education is not a novelty. In addition, such approach to evaluate the "price" of higher education may prove to be incoherent with the norms and beliefs attributed to education (see concluding chapter).

In terms of student income, this can include:
- own earnings, if the student is involved in part-time or full time work while studying (in some cases there are no data as to what portion and what type of students work, especially in countries notorious for grey economy and "tradition" of unregistered labour);
- parental support, either implicitly, by way of accommodation and food, or explicitly, in monetary terms;
- student scholarships, grants and/or loans – from a public or private source, system or institutional level.

From an economic perspective, student income should also include a variety of "invisible" or implicit support, through subsidised food, health services, transport or accommodation, tax exemptions for students, student parents etc. However, for a number of these sources it is questionable to what extent a student benefits from them (e.g. to what extent the fact that the employer pays lower taxes for student employees means that student earns more).

The structure of student income initiates the following questions:
- to what extent students should be expected to work while studying and can this work hinder them in successfully completing their student obligations?
- what cultural and social characteristics lie behind parental support (indirect or direct) and how the reliance on parental support affects equity in access, progress and completion of higher education?
- what are the consequences of specific arrangements regarding scholarships, grants and loans in terms of equity and efficiency of higher education?
- what is the proportion between direct support and indirect support (through subsidies) and what are the implications of this?

To answer the first question one should firstly be aware of who works and why. Research, both from the region (Vukasovic, 2007) and from elsewhere (e.g. Archer et al., 2003) shows that most of the student who work while studying, do so primarily to supplement their income (although some may work in order to improve their employment prospects after graduation). This also means that most of them are from poorer socio-economic backgrounds, especially in countries that very much rely on some form of parental support to students. Studies (Yorke, 1999) also show that working while studying may become a significant burden to students, eventually causing them to prolong their studies or even drop out. Therefore, reliance on this source of income for students may prove to have negative effects on both equity and efficiency.

In terms of expectations of parental support to students (of traditional age), there are significant cultural and social differences both in Europe and elsewhere. In some countries, e.g. Norway, all students are considered to be independent from their parents, and therefore are eligible for the same amount of state support, regardless of their socio-economic background. In other countries, and this is especially true for the region, parents are implicitly expected to support their children while studying and students tend to continue living with their parents while studying (very often even after completing their studies, due to significant economic obstacles to emancipation). The reliance on monetary parental support poses an equity problem, which is further exacerbated by other forms of parental support important for success in (higher) education. Sociological and psychological research (Archer et al., 2003; Marks, 2005 etc.) shows that parental support in terms of aspirations and motivations is also very important and that parents with higher educational attainment will value their children's education more, both in terms of expected economic benefits from higher education, and in terms of importance for personal development attached to education. In addition, they would have a longer time-horizon, i.e. will be more inclined to long-term planning. Furthermore, economic analysis (Jongbloed, 2006: 32) shows lower levels of risk (and debt) aversion for those with more education. The risk and debt aversion is especially important for systems with student loans (including income contingent one). While good information campaign may decrease debt aversion to some extent, student and parental choices regarding continuation of higher education are not essentially rational (as previously discussed).

Regarding the question of effects of scholarships, grants and loans on equity and efficiency in higher education, the key issue is what is the base for award? In many systems, primarily in the countries under study, state scholarships and loans are primarily awarded on merit to a very limited number of students. While, at a first glance, this arrangement may seem equitable, it should be noted that success in earlier stages in education also depends on the socio/economic background, i.e. that there is some accumulation of inequality in terms of learning outcomes (e.g. grades, reputation of schools, quality of outcomes) from earlier stages of education (Lucas, 2001; Raftery and Hout, 1993). The fact

that there are cases in which selection for higher education, or for different status within public institutions (see chapter 3), is based on merit criteria does not mean that socio-economic background has no influence, precisely due to the fact that measurements of merit are dependant on various forms of capital – economic, but also social and cultural (Bourdieu, 1986). This also means that means-tested grants and loans schemes will also tend to neglect the less tangible forms of capital – cultural and social to a certain extent and this should be borne in mind, otherwise the grants and loans system will be regressive, i.e. grants and loans will end up in the hands of those who are already better-off, even though the entire population is contributing to it through taxes. A similar example of such effects is the dual track system that exists in Serbia. A portion of students at public institutions is funded by the state (they do not pay any tuition fee), while the others pay for their higher education. The criteria to be in the state funded quota are grades from secondary education and results from the entrance exam. Studies show that the students from better socio-economic background are over-represented in the state funded quota (compared to the overall population, Vukasovic, 2007), more than they are over represented in higher education general, or university education in particular. These students have accumulated some advantage (Wong, 1998) in the prior stages of education, both thanks to their parents' social and cultural capital (Bourdieu, 1986) as well as through their parents' economic capital (since it is rather common for pupils to have private tutoring or to take special preparatory courses for higher education entrance exams). Therefore, in terms of access, students from poorer socio-economic background are disadvantaged. This is further exacerbated when it comes to progress and completion, since students from poorer backgrounds are also more likely to repeat a year or drop-out (Vukasovic, 2007). However, one should note that to properly tackle inequality in education, one should look both into quantitative and qualitative stratification in education and also address the entire education process (from pre-primary to higher education).

When it comes to the proportion between the direct support through grants and loans, and indirect support through subsidies (to students and/or parents), the first issue is the extent to which the reliance on indirect support prevents students' emancipation from their parents. In addition, indirect support through subsidies as well as direct support solely based on merit, might prove to be less effective in terms of diminishing the effect of students socio-economic background on access, progress and completion.

All sources of income and expenditures (and the amounts) are important in order to assess the affordability of higher education in a specific context. For this it is also important to have information on the overall economic situation especially in terms of the ability to pay (how to define ability to pay, especially in order to be meaningful in a variety of systems, is discussed in detail in Usher and Cervenan, 2005) and good data on actual income disposable to students and their parents, although the latter is problematic in terms of direct availability to the student and therefore should be clearly identified. If one of the goals

for higher education is access, progress and successful completion for students regardless of their socio-economic background, affordability of higher education is of paramount importance in the analysis of the present and development of the future funding arrangements. However, one should also bear in mind that affordability in general is not something an individual student is concerned with, and that system level data on affordability tend to hide significant differences between and within institutions, thus rendering some types of higher education unaffordable to certain types of students, regardless of the general affordability of the system. As can be seen from chapter 3, for the countries under study it was not even possible to have a general assessment on affordability, due to lack of valid and reliable data.

The economists often use income and expenditure analysis, together with analysis of the expected public and private returns in debates about (and pro) cost sharing in higher education (Johnstone, 2006; Teixeira et al, 2006). The key argument in favour of sharing of costs for higher education between the state and primary beneficiaries — students (although the group of non-public beneficiaries from higher education does not end there), is that, apart from public returns, there are significant private returns from higher education as well. These private returns, as was stated earlier, include benefits in terms of higher earnings, improved prospects in terms of employment, health, social standing etc. The critics of this approach address the way in which these private returns are estimated, to what extent they present an estimate of the averages, effectively hiding potentially significant differences between programmes and institutions and how are they compared to expected estimates of public returns. For all this one should have in mind that almost all of the research literature states that returns form higher education, especially public returns, are not easily quantifiable. Two conclusions from economic analysis tend to be very prominent in both research and consultancy literature (Psacharopoulos and Patrinos, 2002):

1. public returns from higher education are smaller than public returns from earlier stages of education (primary and secondary) and
2. public returns from higher education are smaller than private returns from higher education.

Both of these conclusions may be (and often are) used in policy discussions to support the introduction or increase of tuition fees (up front or in the form of graduate tax or income-contingent loan).

The first conclusion is often an argument in favour of less public support for higher education, which basically inevitably means increasing direct costs for students and their parents in terms of tuition fees. Although the same operationalisation and quantification of public returns from primary and secondary education and from higher education may exactly lead to this conclusion, the question remains to what extent is this operationalisation valid and reliable. The second conclusion is often used to support cost-sharing in higher education, especially in terms of the private (student and parent) share being higher than

the public. Again, while specific operationalisations of public and private returns may lead to this conclusion, the question is how something that is generally seen as very difficult (or impossible) to quantify can be smaller than something else.

The previous discussion serves to point out the complexity of issues around and possible consequences of different funding arrangements. If accessibility and affordability of higher education are desirable, then a holistic approach to the choice of the most appropriate mechanism is necessary.

2.5 Some international examples

This section consists of an overview of some interesting funding arrangements from abroad, together with brief discussion about (possible) consequences such arrangements (may) have on quality of higher education or access, progress and completion.

Income-contingent loans in Australia

The Higher Education Contribution Scheme (HECS)[32] was introduced in Australia in 1989. In 1997 there was a differentiation of tuition fees into three tariff bands and in 1998 universities were allowed to admit (a limited number of) students on a cost-covering basis, i.e. those who pay the full costs of their higher education (CPB/CHEPS, 2001). Essentially, HECS foresees a shift of a significant share of costs of higher education to students, who can either choose to pay a portion or the whole tuition fee up front (thus obtaining a discount) or pay later through an income-contingent loan system.

The key idea behind HECS was that, through deferring repayment of loans and connecting the repayment amount and schedule to income level (which is the essence of income contingent loans), the higher education sector will have sufficient resources to expand (since the government was not able to allocate more public funds to it) while not hampering access to higher education (since students will be able to pay after receiving higher education and only depending on their actual income upon graduation).

The scheme first of all relies on an effective taxation system that can record tax payers and enforce repayment. Secondly, it includes some subsidisation of interest rates on repayment of debt by the government as well as a set threshold after one starts repaying their debt. The rate of debt repayment increases with income. Furthermore, the scheme is supported by an information campaign in order to reduce debt-aversion. In terms of effects on equity, several studies (CPB/CHEPS, 2001) show that the participation of students from socio-economic background did not significantly decrease after introduction of HECS. However, the participation rates of students from socio-economic background may have

32 http://www.goingtouni.gov.au/Main/Quickfind/PayingForYourStudiesHELPLoans/HECSHELP.htm (accessed on 2 June 2008)

increase in absolute terms, but so have participation rates in general, i.e. the students from poorer socio-economic background remain under-represented in higher education, especially in more expensive programmes (law or medicine, see CPB/CHEPS, 2001: 62).

"Taximeter" system in Denmark

A series of reforms in Denmark that started in 1992 brought in what has become known as the "taximeter" model in higher education funding. The taximeter model is heavily output based since it is *"directly linked to the number of students who pass their exams"* (CPB/CHEPS, 2001: 89). For each student passing each exam a set amount of funds is awarded to the institution. The amount depends on the field of study and has three elements: costs of education and equipment, joint costs (administration, maintenance) and costs for practical trainings (only for specific subjects). The introduction of such a model was backed by some restrictions for the first years of operation in terms of reallocation of funds between institutions and programmes to avoid the "shock" in the system. There has been much debate since about the level and elements of the amounts awarded for each student who passes an exam. Institutions do receive other funds for research and other activities.

As can be seen, the taximeter system for funding of teaching in Denmark is entirely based in output. There was much fear that such an arrangement would lead to over-production of graduates, i.e. to decreasing the quality of higher education. Foreseeing such problems, the Danish government founded the national evaluation agency (*Evalueringsinstitut,* EVA) already in 1992, which was in charge of evaluating the quality in higher education. According to their studies (CPB/CHEPS, 2001: 92), no overall decline in quality can be observed, primarily due to the fact that there is a system ensuring external control of higher education in general and student assessments in particular via external examiners who should: *"ensure a fair and equal treatment of all students, monitor nation-wide quality standards and advise the institutions on the quality of the programmes, and annually submit a report of their impressions or critique to the institution"* (CPB/CHEPS, 2001: 92). Some institutions (e.g. University of Aarhus) reported almost no effects in terms of increasing completion rates (i.e. decreasing drop-out rates) or decreasing prolongation of studies, while other institutions showed negative effects at the beginning, but stabilisation later on. Nevertheless, institutions tend to complain that the taximeter system prevents them from developing longer-term development plans, since it is not possible to know in advance how much funding will be available from the government.

Norwegian state loans for students

One further example is student funding in Norway. Each Norwegian student is eligible to receive a loan from the State Loan Fund[33]. The fund started operating

33 http://www.lanekassen.no/templates/Page____6768.aspx (accessed on 23 September 2008)

in 1947. In the 2005/06 period, the loan was given to approx. 270,000 individuals in higher and upper secondary education. The loan is supposed to cover living costs (accommodation, food etc.) for students during the period they are not earning, i.e. while studying. This also means that students are considered to be independent from their parents. The loan is interest free as long as the person receiving the loan is a student (i.e. is eligible for receiving the loan). There are specific arrangements for graduates facing difficult life situations and for those who move from Norway after graduation. Some international students are also eligible to receive loans from the State Loan Fund, under the so-called Quota Programme. The loan is not means tested. Presently, students receive approx. 1000 Euros per month. Norwegian students do not pay tuition fees. However, when total expenditure on higher education is analysed, one can see that the public and private contributions are more or less the same (HIS study, p. 102).

Having in mind a generous (at least compared to support available to students in other countries) loan and the fact that there are not tuition fees, one would expect that there are no inequalities in terms of access, progress and completion of higher education in Norway. Nevertheless, studies show (Hansen, 1997) that there is stratification, both in terms of access to more prestigious institutions (universities compared to university colleges) and in terms of more prestigious programmes (e.g. law and medicine compared to teaching). This is clearly an indication that, in order to address the issue of inequality in higher education, a systemic approach to earlier stages of education is necessary.

United Kingdom — widening participation and ensuring completion as output criteria

The Higher Education Funding Council of England provides specific funds to higher education institutions for activities related to widening participation in higher education[34]. There are three categories available:

- funds for additional costs institutions may incur in their outreach activities targeting students from under-represented groups,
- funds allocated to activities and measures for ensuring completion of students from disadvantaged background and
- funds allocated to widen participation and improve position of disabled students.

Each of the categories is accompanied by specific description of allocation methods. For example, funds allocated to activities and measures for ensuring completion take into account the risk of non-completion (on the basis of prior studies) depending on characteristics of students (young or mature, score on A-levels etc.) as well as the type of institution. Apart from the fact that some of these categories include atypical output criteria, it should also be noted that there is significant transparency in terms of methods of allocation as well as that

34 http://www.hefce.ac.uk/widen/fund/ (accessed on 23 September 2008)

these methods heavily rely on prior research of access, progress and completion of higher education and related effects of funding arrangements.

On transferability of solutions from other systems

With regards to afore mentioned examples of specific funding arrangements, it is important to evaluate to what extent such models can be implemented in different contexts and, even more importantly, will it be possible to achieve similar effects. For example, in case of a proposal to introduce HECS-like in a given country one of the first issues will be whether the tax system can support this and what are the social and cultural conditions affecting take-up of loans, especially for education. When it comes to a heavily output oriented system as the Danish taximeter system, the question would be whether there is a solid quality assurance system in place as a safeguard against decreasing of quality through the increase quantitative measures of output as a method of increasing income for the institution. This also goes to say that, although funding is an effective steering mechanism, in order for any funding arrangement to achieve part of the intended results, other incentives and control mechanisms need to be put in place. Furthermore, since the relationships between different aspects of higher education governance and management and their effects on outputs of higher education are so complex, it would be extremely difficult to isolate effects of a specific change in funding arrangements. Essentially, it would be a mistake to easily jump to conclusions both in favour and against a specific funding mechanism.

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3. FINANCING HIGHER EDUCATION: COMPARATIVE ANALYSIS

3.1 Introduction

The chapter *Financing Higher Education: Comparative Analysis* provides an overview of the national higher education systems with a specific focus on the developments and trends in the policy and practice of financing higher education. The aim of the comparative analysis is to provide information on the developments in financing policy and its management mechanisms in countries situated in a region that is going through a transition period and where some countries have common history. In this chapter we will focus on a number of countries in South East Europe (SEE), namely: Albania, Croatia, Montenegro, Serbia and Slovenia. Despite some common characteristics and geographical proximity, the diversity between the systems and their background should be considered. The concept of South East Europe is a construction referring to very diverse realities (Zgaga, 2005: 27). However, despite the differences, comparison of the systems and processes taking place in the countries under study brings forward some important common problems, trends and tendencies.

Research - based information[35] and reliable data are of key importance in policy formulation. Research on higher education systems, in particular on financing policy, in the countries under study is still rather limited. Therefore, this chapter is an early attempt to contribute to a systematic overview and a comparative analysis of the funding systems of higher education in the SEE region and perhaps encourage further research in this matter.

The *Financing Higher Education: Comparative Analysis* aims at providing a holistic view of higher education financing systems through addressing the issue from system (national), institutional and student perspective. The analysis which takes into account the three different perspectives should contribute to the understanding of complexities of higher education in the region of South East Europe. This is essential in order to enable the policy makers, stakeholders and higher education institutions to develop and implement policies, strategies and practices aiming at responding to the needs of modern society. Under constrained economic, human and institutional resources, the financing policy is one of the principle mechanisms determining the level of equitable allocation of resources

35 Research-based information refers to information gathered through independent research by the use of scientific methodology.

and encouragement of necessary reforms. In line with the contemporary trends and developments of a more student centred approach in the European Higher Education Area, particular attention will be dedicated to the student perspective of financing higher education.

The chapter starts with an overview of higher education systems in the region taking into account the context and the trends in the countries and the region as a whole. It serves as a background for understanding the following sub chapters focused on the different issues linked to the funding of higher education. The second subchapter discusses the allocation mechanisms from the state level to the institutions followed by an analysis of allocation mechanisms used within the higher education institutions. The fourth subchapter provides an analysis of higher education funding from a student perspective, rarely addressed in research and documents provided by different stakeholders in the countries under study. The chapter concludes with a summary outlining the major trends and considerations of the financing systems in the region. The summary aims at providing the basis for policy recommendations formulated in the concluding final chapter of the publication.

3.1.1 Acknowledgments on methods and sources used

The analysis in this chapter is based on the questionnaire (see Annex) sent to higher education experts in the respective countries. The aim of the questionnaire was to collect quantitative data relevant for the context and higher education funding at the system level, but also data relevant for analysis from institutional and student perspective. Next to the quantitative data, the questionnaire asked for descriptions of legislative and regulatory frameworks under which the higher education systems operate in respective countries, particularly looking into the regulation on financing higher education institutions. Additionally, the practice of allocation mechanisms from the state to higher education institutions, as well as within the higher education institutions was examined. Finally, tuition fee models, the support system and the expenses students have during their studies in the countries under study were considered.

However, recurrently the quantitative data was not available. In the countries under study the tradition of collecting data on higher education, even more so in collecting data relevant for financing higher education, is not long-standing. Most of the countries are not members of the international organisations and institutions that gather data based on common standardized and complex methodology. Therefore, a lot of data easily accessible for other countries simply is either non-existent or not accessible. Some data might be collected and analysed within the Ministries or higher education institutions, however making the data publicly available and easily accessible is a rare practice.

In the cases where the data were not obtainable through the questionnaires, alternative sources were consulted. Additional data was gathered mostly through

the official government web sites, the reports on the implementation of the Bologna Process, available on the official Bologna Process web site[36], ETF country plans[37], EU Tempus programme national offices web sites[38], OECD Thematic Review of Tertiary Education – Country Background Reports[39] and other official sources available on the World Wide Web or published in various reviews. Several higher education experts have been consulted to contribute with their insight to the understanding of the history and the context of the developments in the higher education in the countries under study.

Throughout the text, attempts were made to avoid simplification to which mere use of quantitative data might lead to by providing context, insight and description of processes surrounding the numbers. Higher education is indeed a complex system. The fact that mere quantitative inquiry might exclude important facts and elements makes the use of methods from the interpretative field of social science inevitable. The comparison between systems with specific backgrounds, norms, beliefs and social reality represents a considerable challenge to the researcher and demands a substantial degree of critical observation from the reader.

3.1.2 Overall information about the higher education systems

Historical background, reform developments and a variety of quantitative data on higher education systems is provided in this subchapter in order to understand the context of the differences and similarities in the higher education financing systems in the analysed countries. The description of the national systems is followed by comparison and outline of common trends in the countries under study.

3.1.3 Historical Background

Although several higher education institutions existed in the region already in the 17th century, higher education system in the countries under study developed mostly after the World War II. In the period after World War II the funding mechanisms in the socialist countries were supportive to the principle of the unified state education. Funding was centralised and there was no tuition fees. While Albania, as an isolated system, developed its own kind of higher

36 http://www.ond.vlaanderen.be/hogeronderwijs/Bologna/documents/Other_relevant_documents.htm (accessed 18 March 2008)

37 http://www.etf.europa.eu/web.nsf/pages/Publications_catalogue_EN?OpenDocument (accessed 18 March 2008)

38 http://ec.europa.eu/education/programmes/tempus/countries/index_en.html (accessed 18 March 2008)

39 http://www.oecd.org/document/16/0,3343,en_2649_39263238_35580240_1_1_1_1,00.html (accessed 18 March 2008)

education, the rest of the analysed countries share common past throughout the bulk of the 20th century (Zgaga, 2005: 25-26). The broader reforms in the field of higher education followed changes in society and economy starting in the late 1980s and evolving along the transition period in the 1990s. However the reform process did not occur evenly, since the circumstances varied considerably from country to country. The gap between the countries deepened especially in the early and mid 1990s due to the political turmoil and conflicts in the region.

The major reform strategies initiated within the last decade across SEE have been guided by the Bologna Process. In 2003 Albania, Montenegro and Serbia joined the Bologna process, while Slovenia and Croatia joined in 1999 and 2001 respectively. All of the countries have gone through major changes in the legislation which provided a framework for introduction of Bologna reforms. The changes in the legislation also opened the debate and provided an opportunity to introduce legislation in other spheres of higher education policy not necessarily directly linked to the Bologna Process. The direction of the reforms encouraged increased institutional autonomy, which often meant larger independence from the state administration, but also decreasing support from the public sources.

3.2 Overview of national systems

Before analysing the national systems in the countries under study some remarks and clarifications on the terminology are needed to address the non-university and university higher education. Both terms vocational and professional education are used simultaneously, as well as a great variety of terms referring to different types of institutions in non-university sector. To avoid confusion, the International Standard Classification of Education (ISCED-97) and terms university and non-university higher education institutions will be used.

Albania — The National Strategy for Social and Economic Development[40], the government's plan to foster social and economic development, recognises education as a key element of development and prioritises the importance of the education sector in Albania. In July 2003, the 1999 Act on Higher Education in the Republic of Albania was amended to introduce a three cycle system in higher education, as well as other Bologna related reforms. The Bachelor/Master structure (Ba/Ma structure) applies to all ISCED 5A programmes and a number of ISCED 5B programmes. The students are allowed to transfer from ISCED 5B to ISCED 5A programmes and parts of their ECTS credits can be accepted in 5A programmes. The 1999 Act already allowed and regulated the establishment of private higher education institutions. The demand to open private universities in Albania is rather high (Malaj et al., 2005).

40 The National Strategy for Socio-Economic Development (NSSED) is available at http://siteresources.worldbank.org/INTALBANIA/Resources/National_Strategy_for_Socio-Economic_Development.pdf (accessed on 1 September 2008)

Croatia — Since 2003 Croatia has been involved in intensive reforms in the higher education system. The Act on Scientific Activity and Higher Education[41] came into force in June 2003, but since then number of amendments to the law, as well as additional rules of procedures and sub-acts have been adopted. As stated on its website, the Ministry is devoted to development of the binary system of higher education in which professional studies are carried out at polytechnics or schools of professional higher education while university studies are carried out at universities[42]. The Ba/Ma structure applies to both ISCED 5A and 5B programmes, while the admission criterion to ISCED 5A from 5B programmes is determined by the respective faculties. It is expected that by 2010 the ISCED 5B programmes will be completely carried out outside the university sector. Additionally, the law introduced regulation on establishment and carrying out educational programmes in private higher education institutions. The number of private higher education institutions and programmes is growing, however predominantly in the non-university sector.

Montenegro — In 2003 a new Higher Education Act[43] was adopted by the Parliament of Montenegro. The overall goal of the Law, as stated in the Bologna National Report[44], is to enable maximum autonomy to higher education institutions in their activities, particularly in activities related to academic work, with minimal mediation of the state, except when so is requested for the purpose of protecting public interest. The Ba/Ma structure is applied in both types of programmes. The ISCED 5B graduates have a possibility to access the ISCED 5B Master courses, while during their studies they are not allowed to transfer between different types of programmes. The 18 ISCED 5B programmes are carried out at the University of Montenegro and represent 25% of the Universities programmes. The law regulates establishment of private higher education institutions, which led to opening of private institutions in the country. After the adoption of the law a private university was opened, as well as several private faculties.

Serbia — In 2005 Serbia adopted a new Law on Higher Education[45] to enable the reforms in line with the Bologna Process. The law introduced the procedures which opened possibilities to flexible learning paths through ECTS accumulation procedures rather then the previous system based on "study years". However the Regulation on funding of higher education which provides the regulatory framework on financing higher education institutions didn't change

41 Zakon o znanstvenoj djelatonsti i visokom obrazovanju ("Narodne novine" br. 123/03, 198/03, 105/04, 174/04, 46/07) www.nn.hr (accessed on 1 September 2008)

42 http://public.mzos.hr/Default.aspx?sec=2254 (accessed on 1 September 2008)

43 Zakon o visokom obrazovanju ("Službeni list RCG" br. 60/03) http://www.gom.cg.yu/files/1117197385.pdf (accessed on 1 September 2008)

44 Bologna National Report of Montenegro for 2005 http://www.ond.vlaanderen.be/hogeronderwijs/bologna/links/National-reports-2005/National_Report_Montenegro_05.pdf (accessed on 1 September 2008)

45 Zakon o visokom obrazovanju, http://www.parlament.sr.gov.yu/content/lat/akta/akta_detalji.asp?Id=271&t=Z (accessed on 1 September 2008)

in accordance with the new law. Therefore the funding procedures are still based on the past system (see chapter 4). In addition, the law brought non-university and university education under one law, although there are some different procedures prescribed for institutions providing non-university and institutions providing university education. Provision of ISCED 5B programmes is possible in both university and non-university institutions. However, the Ba/Ma structure does not apply to ISCED 5B programmes. The students can transfer from ISCED 5B to 5A programmes, depending on the decision of the accepting institution. Currently, the accreditation of the non-university institutions has been carried out, while both programme level and institutional accreditation is ongoing in the university sector. Although private higher education institutions existed in Serbia prior to the 2005 law, the new law introduced quality assurance and accreditation procedures which apply to both private and public higher education providers.

Slovenia — The process of integration of the Universities in Slovenia started already in the early 1990s, while the Bologna Process was fully introduced on the legislative level in 2004. According to the higher education legislation (the 2004 ASHE Act)[46], the new three cycle structure is to be gradually implemented in all fields of study and all types of intuitions. The ISCED 5B programmes can be carried out in universities as well as separate non-university institutions. Both ISCED 5B and 5A programmes provide qualifications for gaining entry to Ma programmes regardless of the type of institution that carries out the Ma programme. Separate non-university institutions carrying out research can offer PhD programmes upon fulfilment of certain requirements or in cooperation with Universities. The rise in the numbers of the private higher education institutions Slovenia has been steadily growing in the last decade, backed by the government[47] views on competition as a beneficial instrument to increase the quality.

3.2.1. Institutions and programmes

One of the major discussions in the ongoing reforms has been the concept of autonomy. Due to the specific organisational model of universities in the countries of former Yugoslavia, where faculties act as separate legal entities, the university organisational model and the concept of autonomy have been in the heart of heated debates. All of the legislation adopted recently in Serbia, Montenegro and Croatia foresees integration of the universities and limitations on faculty autonomy as separate higher education institutions. Despite the efforts that have been put into reform, the fundamental step of integrating universities into a coherent and manageable structure has only been achieved in very few instances[48]. Slovenia has started the process of integration of the

46 Higher Education Act (consolidated text, 2004) http://www.see-educoop.net/education_in/pdf/2004-act-higher-education-slo.pdf (accessed on 1 September 2008).

47 This refers mainly to the conservative government that was voted in the office at the end of 2004 and eded its mandate in November 2008.

48 Trends V: Universities shaping the European Higher Education Area, An EUA Report http://www.eua.be/fileadmin/user_upload/files/Publications/Final_Trends_Report__

universities rather early, already in the beginning of 1990's, but still the financial autonomy of the faculties plays a significant role in the allocation mechanisms within universities. (For further information on autonomy see *Institutional level financing*). In Albania, the autonomy of higher education institutions has been in the focus of much debate due to the centralised state management system (Malaj et al, 2005). The discussion about autonomy is closely linked to the financial management in the higher education system and the role played by the different actors in development of financial policies. Therefore, it is not surprising that the introduction of Bologna reforms has also triggered the debate and changes in the higher education funding policy and the division of power in the financial management between higher education institutions and the state across the region.

Table 1: Overview of university and non-university higher education institutions

	Albania	Croatia	Montenegro	Serbia	Slovenia
Number of universities and free-standing faculties[49]	16	7	5	19	15
Non-university higher education institutions[50]	10	32	0	48	14
Total no. of higher education institutions	26	39	5	67	29

The countries under study have a great variety of legislation frameworks for the non-university sector and the provision of ISCED 5B programmes. Croatia is the only country committed to the development of a binary system, where ISCED 5B programmes would be carried out completely outside the university sector. All the other countries provide the ISCED 5B education in both university and non-university type of higher education institutions. The Ba/Ma structure is applied in both types of programmes in all the countries except Serbia where the ISCED 5B programmes offer one cycle programmes. Slovenia on the other hand is the only country under study where non-university institutions can carry out PhD programmes as well.

When it comes to flexibility of learning paths and possibilities of transfer between the ISCED 5B and 5A programmes for students, the system in the analysed

May_10.pdf (accessed on 1 September 2008)

49 Although in a number of countries faculties are separate legal entities they are a part of a university. In these cases, university was counted as one higher education institution, rather then all the faculties within the university. However, in addition to the universities, there are free-standing faculties which act as independent institutions separately from any university. Therefore, they were added to the number of universities as separate higher education institutions.

50 The term refers to separate higher education institutions which carry out ISCED 5B programmes; although in some countries some ISCED 5B programmes are carried out in the universities. These were not added to the number of non-university higher education institutions.

countries are rather inflexible and pose numerous limitations to horizontal and vertical mobility of students. The horizontal mobility from ISCED 5B to ISCED 5A and access of ISCED 5B graduates to ISCED 5A master programmes is limited with numerous requirements for students. These normally include additional course work and have little possibilities for recognition of previous work in ISCED 5B programmes. The criteria and acceptance to ISCED 5A programmes either as vertical or as horizontal mobility of students is dependent on the decisions of individual faculties. Slovenia is the only country under study where the system seems rather flexible and where the access to master level programmes is subject to the same conditions for both ISCED 5B and 5A graduates.

Table 2: Overview of students in ISCED 5A and 5B programmes

	Albania	Croatia	Montenegro	Serbia	Slovenia
Students in ISCED 5A programmes	Na	110,989 (81%)	Na	183,807 (77%)	52,401 (57%)
Students in ISCED 5B programmes	Na	25,667 (19%)	Na	54,903 (23%)	39,472 (43%)
Total no. of students	74,070	136,646	5143	238,710	91,873

Although the number of institutions might suggest differently, when looking at the student enrolment higher education systems in the countries analysed are predominantly university oriented. Still, without the data on the trends in student enrolment to ISCED 5B programmes it is difficult to estimate whether the increase of non-university institutions might change the higher education landscape in the region. The flexibility of learning paths, possibilities for continuous education and horizontal and vertical mobility might have an effect on the students' choice between ISCED 5B and 5A programmes.

With an introduction of accreditation procedures based on quality assurance and establishment of quality assurance agencies a set of standards and requirements all higher education institutions need to fulfil and be evaluated against on a regular basis was introduced. Additionally, all of the countries have created a regulatory framework for private providers of higher education. In the countries where private higher education institutions were present, the legislation enabled equal legal treatment of private and public higher education institutions in terms of regulation and recognition of degrees. In the countries where the private providers didn't exist, the new law made it possible for the private providers to open new higher education institutions.

The number of private institutions in all of the countries is rather high compared to the number of public higher education institutions. Nevertheless, more students by far enrol in public higher education institutions — over 85% in all of the countries.

Table 3: Overview of private and public higher education institutions[51]

	Albania	Croatia	Montenegro	Serbia	Slovenia
Private higher education institutions	15	18	4	34	25
Public higher education institutions	11	21	1	33	4
Total no. of higher education institutions	26	39	5	67	29

Since the expansion of private higher education sector in terms of student numbers doesn't seem to be significant, one could conclude that the trend of privatisation of higher education was not prominent in the analysed countries. However, with an exception of Slovenia, a trend of an extensive privatisation of the public higher education itself is highly notable. Public higher education institutions in the region gradually introduced tuition fees for a significant number of their full-time students, as well as different types of administrative charges to all students. This led to a specific public higher education system where approximately half of the total number of full-time students pays for their education through tuition fees (See further in *Student level funding*). Therefore, although the higher education system is still predominantly public in the countries under study, the concept of public higher education in these countries does not entail provision of higher education free of charge. The trend of privatisation of public higher education is well under way in the region and it seems to continue.

Table 4: Overview of students studying in private and public higher education institutions

	Albania	Croatia	Montenegro	Serbia	Slovenia
Students in private higher education institutions	5018 (7%)	553 (0.4%)	800 (15%)	16,710 (7%)	4989 (5%)
Students in public higher education institutions	69,052 (93%)	136,093 (99%)	4443 (85%)	222,000 (93%)	86,884 (95%)
Total no. of students	74,070	136,646	5143	238,710	91,873

51 The table covers the whole higher education sector. The term higher education institution refers to higher education institutions of both university and non-university type.

3.2.2 Enrolment to higher education

Table 5: Gross enrolment ratio. ISCED 5 and 6. Total.
Source: UIS (UNESCO Institute of Statistics)

COUNTRY	GER (%) for the year 2002
Albania	15.8
Croatia	35.8
Montenegro	Na
Serbia	43.0[52]
Slovenia	66.7

According to UIS, an average enrolment rate for Central and Eastern Europe is 50%, whereas most of these countries fall between 30 and 45%. In the Central and Eastern Europe region the Baltic countries and Slovenia lead as the only countries close to the enrolment average of North America and Western European countries which is at 67%. Albania significantly lags behind the countries within the same region, while Croatia and Serbia appear as typical countries of the region. Nevertheless, all of the analysed countries can be classified as mass higher education systems, even if Albania is just over the 15% margin. All of the countries still need to put additional efforts in raising the GER to catch up with Slovenia and the Western Europe and North America.

It is important to note that all of the countries report continuous increase in GER to higher education over the past decade. Total numbers of students since early 1990s have doubled in all of the countries by academic year 2006/07. The trend of increased GER has been steady over the past decade and is likely to continue. The key question is to what extent the investment to higher education has followed the growth in student numbers. Equally important, but very often forgotten, is whether the investments towards student welfare have been increased and to what extent. How will the decision makers address the continuing growth of student numbers and ensure equal access to higher education is of crucial importance in the region. (See further in *Student level funding*).

3.2.3 Academic staff

All countries except Montenegro didn't have separate data on administrative staff within higher education institutions and didn't seem to add administrative staff to their overall statistics on academic staff. Consequently, it wasn't possible to compare or analyse the data on administrative staff. Nevertheless, it

52 All the data presented in the table is from the UIS, however alternative sources suggest that the GER in Serbia is 37.8%, if one takes into account that the relevant cohorts are different for different types of higher education programmes (Vukasovic, 2007).

is important to note that administrative staff is essential to the functioning and the overall quality of higher education institutions, especially with the growing numbers of students and additional pressure on all higher education systems to invest into collection of data and administration procedures.

Nevertheless, countries do collect data on teaching staff and differentiate between teaching staff and "education collaborators" or "teaching assistants". Thus, it was possible to calculate the student teacher ratio.

Table 6: Academic staff

Country	Academic staff. Total.	Student teacher ratio
Albania	Na	Na
Croatia	7917	23:1
Montenegro[53]	1221	29:1
Serbia	12,884	29:1
Slovenia	7273	23:1

Compared to OECD countries where the average number of students per teacher is 16, the countries in the region fall behind significantly. This is particularly the case with Serbia and Montenegro where student teacher ratio is almost 30 students per teacher. The need to boost the numbers of teaching staff seems evident. However, the costs related to staff salaries are currently the highest expenditure for higher education institutions. Since higher education institutions still receive itemised funds for their employees directly from the state on an annual basis they have little autonomy in employing additional staff or ability to plan a long term recruitment strategy. The income generated individually by faculties, of which the purpose is determined by the faculty, is mostly spent on salary increase of the already employed academic staff (see chapter 4). In Slovenia, the process of integration is at a further stage compared to the other countries under study, so the recruitment process is under the auspices of the university, rather then individual faculties within this university.

3.3 System level financing

In the cross-country analysis of funding mechanisms[54] at the system level, the main focus will be directed on the allocation of the government funds supplied to higher education institutions and students. For the allocation of funds a variety of approaches and mechanisms is in use. The choice of an approach depends on a number of factors and circumstances and reflects the political and social environment. The most appropriate system depends to a large extent on

53 Data was available for public higher education institutions only.

54 As explained in the glossary in the Introduction, "funding" refers to public funds, while "financing" refers to all funds, regardless of the source.

what does the government want higher education institutions to do (Jongbloed, 2003: 121). However it is difficult to trace the government policies in the field of financing, since the availability of written documents is rather scarce and often there is no proper financing strategy elaborated.

Among the major factors of influence in the choice of a funding approach are the historical developments and academic traditions in the respective countries. The countries under study belong to the former socialist Europe and share the major phases of the development of higher education in the recent past. This determines the underlying economic concepts and frames in which higher education is embedded (see chapter 2).

3.3.1 Overall investment to higher education

While all of the countries analysed provide official data[55] on the percentage of GDP allocated to education as a whole, only Slovenia provides official data on the percentage of GDP allocated to higher education in particular. Therefore the data provided in Table 7 is calculated by the autors on the basis of the government budgets and official data on GDP. Although numerous international organisations (e.g. OECD, the World Bank) regularly collect data on GDP allocation, there is no standard definition on what expenditure is considered to be higher education expenditure, or at least what expenditure should not be included in the equation. Since, the providers of the national data are not required to explain what expenditure they consider to be higher education expenditure and the international organisations don't provide a standard definition or at least a framework, there are several issues arising.

The international comparisons often rank the countries on the basis of the quantitative data provided; therefore countries may tend to boost their numbers to be placed higher up on the ladder. Croatia, for example, in the OECD National report states that 0.867% of GDP is allocated to higher education in the year 2004. In the calculation the budget expenditure allocated to student welfare and even student union activities is added into the equation, while the calculation based only on the allocations towards expenditure towards higher education institutions directly shows that only 0.72% of GDP is allocated to higher education.

Consequently, comparability of such data is questionable. Furthermore, the use and the interpretations of data collected in this manner are at the very least opened to discussion. Providing analysis based on quantitative data without the standardised methodology and without the context in which the higher education system operates might lead to misconceptions and wrong conclusions. Moreover, such flawed data might mislead the policymakers and jeopardise sound development of higher education policy.

55 O*fficial data* in this part of the text refers to publicly available data published on regular yearly basis provided by a governmental source or national statistic offices.

In the countries under study it is extremely difficult to calculate the private expenditure on higher education. One of the key problems in calculating the private expenditure on higher education is the non-integrated university, where the individual faculties still have extensive autonomy. Faculties, as separate legal entities, generate their own income, vastly through tuition fees and some in part through provision of services. However, these are a part of the faculties' income which is not publicly available. Rough estimates can be made on the faculties total incomes, at best.

The numbers provided in the Table 7 represent public expenditure on higher education institutions presented as a percentage of GDP.

Table 7: Allocation of % of GDP[56]

Country	Higher education as a whole	Research
Albania	Na	Na
Croatia	0.72%	0.32%
Montenegro	1.10%	0.30%
Serbia	0.90%	0.32%
Slovenia	1.26%	Na

Taking into account the methodological considerations, as well as the context of the higher education systems examined, the higher education investments are worryingly low in Croatia and Serbia. Looking at the trend of growth in student numbers and the prospect of its continuation, the student teacher ratio (see Table 6), the need for additional staff, as well as the ongoing Bologna related reforms the higher education investments should increase.

Due to limited data it is impossible to say whether investment in higher education increased or decreased over the past decade. It is even more difficult to say to what extent the GDP investments followed the growth of the higher education sector. Unavailability of such statistics poses a challenge to evaluation of higher education policy and higher education development strategy in those countries where such strategies exist.

3.3.2 Regional and local investment to higher education

There is only a symbolic role that the local and regional investment to higher education plays in the analysed countries. This is not surprising, since most of the countries have highly centralised systems, where local and regional

56 For Serbia and Croatia the GDP allocation was calculated based on the approved state budget. The calculation includes the direct transfers to higher education institutions which include salaries, administration expenses, running costs etc. The calculation does not include capital investments or expenditure on student support, student activities and student participation.

administration have only limited authority and restricted budgets. Still, even in more decentralised countries of the EU, the regional and local investments are rather negligible[57]. For this reason it is clear that the responsibility for ensuring the functioning and quality of higher education provision, as well as providing support to all the students regardless of the regional origin lies with the state.

Example 1: Regional investments in Vojvodina (province in Serbia)

In Vojvodina, the province in the north of Serbia, the provincial government does not have extensive jurisdiction of funding of higher education. In terms of core funds, it only transfers funds from the state ministry responsible for higher education to the University of Novi Sad (the only state university in Vojvodina). Nevertheless, the provincial government supplements the funds allocated by the state by investing into higher education infrastructure (especially student housing capacities) and scholarships. It is interesting to observe that, despite the fact that most other scholarship schemes in Serbia are solely merit-based and not sensitive to various elements of the socio-economic background, a number of the provincial scholarships are awarded to Roma students.

3.3.3 Allocation channel

The public funds are spent on higher education in various ways. Part of public money flow can be directed to the students and families in the form of grants, scholarships, subsidies, allowances, etc. This mode of funding will be discussed in the subchapter *Student level funding*. The public funds dedicated to higher education institutions can be transferred through more channels. Usually the funds are transferred directly to the institutions. There is no case in the examined countries where funds would be allocated via students in the form of vouchers (see chapter 2).

The funds supplied by the government to higher education institutions in the analysed countries are allocated directly to the institutions on an annual basis. The use of market driven mechanisms has not been the case in the steering of higher education, at least not in a significant extent. However one could argue that some effects that can be expected to voucher system have appeared due to the current funding mechanisms applied to the state universities in Slovenia. A considerable amount of funds is allocated on the base of number of enrolled students and graduates, which to a certain extent reflects student choice. Nevertheless, this does not bring the full effect of the demand based allocation channels as it is deemed to be the case in a voucher based system (see chapter 2).

57 Key Data on Higher Education in Europe, 2007 Edition http://www.eurydice.org/ressources/Eurydice/pdf/0_integral/088EN.pdf (accessed on 1 September 2008)

3.3.4 Allocation conditions and financial autonomy of institutions

The trend across the western European countries shows the move towards funding systems that allow the institutions the freedom to use the combined budgets for teaching and/or research in anyway they see fit (Jongbloed and Vossensteyn, 2004: 256). This is known *as lump sum* funding and it is replacing the formerly predominant *line item funding*[58] permitting greater financial autonomy and accountability of higher education institutions. In the latter, the separate budget items are negotiated and funded through the state budget (see chapter 2).

While the major trend in other parts of Europe is towards the integral lump sum financing of higher education, there seems to be a considerable reluctance to such developments in the countries under study. The examined higher education systems came into transition pervaded with the tradition of state control over the institutions. The *line item budgeting* used to be the common allocation condition in such systems. In all countries, the necessity of change has been recognised and steps towards the larger institutional autonomy have been undertaken. However the pace and direction of funding mechanisms reform has differed from country to country.

In the European countries in transition, higher education drew upon nineteenth century tradition of freedom of teaching and learning inspired by the so-called Humboldtian university. This can be explained by the necessity to free the university from the control of the state regime dominated by a single political party (Neave, 2003: 27-28). Universities tended to protect their territory with a new legitimacy dwelling in the process of reconstruction of society. Under these circumstances it has been often difficult to succeed with the externally proposed (imposed) reforms, including the funding model. Despite resistance of universities, there have been reforms in some instances that clearly made a progress on the way out of the old funding framework.

The mode in which the state budget for higher education institutions has been organised in the analysed countries, where it specified item per item the expenditure of higher education institutions has been reformed in Slovenia and to a certain extent in Croatia. In Slovenia, the institutions are to a large extent autonomous in deciding on their internal allocation of resources. The amount of allocated funds is calculated through a clearly defined formula based on a combination of input and output criteria added to a share of the previous year lump sum (see Example 2). The latter serves as stability factor in order to alleviate large annual oscillations and therefore enables long term planning. In Serbia, the allocation conditions have been changing less radically over last two decades. The

58 *Line item funding* is based on requests (activity plans, budget proposals) submitted to the budgetary authorities – usually governments. The budget allocation is often based on the previous year's allocation of specific budget items. Separate budget items (called *line items*) then are negotiated between representatives of educational institutions and the funding authorities. (Jongbloed, 2003: 124)

universities enjoy a very modest level of financial autonomy (see chapter 4), and the government decides upon the expenses/budget lines of public funds within the budgets of higher education institutions. In Montenegro, the state negotiates directly through the Ministry of Finance, rather then Ministry directly responsible for education, with the one public university in the country. The university is awarded funds on an annual basis through a specified contract signed with the Ministry of Finance. However, the Ministry responsible for higher education in consultation with the National Council for Higher Education recommends the criteria, standards and methodology of allocation of funds to the government which has the authority to formally proscribe them.

3.3.5 Allocation base and mechanisms

As defined in chapter 2 the allocation base refers to the criteria and mechanisms used to determine the amount of public funds to be transferred to a particular higher education institution. The input based criteria are prevailing across the analysed countries. Most commonly used parameters to determine the funding are numbers of enrolled students, staff employed, study fields, etc. In this context Slovenia is an exception. The funding formula used to allocate funds consists both of input and output criteria (see Example 2).

Example 2: The combination of the input and output based criteria in the funding formula in Slovenia

The total sum of allocated funds (total sum) is composed by the sum of basic yearly funds (BYF) and normative yearly funds (NYF).
Total sum = BYF+NYF
The share of BYF is decreasing every year. In 2005: 77.5% of the previous year + k (k is the estimated inflation rate, assigned by the Minister), in 2006: 75% + k, in 2007: 65% + k, 2008: 60% + k.
NYF = YOV* Σ ((N+P*D)* fg)
YOV: yearly origin value = (Total sum — Σ BYF) / Σ ((N + D * P) * fg
N: total number of full time students of old long cycle and 1. and 2. Bologna cycles
P: Ponder = NYF per graduate of a program/NYF per student of the same program
D: number of graduates of full time old long cycle and Bologna 1.and 2. cycle
fg: factor of study field group
Σ BYF: sum of BYF of all higher education institutions

Source: Higher Education Funding Enactment of the Republic of Slovenia from 2004 to 2008[59]

59 Uredbe o javnem financiranju visokošolskih in drugih zavodov, članic univerz, od leta 2004 do leta 2008 (Uradni list RS, št. 134/03, EVA 2003-2311-0222, veljavnost od 31. 12. 2003, uporaba od 1. 1. 2004).

Relatively to the rest of the region, the reforms of allocation mechanisms in Slovenia have been the most far reaching in terms of changing the norms and practices of the higher education institutions. In Serbia, the allocation mechanism is based on number of teaching staff, number of enrolled students, field of study (average quotient) and basic criteria for salaries in the public sector (for further details see chapter 4). Similarly, the Albanian system of allocation relies on enrolled students, part-and full-time teaching staff, the size of institutions, their self generated revenues and specific teaching expenses. In Montenegro as well, the allocation basis are input oriented and rely on the number of enrolled students, number of employed staff, etc. In Croatia the allocation of the funds from the state budget to higher education institutions is based on the capacity of the higher education institution, the price of the study programmes and the quality of the institution based on the quality assurance procedures (see Example 4).

3.3.6 Buffer bodies

As elsewhere in Europe, it is possible to find buffer bodies between government and higher education institutions. Even though the buffer bodies are not an exception in higher education systems, they are rarely involved in the funding mechanisms. When they are, this is mainly in the phase of the allocation process.

In Croatia the recent reforms brought into the system an important role of the National Council for Higher Education (NCHE). The Croatian NCHE is composed of university professors, experts, researchers and members from industry sector. According to the law, the NCHE should take a role of an expert body that assists in the process of negotiating the yearly allocation of funds between the higher education institutions and the government (see Example 4). In Montenegro the Council for Higher Education provides its opinion on the criteria, standards and the methodology of allocation of funds to the higher education institutions. The National Council for Higher Education in Serbia doesn't take part in the mechanisms and allocation of funding. In Slovenia the process of allocation of the funds takes place between the state and higher education institutions.

3.3.7 Special tasks and incentives

In some countries additional funds are provided for special tasks and various incentives are available. These include infrastructure investments, new equipment, incentives for development tasks and implementation of the Bologna Process.

In Slovenia up to 4% of total budget for higher education can be used for: improvement of higher education teachers and research staff; introduction of new programmes; international cooperation; quality of study and study programmes,

and other development tasks in accordance with the national policy and the Lisbon strategy. The ministry distributes these funds in line with the public tender regulation. In 2005, the Croatian state budget reserved funds for development of the external quality assurance system and for the support activities in the process of implementation of the new funding mechanisms. In Serbia, in 2006 a small amount of extra funds was devoted to the projects aiming at international cooperation and exchange of students. Infrastructural funds from the National Investment Plan (funds gathered in the process of privatisation of large state companies) were partly allocated to higher education as well.

3.3.8 Financing research

In the countries under study, research is financed separately from teaching. In some cases the division is rigorous. In Serbia for example, the responsibility for the two funding streams is divided between two separate ministers. In this matter Albania is an exception. There, the funds are allocated to the institution jointly for teaching and research.

The allocation mechanisms for research differ substantially from those in use for teaching. Funds tend to be granted on a competitive basis. Buffer bodies such as research councils are often part of the allocating mechanisms (e.g. Slovenia, Croatia).

3.3.9 Financing private higher education institutions and competition

The reliance on private higher education institutions is not significant in the countries under study. The long tradition of public universities compared to the private higher education institutions has provided a network of institutions enrolling students from the whole national territory. Some of the universities have been established along with the building of the nation state to then later serve the socialist states and societies. The era of transformation that had its dawn in the early 1990s saw large disintegrated universities opening up to already ongoing growth of citizens interest for higher education. However, as in many other transition or developing countries, there has been no room for a substantial growth in funding of the public sector. The universities became increasingly under funded.

There are private higher education institutions of both university and non-university type in the countries under study. A great share of private higher education institutions could be found in the field of management and business administration or other professions that do not imply expensive study process. In none of the reviewed countries the legislation would favour for-profit forms of higher education provision.

Table 8: Overview of system level funding across the examined countries

	Allocation channel (recipient of public funds)	Allocation conditions (level of financial autonomy of institutions)	Allocation base and allocation mechanisms
Albania	Higher Education Institutions		Prevailing input criteria: enrolled students, part- and full-time teaching staff, the size of institutions, their self generated revenues and specific teaching expenses
Croatia	Higher Education Institutions; Intermediary body participates in the process of negotiations (NCHE)	A mix of item line based negotiation and autonomous spending of allocated funds; Increasing financial autonomy	Combination of mainly input criteria: The capacity of the higher education institution (referring to number of students, teaching staff, infrastructure), the relative cost of the study programmes and the quality of the institution based on quality assurance system (not yet in place). The negotiation procedure is coordinated by the National Council for higher education
Montenegro	Higher Education Institutions	Line itemised annual budget	Contract based funding Contracts are awarded on annual basis through the process of negotiation; The contracts are determined by input based criteria: number of employed staff, number of enrolled students, etc.
Slovenia	Higher Education Institutions; The emphasis on the numbers of enrolled and graduated students brings in the elements of student choice, but limited to state institutions	High level of financial autonomy; Lump sum	Funding formula consisting of both of input and output criteria: Enrolled students, graduates, study field related factor and a correction related to the previous year budget
Serbia	Higher Education Institutions	Low level of financial autonomy with respect to public funds for teaching; Line item funding	Formula like base with predominantly input criteria: Number of enrolled students, number of teaching staff, field of study (average quotient) and basic criteria for salaries in public sector

The governments integrated the private institutions in their higher education policy and system development. While Serbian government does not fund private institutions, in Slovenia some funds are allocated to private higher education institutions through concessions that confer to the private sector carrying out of a part of public service. Croatia has a legal option to award funds to private institutions in case of "state need for a specific programme". In these cases the financing is allocated based on separate contracts that contain specific criteria and law based conditions. In Montenegro private institutions may acquire funds for teaching and research of public interest. The government adopts norms and standards, distribution conditions for teaching and research, as well as any additional conditions for the use of public funds allocated to private institutions on individual basis. The private institution receiving public funds is accountable to the government for the lawful use of specified resources and is obliged to enable access to financial books and records to the government.

3.3.10 Discussions about the future of financing higher education

The issue of financing higher education is among the most intensively discussed issues within the sphere of higher education policy. The governments are considering loosening the ties to the university financing by leaving the responsibility for the management of financial resources to the institutions themselves. There are some discussions on more output and performance based criteria and demand driven mechanisms (e.g. demand side vouchers). However, it is an issue of a high political sensitivity, and therefore is often not easy to say very accurately what the positions of different actors are.

Croatia set new mechanisms for funding quite recently and therefore the debate mostly focused on the implementation of reforms. Nevertheless, the discussion on the extent to which the costs of study should be transferred to students is under continuous discussion. In 2008, when the first generation of Bologna bachelors was to graduate, the discussions on access and tuition fees at the master level culminated with student protest across the country. The government signed a contract with the universities to fully fund the costs of the Master level studies for the upcoming first generation of the "Bologna" master students in 2008/2009. Whether this will be a continuing practice remains to be seen, meanwhile the debate on bachelor level tuition fees continues. In Slovenia, there has been debate on diverting more funds to private institutions, to ensure competition and raise efficiency of the institutions. Except for the government and private institutions, the stakeholders in higher education reject this approach to the higher education policy. In Albania, the funding system is to be transformed in order to cater for the policy goal of increasing the enrolment rates of the generation cohort. There is a trend of seeing the future of funding higher education based on greater institutional autonomy in managing funds. However challenges associated to such changes trigger some policy discussions (see Example 3).

Example 3: Albanian dilemmas related to the allocation mechanisms reform

"... Often it is believed that the policy of increasing institutional autonomy in dealing with resources would bring to beneficial developments for Albanian higher education. The ideas look in the direction of lump sum budget allocation system. However such a step brings along important policy problems.

There are at least three main concerns related to introduction of lump sum budgeting and greater autonomy of institutional management: a) relationship between faculties and university shall be properly studied and clearly defined through reformed governance structure before the new allocation mechanisms are in place. A capacity of long term planning and strategic use of the resources is better to be in place; b) Transparency, efficiency and effectiveness should be taken care of parallel to introduction of such system to avoid the moral hazard and self-interest of the leadership. Trained managers and leading academic staff are often not sufficiently present. Auditing and control of the use of resources ought to be examined as a necessity to assure the proper transition to new concepts; c) The new system differs substantially from the one that has been in use for a longer period. Therefore a large acceptance of the concept has to be achieved in the society, especially among main stakeholders. The reform might be jeopardised if politicians, students and general public do not understand and accept the new mechanisms, processes and relationships. ..."

Quoted from: Malaj et al. (2005)

3.4 Institutional level financing

3.4.1 Universities in the process of integration

The universities in the countries under study, with Albania as an exception, derived from the same institutional setting in the past. Their political and social environment had differed little and the links had been stronger than after the disintegration of the Socialist Federal Republic of Yugoslavia. The universities were organised in the self-management communities[60] of higher education institution and not specifically an academic institution. The outstanding feature of the system was the weak and disintegrated university on the one hand and powerful and independent faculties on the other. The institutions were bottom heavy with the decentralised resource management (Zgaga, 1998).

The above mentioned historical and political background explains the similarities in the policy problems and the normative base for the reform

60 The Yugoslav variation of socialism was grounded in the principles of worker self-determination. The bottom up system of organizing the self-management communities was applied to the universities as well. This has indeed determined heavily the structure and the nature of institutions and makes them very far from being cast in the same mould with other universities in the former socialist Europe (Kump et al., 1998).

strategies. Somewhere more, somewhere less, all the reform strategies are addressing the problem of disintegrated and bottom heavy organisation of the large public universities. The lack of internal cooperation and coordination, inappropriate task division, doubling of activities and similar problems represent base to the claim that integration of the universities should lead to a better use of allocated funds. In this respect, funding mechanisms can be devised in order to encourage the integration of the university. The funding strategies in Slovenia and Croatia point in this direction (see Example 4). Institutional autonomy has been a central issue of the reform process in Albania for the last decade or so. However, autonomy in this case refers more to the independence from the state and its political institutions than autonomy in resources management. Current discussions and processes are directed towards the achievement of the latter.

Example 4: Funding mechanism on the way to the integration of universities in Croatia

After receiving budget proposals from each higher education institution, the buffer body, National Council for higher education (NCHE), consults the Funding Advisory Committee. The members of the Funding Advisory committee are appointed by the Rectors Council, the Council of the Polytechnics and the School of professional higher education. Together they form a representative body of the leadership of public higher education institutions.

The Funding Advisory committee forms an opinion on the budget proposal and sends it to the NCHE. The NCHE prepares the final proposal of the budget which has to follow predetermined criteria. The final decision on the budget proposal lies with the Minister.

Once the budget is approved by the Parliament the funds are transferred to the universities as a lump sum. However, the allocation conditions remain closer to the line item budget model since the budget approved in the parliament clearly prescribes what amounts are to be spent on salaries, infrastructural costs, etc. Therefore, it can be concluded that the system is geared towards integration of universities, but not to extensive institutional autonomy.

The mechanism takes in consideration the faculties, that are separate legal entities, but gives the university leaderships the role of negotiation partner to the government. This encourages the articulation of a common strategy of the universities and brings them to unanimous proposals.

Source: Act on Scientific Activity and Higher Education of the Republic of Croatia

3.4.2 Distribution of funds

Despite the above mentioned high level of faculty autonomy, the distribution of funds is usually carried out in a top down way and through the central university level. In Serbia however, the funds are distributed directly

to the individual faculties as legal entities. The faculties agree on contributing funds from their budgets to the central level in order to financially enable the joint services, provided by the university.

Nevertheless the internal mechanisms of distribution of funds still emphasise the power of faculty level. In practice the faculties decide on financing the central level even if formally the funds are allocated to the central level (see Examples 5 and 8). The decentralised tradition hampers the development of broader strategies of deploying resources and leaves the bulk of the financial management to the faculties. This applies to Slovenia as well, where despite the lump sum funding based on a funding formula, there is rather little room for central university administrations to make internal reallocations.

Example 5: The internal distribution of funds in Croatian public higher education institutions

The funds to the universities are transferred as a total amount, although the state budget defines the lines transferred for salaries, infrastructure costs, etc. The universities allocate the budget according to their statutes and other regulation to the faculties. The university budget is decided on by the Senate on the proposal of the Rector. In the polytechnics and schools of professional higher education the decision on their budget is carried by their expert councils (stručno vijeće) based upon the proposal of the Dean.

Despite the commitment to a greater integration of the universities and the lump sum system, the university leadership depends heavily on the lower levels of decision making. Faculties (sastavnice sveučilišta) have to transfer parts of their funds to the university budget for capital investments and development programmes, coordinated by the university. Sometimes the system is referred to as a lump sum or integral, but it only approximates the levels of institutional autonomy in allocating funds, that is expected in such funding models.

Source: Act on Scientific Activity and Higher Education of the Republic of Croatia

3.4.3 Institutional income based on tuition fees

Transferring a part of the cost of study to students has been an increasing trend in the countries under study. This has been caused mainly by the inability of the state budgets to financially cope with the growing enrolment into higher education institutions. Tuition fees became a significant source of funding all across the region. None of the examined state is an exception in this respect.

In Montenegro 60% of students enrolled in the public university pay tuition fees. The budget places in Croatia and Serbia are distributed based on merit through high school grades and the results of entrance exams. In Serbia the number of students who contribute to their education by paying the tuition fee in public institutions varies between 20% and 80% of total study posts. Students can gain or loose the state-funded status depending on the success in studying.

As was previously stated, the exception is Slovenia, where the Higher Education Act makes it impossible to charge fees to full time students in first and second study cycles. An interesting development occurred in Croatia, where the government signed a contract with the universities to fully fund the first generation of the "Bologna" master students in the academic year 2008/2009. Whether the practice is going to be a one time case remains to be seen. In countries where part time study exist they all pay tuition fees. In the public institutions fees do not cover full cost of the study and include only the basic activities (teaching and examination). In some cases the fees in private institutions include also textbooks, but tend to be higher than the ones in their public counterparts. In Montenegro the average fee for the private tuition amounts to 1500 EUR and is three times higher than in the University of Montenegro. Some private and public faculties charge considerably more: e.g. private faculty of visual arts charges 2500 EUR, public faculties of fine arts can charge double of the normal sum. Similar ratio can be found in Serbia. In Croatia students pay between 750 EUR and 1250 EUR depending on the field of study.

Fees are calculated based on different practices. The faculties in Serbia base their amount of tuition fees on the attractiveness of the programmes (higher demand — higher price) and partly to its relative cost, although there is no clear guidelines as to how the level of tuition fee should be determined. Faculties suggest to the university the amounts, and the university usually approves them. Ministry has a formal competence to influence the fee proposed by the universities, but in practice this does not occur. In Montenegro the amounts are decided by the University Steering Board upon the proposals of the Faculty Senates and eventually have to obtain the clearance from the Ministry of Education and Science. The masters and doctoral studies cost on average a 1000 EUR per year.

The fees are normally poured directly into the budgets of the faculties. In Albania for instance, from 2005 the institutions are autonomous in using the funds generated by tuition fees, which was a considerable step towards a greater financial autonomy of universities. In the same year fees represented already more than one fifth of total budget for higher education, with a growing trend. In many cases the income generated from tuition fees represents a significant share of total income of higher education institutions. The structure and the amount of the own income is not transparent and publicly available. Additionally, the faculties have a high level of autonomy in deciding what they will do with their own income. They are indeed the main non-public source of money for higher education which for example in Croatia and Montenegro amount to a third of total income of higher education institutions.

3.4.4 Administrative and other fees

In the analysis, it appeared that higher education institutions can be impressively resourceful when it comes to charging various services to the

students. Usually they charge registration fees, issuing of the diploma or various certificates and applications for repeating exams. The collected money becomes directly a part of the faculty budget. In Serbia there is a category called *certification of the semester* which students have to pay per semester. Not all the universities choose to charge this fee. In some universities students pay as well the *enrolment/registration fee* for each study year. In one of the universities this fee amounts to 75 EUR and comes on top of the regular tuition fee. Similar fee is charged at the Croatian universities as well. Just as an example of micro fees charged, it is worth to mention the application form fee for exams charged at some universities in Croatia (up to 1 EUR). In total the income generated by administration fees in Serbia can reach up to 20% of total budget of a public institution. In Slovenia the universities are allowed to charge administrative fees or other fees within the limits set by a special enactment adopted by the government. Universities do not hesitate to take advantage of these possibilities, despite the resistance of the student unions. In some cases the charges are justified as non-standard service.

The inflation of various fees points at the necessity to restrict the financial autonomy of the universities. Montenegro and Slovenia legally restrict the administrative charges that higher education institutions can introduce (see Example 6). In many cases there is no reflection on the broader social effect of increasing the fees. Such trends might seriously affect the access and ability of the students to successfully complete the studies (see chapter 2).

Example 6: Legal regulation on administrative charges in Montenegro

The Law on Higher Education proscribes restrictions to what administrative charges to students can be introduced by higher education institutions. The administrative charges are legally limited to:

- Entrance and registration fees
- Retaking exams
- Issuing of the Diploma

Additionally, the law regulates the procedure in which the amount of the administrative charges can be set. The amount is set by the governing body of the higher education institution. This means that the amounts are set by the university, rather then individual faculties as it is the case in other countries under study.

Source: Law on Higher Education, Montenegro

3.4.5 Alternative (external) sources

With the term *alternative* (or *external)* sources of finances we refer to private finances that are not paid by individuals in the form of tuition or administrative fees. This sort of income is not very common or at least does not represent significant proportions in the budgets of higher education institutions across the region.

In general, external sources depend on the lower levels of university organisation. Faculties or departments are involved in research projects or organise tailor made training courses for the industry. Some lucrative activities in the field of counselling and training are performed by economics and business field faculties. On the other hand, there are interesting cases of increasing income from external sources in the engineering field. At the University of Montenegro some income is generated by issuing security certificates, measurements and projects in the field of construction business. At the University of Ljubljana, one of the most advanced faculties when it comes to alternative sources is the Faculty of Electrical Engineering (see Example 7).

Example 7: Alternative income of the Faculty of Electrical Engineering, University of Ljubljana

The faculty enrols roughly a total of 2500 students and employs approximately 300 staff members. It cooperates in research and innovation projects with more than 50 enterprises, mainly from the field of electronics, energy and telecommunication. In the last year, a bit less than 3.5 million EUR had been generated through the cooperation with the industry. This represents 15% of total faculty budget and it is mostly invested in laboratory equipment and maintenance. Additional 5% of faculty budget are obtained from EU funds. The strategic goal is to further increase the finances from non public sources such as industry and EU funds beyond 50% of the total budget.

Sources: University of Ljubljana, Faculty of Electrical engineering (2008); Kos, Andrej (2007) R&D, Projects, Cooperation. Presentation, LTFE

The income from alternative sources however tends to be dispersed and decentralised. There is only a little regard for the common strategy of the institution in terms of financial investments from externally generated income. Faculties consider the alternative income as their legitimate revenue and are reluctant to share it with the rest of the university. This hampers the central management of the University to carry out an integrated institutional strategy. The diversity of study fields in terms of commercial attractiveness is rarely taken note of. In Slovenia, for example, the faculties of public universities retained the full autonomy in the financial transactions when it comes to the income from private sources (see Example 8).

In some cases the universities cross the limits of academic values and ethical considerations when looking for external sources. In Serbia cases can be found where institutions offer preparation courses for their own entrance exams in return for a fee (see Example 9). Such occurrences might be considered an academic malpractice. For the examined environments it is of extreme importance to adequately regulate the initiatives aiming at increasing the private financing of higher education institutions. The integrated strategy of public universities and proper external monitoring are perhaps vital in the transformation process.

Example 8: Complex legal status relationship between the faculties and the universities in Slovenia

Public universities are single legal entities when it comes to the allocation of public funds and the performing of the tasks stated in the Higher Education Master Plan, adopted by the National Assembly.

However in the activities beyond the national Higher Education Master Plan or activities from the Master Plan, but not funded by the state budget, the single faculties are autonomous in managing funds and generating income and act as separate legal entities.

Income from external (alternative) sources fall under the faculty auspices. Greater autonomy in managing the self generated resources can work as an impetus for the faculties to generate their own income and to attract additional private finances. Nevertheless caution should be used since the downside of this mechanism might be a negative effect on the integration of the university and therefore might hamper the long run strategic planning of the whole institution in the global higher education context.

Source: Higher Education Act of the Republic of Slovenia[61]

3.4.6 Discussions and policies for the future

In Albania the issue of financing is closely linked to the autonomy and governance mechanisms and is a permanently on the agenda of the higher education policy discussions. Greater financial autonomy of institutions is discussed along with increased responsibility and external control (see Example 3). In the national report for the Bologna Process (2007), Croatian ministry responsible for higher education announced a major reform in the field of financing the higher education institutions and students. Better use of the resources and alternative sources of income appear on the top of the agenda. Even though in Serbia there is a low intensity of discussions about financing, universities occasionally complain with regard to the lack of set priorities for funding of the certain disciplines. The general state governance reform that was announced recently and would lead to the program driven funding of the public sector might initiate a more intensive discussion about financing higher education system and bolder reforms of higher education institutions. In Slovenia the public universities demand more money for quality, while the importance and influence of the private counterparts is steadily increasing.

61 Uradni list RS, št. 119/2006 http://www.uradni-list.si/_pdf/2006/Ur/u2006119.pdf (accessed on 24 December 2008)

3.5 Student level funding

When discussing and developing a financing policy for higher education it is of key importance to take the student perspective into account. In the region which significantly lags behind the Western Europe and developed countries in the proportion of the overall population with higher education degrees, ensuring growth and stability of student enrolment should be a strategic goal for overall development. There are numerous factors in the financing policy that can affect the student enrolment and which affect the student life on a daily basis (see chapter 2).

If the governments choose to prioritise higher education and research as an important social and economical development factor, systematic data collection that would ensure insight to the socio-economical background of students is of key importance. None of the countries collect data that would provide information about the total monthly or annual income and expenditure of students. The information on the sources of income and the type of the expenditure that students normally have during their studies is also lacking. The exception to this is Slovenia, which takes part in the EuroStudent report, a commitment that all the governments have been encouraged to take in both Bergen and London ministerial summits. With the available data, this sub-chapter outlines the current financial conditions in which the students in the region study, the effects that the current financial policy has on their enrolment and studies and it offers an overview of trends in the attitude towards students and the financing policy from a student perspective, to the extent that was possible.

3.5.1 Conditions for enrolment into higher education

In the countries under study access to higher education is subject to *numeri clausi*. Additionally, countries have developed a complex system of different categories of students.

The studies in Slovenia can be organised as full time studies and part time studies. The number of students enrolled in full time studies is set by the government, while the higher education institutions are free to organise their part time studies in accordance with their capacity. Students in both types of studies have the same social and academic rights. Slovenia is the only country in the region where charging tuition fees for full time publicly funded undergraduate study performed as a public service is illegal, although some higher education institutions in Slovenia charge tuition fees to the students enrolled into part time studies. The government 2004-2008 was looking into ways in which the number of places in part time studies can be limited as well. Since the higher education institutions charge the tuition fee to the part time students, limiting the number of students in part time studies was seen as an incentive for students to enrol into private higher education institutions which was supposed to

increase the competition in the higher education sector and to lead to quality enhancement.

In Serbia studies are only possible as full time studies. However, the students are still divided into two categories — those whose studies are in part paid[62] by the government and those who pay tuition fees. In the public higher education institutions the government agrees through a process of negotiations on the total number of students that can be enrolled at the individual faculties. The number of students whose studies will be in part paid by the government ("state budget students") is determined by the government. The students are equal in their rights to subsidies, health insurance and academic rights and obligations. The state does introduce an age limit of 26 to rights of students in terms of health insurance and subsidies. The students who are paying tuition fees can't apply for the grants and loans provided by the state. (See later in the text.)

In Croatia, the studies are organised as full time and part time studies. In full time studies there are two categories — students whose studies are in part covered by the state and those who pay the tuition fees. The total number of full time students is set by the government as well as the number of students who don't have to pay tuition fees. The full time students have access to health care, state subsidies and grants. The students studying in part time studies pay their own studies, usually half of the tuition fee of full time students who pay tuition fees, but don't have access to health insurance, state subsidies and grants. Part time students also have limited academic rights e.g. the right to student representation, academic competitions, etc. These students have for a long time been an income generator, while never really considered to be "real students" by the higher education institutions. With the Bologna implementation, conditions have been set for institutions to provide special classes for part time students, which led to the discussions at some faculties on sustainability of part time studies. Serbia had a similar system of part time students some time ago.

In the analysed countries, the number of new admissions is decided annually by the Ministry based on the proposal of higher education institutions. The available study places are distributed to students based on a ranking that takes into account the combination of success in secondary school and entrance exams developed by faculties individually. Additionally, within the number of new admissions each year the ministry decides on the number of places which will be awarded to students who don't need to pay tuition fees — so called "budget places". These are awarded to the best ranking students out of those students who have been granted a study place at the higher education institution.

Excellence seems to be the driving force in the access to higher education in the countries under study. The merit-based criteria is often presented as an objective selection instrument which assures equal opportunities to all who compete for places in higher education. This view is rarely challenged in the academic community, or even the society, due to a long tradition of limited

62 Since the students pay significant administrative charges and have additional learning related expenses, as shown later in the text, the term "in part paid" is used, rather then fully paid or paid by the government.

access to higher education, which still is in the early stage of the massification process. Thanks to their parents' economic, social and cultural capital, students from better socio-economic background tend to do better in lower levels of education, especially in terms of learning outcomes, therefore ranking higher compared to the students of lower socio-economic background. Furthermore, the common practice of paying for private tutoring or special schools which are preparing pupils for entrance exams in the countries under study gives an additional advantage to those of better economic standing. Studies show that the students from better socio-economic background are over represented in higher education in general and particularly in universities compared to their representation in overall population. Furthermore, the students from better socio-economic background are even more overrepresented in the no tuition fee places then in the overall higher education population (Vukasovic, 2007).

3.5.2 Student expenditure

As explained in chapter 2, the student expenditure includes:

- Costs related to tuition — this included tuition fee, as well as costs incurred for books, materials, equipment, etc.
- Administrative costs — this includes various administrative fees, paid to the institution (and/or department) and in some cases to a national structure. This can include membership in student unions.
- Costs related to living while studying — including accommodation, food and subsistence, transport, health, leisure etc.

Costs related to tuition

With an exception of Slovenia, where fees for undergraduate publicly funded public education within the public service are illegal, the tuition fees are set in the process of negotiations between the universities and the governments. However, although governments in some countries have a legal possibility to have the final say in setting the tuition fees, governments don't practice these rights. In reality the higher education institutions have a wide autonomy in setting the amount charged to students as tuition fee. The tuition fees in the private higher education institutions are not regulated by the state. There is also no available public data on average tuition fees charged in the private higher education sector. However, the tuition fees tend to be higher in the private higher education institutions compared to their public counterparts.

The amount of the tuition fees in terms of the maximum amount or a possible fixed amount are not set legally in the countries under study. Compared to the practice of EU member countries which charge tuition fees, this is a highly unusual practice. Out of 16 countries where tuition fees are charged in the EU, only Italy doesn't regulate the amount of the tuition fees in the public higher education institutions. Majority of these countries (75%) legally prescribe the maximum tuition fee that can be charged, while a smaller number of countries

(25%) have a legally fixed amount of tuition fees for all higher education institutions and programmes.

Table 9: Tuition fees overview

Country	Average monthly salary (EUR)[63]	Average tuition fee (EUR)[64]	Minimum tuition fee charged (EUR)	Maximum tuition fee charged (EUR)
Albania	161 (year 2005)	200	Na	Na
Croatia	681 (year 2007)	750–1250 (depending on the field of studies)	Na	Na
Montenegro	338 (year 2007)	500	500	1000
Serbia	385 (year 2007)	750	375	3000
Slovenia	835 (year 2007)	Legally tuition fees are not allowed		

As visible from Table 9, the average tuition fees tend to be higher then the average monthly salary. While in Croatia only some faculties charge double of the average salary, in Serbia this seems to be a regular practice.

It is important to be aware that in the countries in the region average salary hides drastic differences between developed (mostly urban) and underdeveloped (mostly rural) areas. The average salaries between the regions in the countries can vary by 30% or even more. The average tuition fees are then considerably higher than average salaries in these areas. In this context it is also interesting to notice that although Serbia, Croatia and Montenegro are behind most EU countries in terms of salaries and living standard, they are not lagging behind in the amount of the tuition fees charged to their students. In the EU, only the Netherlands, UK[65] and Latvia charge tuition fees significantly higher than the tuition fees in Serbia, Croatia and Montenegro[66]. Albania seems to charge somewhat lower total amount of the tuition fees, compared to the countries under study. However, the average monthly income in Albania is rather low compared to the countries under study, and even more so compared to the EU average. Furthermore, the differences between urban and rural areas in Albania tend to be greater then already significant differences in the other countries under study. Still, most

63 Data on average monthly salaries is based on the data collected and published by the national statistical offices of the analysed countries. The references to the sources are given at the end of the chapter.

64 Due to disintegrated university, the data on the tuition fees is available on the faculty basis rather then aggrageted level of universities. Therefore the given data are estimates based on the data that was publicly available for the academic year 2007/2008.

65 UK without Scotland, which has no tuition fees in higher education system.

66 The data in the paragraph is based on the Key Data on Higher Education in Europe, 2007 Edition http://www.eurydice.org/ressources/Eurydice/pdf/0_integral/088EN.pdf (accessed on 1 September 2008).

higher education institutions are pushing for an expansion of the number of the students paying tuition fees and/or increasing the tuition fees.

Next to the tuition fees paid by part of students, all students cover their own book expenses and other necessary materials (except in very rare cases). However, there is no data on how much, on average, a typical student spends on learning related expenses, besides the tuition fee.

Administrative costs

As stated previously in the text, in all the countries all the students are charged with administration fees, which are both in terms of amount and type decided autonomously by the higher education institutions alone. Montenegro is the only country under study which regulates the type and the procedure to establish the amounts of the administration fees (see Example 6). The higher education institutions have been quite inventive in the development of administration fees that can be charged to students. Some of the examples are:

- annual registration fee,
- certification of the semester,
- charges for applying for an exam,
- issuing of the diploma,
- charges for changing the examiner or date of the exam,
- entrance exam fees, etc.

Some faculties also introduce penalty fees for students who are studying longer then expected or who have failed their exam more then the number of times prescribed in the statutes of higher education institutions.

Additionally, all applicants have to pay to take the entrance exam. Again, the higher education institution decides freely on the price of the entrance exam charges. Moreover, some higher education institutions organise preparation courses for pupils for the very same entrance exams they will organise. This can be seen as a conflict of interest and certainly falls under academic malpractice.

Since the higher education institutions in majority of the countries under study decide autonomously on the type and the amount of the costs charged to the students, there is no data available on total costs that every student pays to the institutions through different administration charges. Given that the higher education institutions consider the faculty accounts and their self-generated income a “business secret” accurate data on the extent to which the administration charges contribute to the higher education institutions income are not available either. The legal basis of such position advocated by the higher education institutions is somewhat questionable, having in mind that the higher education institutions in question are legally considered to be public institutions.

Example 9: The case of entrance exam fees in Serbia

To enrol into higher education in Serbia, a candidate has to pass an entrance exam. Together with the average of high school grades, the results of the exams are used to determine rankings of candidates. These rankings, first of all, determine whether or not the student will be enrolled at a particular faculty (if within the total quota for that faculty) and whether s/he will be funded by the state (if within the quota determined by the state) or will have to pay the tuition fee.

These entrance exams are organised separately by the individual faculties, even within one university. Faculties seldom recognise points obtained on an entrance exam organised by another faculty, which limits the choice for students.

A number of faculties organise preparatory courses for high school graduates for the entrance exams. The courses can last for up to a year and there is a (substantial) fee involved. The advertising of such courses sometimes includes guarantees that the candidate will pass the entrance exam, which provides the base for the claim that such practice is borderline corruption.

Furthermore, such practice puts students from poorer families in a disadvantaged position, since they are less likely to obtain high scores on such entrance exams. In addition, as these courses are organised at the faculty, students who live in another town can not take them, which makes the competition even less fair.

Costs related to living while studying

As mentioned in the introduction of the chapter only Slovenia monitors the living expenses of students. In Slovenia the total of expenditure of an average student living in his own household is 342 EUR of which accommodation and food represent 65% of expenditures[67].

Reliable data on costs related to living while studying are relevant for development of a sound financial and funding policy both from a system and student perspective. Without such data genuine affordability of higher education is impossible to calculate. The information on affordability of higher education has a great impact on the evaluation of accessibility of the higher education system to students in general and different groups of students in particular. If affordability was measured in the countries under study, differences in genuine access possibilities between regions with different average earnings within the countries would be easily visible. Furthermore, realistic possibilities of access relating to the average incomes of the different socioeconomic groups and minorities in society could be properly assessed. For the development of equitable higher education system which truly ensures equal opportunities, and in particular for the development of a comprehensive support system for students, the data on affordability is of crucial importance.

67 EuroStudent Survey 2007.

3.5.3 Student income

In terms of student income this, as explained in chapter 2, can include:
- own earnings, if the students work while studying;
- parental support, either implicitly, by way of accommodation and food, or explicitly, in monetary terms;
- student scholarships, grants and/or loans — from a public or private source, system or institutional level;
- "invisible" or implicit support through subsidies, tax exemption, etc.

Own earnings

In the countries under study the state encourages student employment through incentives given to the employers. Through legally regulated institutions[68] which act as mediators, employers can employ students under a special type of student contract through which the employers pay significantly less taxes and social contributions. In Serbia the right to work under the student contract is granted only to students up to the age of 26 regardless of when they enrolled into higher education. Again, only Slovenia has the publicly available data on the student employment. In 2005, 66% of Slovenian students worked while studying earning on average 430 EUR (EuroStudent 2005)[69]. Although, via the student centres student employment could be easily traced, in the countries where informal economy still plays a significant role data on employment would not be accurate. In these countries, employment of students without a contract at all (students are paid in cash) seems to be a widespread practice. On the other hand, it is interesting to note that Croatia recently introduced a maximum earning limit for students due to major number of malpractices, realted to the bogus work contracts with students who would, in return for a small fee, give the salary to the regular worker, thereby circumventing the costly official employment.

Parental support

As was stated earlier, only Slovenia collects data on student income. When it comes to income of students living in their own household, 33% comes from parents. Although the numbers are not provided, one can presume that the majority of the income of students in Croatia, Montenegro, Serbia and Albania is heavily dependant of parental support. Students from the city where the

68 These institutions act as legal mediators in the employment of students, if the employers wish to employ the students under a student contract which entails lower taxes and no obligation to cover insurance costs. In Slovenia these are referred to as Študentski Servis, in Croatia as Studentski Centar, in Serbia and Montenegro as Studentska Zadruga. The employers can employ students under regular contracts as well.

69 www.campuseuropae.org/en/support/docs/bologna/eurostudent/eurostudent2005.pdf (accessed on 6 October 2008)

university is situated overwhelmingly live with their parents. This is partly due to the regulation that doesn't allow the students in such situation to apply for places in student dormitories. Even when the students have to move to their place of study the parents normally cover their living expenses. Therefore, Slovenian students appear more independent from their parents compared to students in other countries under study.

Student scholarships, grants and/or loans

The countries in the region never had a system of grants and loans that would cover the whole student population as often seen in Western Europe. Slovenia has the widest grant scheme where every fifth student receives direct state support in the form of a grant or a scholarship. In Croatia, in 2005 a total of 3501 scholarships were awarded by the state which means that less then 3% of student population received direct state support. Serbia doesn't provide the number of student grants awarded by the state to the public, although internal reports of the Ministry of Education include this data (in 2007 5811 grants and 17,387 loans).

Each country has its own complex system of criteria according to which the grants or scholarships are awarded. In Slovenia, part of the grants is awarded based on the excellence criteria and another part on the social status of students applying. In Croatia, there are nine different types of scholarships that can be awarded, however more then one third is awarded to specially gifted full time undergraduate students and another third based on the social status. The rest are scattered across the other seven categories. In both Slovenia and Croatia, the number of the scholarships is so small and the competition so high that even the categories that should be awarded on social status or other criteria in fact depend heavily on excellence criteria. To rank the students applying for the grants their success in the previous years of studies will be taken as a major factor leading to only the best students amongst those with lower socio-economic background able to receive direct state support. In Serbia, the data on socio-economic background of students is not even a requirement when awarding grants. The sole criteria for grants is the success in the previous years of study, moreover the grants are solely available to students who are on the state budget — those who in fact don't pay tuition fees. Similarly, in Montenegro, the full time students on the state budget have a right to apply for scholarships. The scholarships are awarded only to "talented students" defined as students with excellent grades with special interest and talent for scientific or artistic work and/or students who won at national or international competitions. Additionally, in Montenegro, students who have on their accord changed their field of study are not eligible to apply for scholarships.

In countries under study the scholarships are transferred to students on a monthly basis for the duration of the academic year i.e. 10 months rather then 12 months. In Slovenia the grant is 158 EUR (20% of the average salary), in

Croatia between 68 and 109 EUR depending on the type of the grant (13% of the average salary), in Montenegro the state grant ranges between 25 and 37 EUR (10% of the average salary) and in Serbia 64 EUR (16% of the average salary).

Serbia and Montenegro are the only countries which have an organised state loan system. In Serbia, the state provides loans to 18,000 students in total or to 7.5% of the overall student population. The students eligible for loans are the students whose studies are funded through the state budget. Unlike the scholarships, the loans are awarded on the combination of criteria — the success in the previous years of studying and socio-economic background of the students applying for loans, although the socio-economic background does not have great weight and is relevant only for first time applicants. Continuation of the loan is determined solely on the basis of merit. The loans are of the same amount as grants (64 EUR) and are transferred to the students on a monthly basis for 10 months in a year. In Montenegro, students financed through the state budget which didn't change their study field are eligible to apply for student loans. The government awards around 4500 student loans per year or to approximately 20% of the overall student population. The main criterion for awarding the student loan is the success of the student in the previous years of studying. Amongst students with the same success in their studies an advantage is given to the student who can prove that their parents are awarded state social aid. The students are awarded different amounts of loans depending on the number of ECTS, success index (based on the grades in the previous study years) and the year of study. The minimum amount of the loan is 25% higher then the expenses of accommodation and food in the dormitories. The established amount of the grant is diminished by 20% for the students which study in the same place as they live.

The conditions under which the students in Montenegro are to pay back their loans are defined in the act regulating the grant and loan system. Students are obliged to start repaying the loan within a year of prescribed length of their studies[70]. The period in which the students have to start paying back the loan can be prolonged to 18 months after the prescribed length of their studies. Final deadline to repay the loan in full can not be longer then double prescribed length of their studies. In case students drop out of their study programme they are obliged to start repaying their loan within the year of dropping out. Students can also submit a request not to repay their student loans. In case the student graduates within the prescribed period of studies with an average grade 9.00 to 10 (maximum grade 10) the student doesn't need to repay any part of the loan. When the average grade of is between 8.00 to 9.00 the students need to repay 20% of their loan and with an average grade between 7.00 and 8.00 students need to repay 40% of their loan. While in Montenegro the act regulating the grant

70 The term prescribed length of studies refers to the period in which the Faculty through their Statutes determines the expected length of their study programme. Students may take longer to finish their studies or exceptionally they may finish their studies earlier. Additionally, students may drop out of their study programme.

and loan system is easily accessible online, in Serbia the act was not possible to obtain therefore the conditions under which the loans need to be repaid were not available. The Call to award the state grant and loans in Serbia solely states that the conditions under which the loans are to be repaid are defined in the loan awarding contract.

It's interesting to note that in all of the countries commercial loans set up by the banks are available to students. The conditions under which students apply, are granted loans and under which these loans need to be repaid are at full discretion of the banks.

3.5.4 "Invisible" or implicit support

Under the term "invisible" or implicit support as defined in chapter 2 we understand different types of subsidies and tax exemptions given on the basis of the student status. In all the countries, except in Croatia, all students are equal in their rights and obligations in terms of implicit support. In Croatia, the part time students are not entitled to subsidies or the tax exemptions, partly due to the presumptions that their social security and other matters are arranged through their status of employed citizens. Therefore the data provided for Croatia applies only to the full time students.

The students in the countries under study have access to health and dental care through a system of, in principle, free public student health insurance. With the changes in the overall public health insurance systems, some low fees may be charged to students for certain type of services or certain medicines in line with the overall changes towards a cost sharing model. In Serbia, these rights are limited to students under age of 26, regardless of when they have enrolled to higher education institutions. This particular regulation is contradictory to the life long learning policy and is an obstacle to enrolment of those who haven't went to higher education immediately after their high school graduation.

Food and accommodation in the countries under study is partly subsidised by the state. While food subsidies are available to all students through a system of student cafeterias, subsidized accommodation is available only to a limited number of students depending on the number of places in student dormitories. The dormitory places are, similar to scholarships and entrance conditions, awarded on the basis of excellence. Although Slovenia and Croatia have invested into building new student dormitories and expanding the capacities, long term projections on the needs for dormitory places don't exist in any of the countries under study.

In Slovenia tax exemption for the part time student work plays a considerable role in the financial support for students. Both students and employers enjoy a special tax treatment in the system mediated by student job agencies. Such arrangement contributes to a larger and diverse supply of part time job opportunities for students and in most cases means higher student wages.

All of the countries offer some type of transport subsidies to their students. However, these vary greatly from country to country. The transport within the town where the institution is situated is usually subsidised and managed locally through the city transport system. The intercity transport often offers discount to students, however the ways in which the discounts are provided and managed varies greatly from country to country.

3.6 Summary

The summary aims to highlight the trends and tendencies within the higher education systems, in particular the finances policy and practice, as well as specific solutions that some of the countries found in their reforms. The summary in the most part follows the structure of the chapter and it ends with an outline of the debates on the future of financing in the countries under study and the role of information in development of financing policy.

Overview of higher education systems

The countries under study, namely Albania, Croatia, Montenegro, Serbia and Slovenia, have all developed its own individual higher education systems. Still, they share a common transitional setting and similar challenges. All of the countries joined the Bologna process which has been a major incentive for an overall reform of the higher education systems. The countries went through major legislation reforms to enable the implementation of a number of Bologna action lines. At the same time the reforms opened a number of issues not directly related to the Bologna process, in particular the issue of autonomy of higher education institutions, relationships between university and non-university institutions and the private higher education providers.

All of the countries introduced two major overarching changes to their respective higher education systems in line with the Bologna process. On the one hand, the new legislative framework envisaged the introduction of a three cycle structure based on accumulation and transfer of ECTS and learning outcomes based reformed study programmes. On the other hand, quality assurance and accreditation procedures to be carried out through national quality assurance agencies have been foreseen. Although the implementation is at different stages the planned reforms suggest a need to discuss the current finance arrangements.

The implementation of the three cycle structure implies, amongst others, new concepts of study levels, degrees, progress through studies and learning paths. The new concepts suggest diversification and more flexibility in learning paths, as well as a different approach to access between different levels of studies. The introduction of quality assurance and accreditation procedures should gear the higher education institutions and the system as a whole towards

quality enhancement at all levels. A comprehensive financing policy should take into consideration the changing student perspective, should not obstruct the underling goals of the reforms, and it should introduce a broad system of incentives to encourage and support quality enhancement.

The reforms taking place also affected the relationship between the university and non-university sector. In this respect the countries have developed a variety of approaches. Regardless of that, the countries under study, with an exception of Slovenia, have a rather inflexible system where numerous limitations and obstacles are in place to separate the ISCED 5B from ISCED 5A programmes. The criteria to allow horizontal mobility between programmes, or access to master level studies in ISCED 5A, are set by the individual faculties often entail additional course work and rarely recognise the previous work in the ISCED 5B programmes. Slovenian higher education system established strong links between the ISCED 5B and 5A programmes, where horizontal mobility seems easier and access to master level is subject to the same conditions for both ISCED 5B and 5A graduates. Furthermore, non-university institutions can in addition to Bachelor and Master programmes, carry out PhD programmes under certain conditions. In this context, it is interesting to note that unlike other countries where around 20% of students study in ISCED 5B programmes, in Slovenia the number of students in ISCED 5B programmes is slightly over 40%. Taking into account the student enrolment to ISCED 5B programmes, the higher education systems in the majority of the countries is predominantly university oriented, although the number of non-university institutions might suggest differently.

In the countries under study the number of private higher education institutions has been growing over the past decade. The new legislative reforms provided a regulatory framework encompassing both private and public higher education institutions which has not been the case beforehand. Particular attention has been paid to ensuring that quality assurance and accreditation mechanisms are in place for both the private and public institutions. Additionally, some countries envisaged a possibility to transfer public funds to private higher education institutions in case the programmes or research at private institutions are of public interest. With the exception of Slovenia, which occasionally does fund private institutions, the other countries don't really use this option. Nevertheless, the students still overwhelmingly study in public higher education institutions, so the private sector is still rather small. Since the expansion of the private sector in terms of student enrolment hasn't been significant, it could be concluded that the trend of privatisation hasn't been prominent in the countries under study. However, public higher education institutions in the analysed countries have gradually introduced various fees to students. Moreover, institutions are continuing to raise the amounts charged to students, as well as expand the number of students charged with tuition fees. Therefore, a trend of privatising the public sector seems to be prominent in the countries under study.

Enrolment and investment into higher education

According to UIS, the average enrolment rate for Western Europe is at 67%, whereas the countries under study fall between 30 and 45% with an exception of Slovenia (66.7 %) and Albania (15.8%). Nevertheless, all of the analysed countries are within the mass higher education category. Still, it seems that majority of the countries need to put additional efforts in raising the GER to catch up with Slovenia and Western Europe countries.

Taking into account the methodological considerations, as well as the context of the higher education systems examined, the overall investment in higher education is rather low in the countries under study. While Slovenia and Montenegro invest slightly more than 1.10% of GDP to higher education, Croatia and Serbia invest less then 1% of GDP in higher education. Public higher education institutions depend dominantly on public funding. The regional and local investments to higher education are marginal. Higher education institutions do have a possibility to generate their own income, however the data on the own income is difficult to access. Some estimates suggest that one third of the overall income is generated by the institutions independently mostly through tuition fees and other administrative fees charged to students.

Due to limited data, it is impossible to assess whether public investment to higher education is increasing or decreasing at what rate and to what extent the growth of higher education sector is supported by the public investment to higher education. Furthermore, analysis of the ratio between public funding and own income at the institutional level is essentially impossible due to the non-transparent institutional budgets, especially at the faculty level.

System level financing

The universities in the countries under study, with an exception of Albania, share the same historical background. In the countries of former Yugoslavia the universities were organised in the self-management communities of higher education institutions rather then academic institutions. The outstanding feature of the system was the weak and disintegrated university on the one hand and powerful and independent faculties on the other hand. The institutions were bottom heavy with the decentralised resource management (Zgaga, 1998). At the same time, in all of the countries the state played a key role in determining not only the budget of higher education institutions, but also the way budget was to be spent through a line itemised budget. Consequently, the debate on the autonomy of higher education institutions, in particular with respect to finances, has been one of the most heated debates in the academic community. The funding approach at the system and institutional level is on the whole influenced by the specific historical organisation of the universities and the relationship between the state and higher education institutions.

When it comes to system level funding, in all of the countries the allocation channel is directed to higher education institutions. In Slovenia, an element of

student choice is present in the system, due to a strong emphasis on the number of enrolled and graduated students in the funding formula. The allocation conditions and the level of institutional autonomy in the countries under study vary, nonetheless most of the countries still have line item funding in place. Croatia has developed a system where the line item funds are moved as a sum to the universities. This leads to a more centralised university, but not substantially towards financial autonomy from the state. Slovenia is the only country where the lump sum model is in place and where the level of financial autonomy of the institutions is rather high. Compared to the low level of financial autonomy when it comes to managing the public funds at the institutional level, the level of financial autonomy in managing the own income in majority of countries, with an exception of Albania, is surprisingly high. Due to the disintegrated university, own income is generated by the individual faculties. The faculties are accountable neither to the university nor to the state for their own income. Very often the budgets of individual faculties are considered a business secret and are not available publicly. Montenegro and Albania are exceptions to this practice. In both countries the state has wider powers to control and the financial books of the higher education institutions must be sumitted to official revision of finances by the state.

When it comes to allocation base and the allocation mechanisms, the input criteria prevails in the countries under study. The allocation mechanisms on the other hand differ amongst the analysed countries. However, with an exception of Croatia where a process of negotiations which includes a buffer body (NCHE) is envisaged by the law, the countries tend to have a funding formula or a formula based systems.

Institutional level financing

The specific structure of disintegrated universities in Croatia, Montenegro, Serbia and Slovenia has a profound effect on the institutional approach to financing. All of the countries have committed themselves to the process of integration of universities. Despite the efforts put into the reform, the fundamental step of integrating universities into a coherent and manageable structure has only been achieved in very few instances. Even in Slovenia which started the reforms in the early 1990s, considerably sooner then the other countries, financial autonomy still plays a significant role in the institutional level financing.

All of the countries except Serbia have chosen to allocate the state funds to universities, which are responsible to distribute the funds to the faculties. In Serbia, funds are still allocated directly to faculties. Nevertheless, it seems that the reforms in allocation mechanisms only introduced an additional step in the process, rather then substantially affected the autonomy of the faculties. The faculties in the majority of the countries, despite this step, still decide on what funds the faculties will allocate to the university and what budget will the university have at its disposal. With such system in place, there is little room for development of long term capital investment strategy in infrastructure or staff

at the university level.

The specific structure of the university also determines the institutional approach to income generated by the institutions, either through different types of fees charged to students or through alternative external sources. The common way to generate own income is through tuition fees and other charges to students. These may amount to, according to some estimates, one third of the overall income of the institutions. Only a few faculties, usually technical faculties, as well as law and economics, are able to generate considerable resources through provision of services or through other alternative sources. Such large differences between the faculties in their capacity to raise additional own income poses a major obstacle in the process of integration of universities. Own income is generated at the level of faculties, therefore it is considered to be the property of the faculties. The faculties decide individually to what purposes and in which manner own income will be spent, without any accountability to either university or the state, and even less so to the public.

Student level funding and access to higher education

Access to higher education is subject to *numeri clausi* in the countries under study. The total number of new admissions is decided annually by the Ministry based on the proposal of the higher education institutions. However, in majority of the countries the *de facto* situation is that the higher education institutions determine the number of overall enrolment independently or with little interference from the state. In addition, the Ministry decides each year on the number of so called "budget places" for the students who don't need to pay tuition fees. The students are granted access to higher education institutions based on a combination of results of the entrance exams and high school success of the applicant students. Those students with highest scores on the ranking are awarded the "budget places". The students with lower scores have to pay tuition fees to the higher education institutions.

The amount of the tuition fees charged to students are decided annually by the higher education institutions, even if in some countries the governments have legal possibilities to take part in the decision making. The average amount of the tuition fees are somewhat higher compared to an average monthly salary in respective countries, although some programmes and faculties charge double or triple the average salary. By way of comparison, the gap between the average salaries in the EU countries and the countries under study is momentous, while only UK, the Netherlands and Latvia charge higher tuition fees. Furthermore, the countries charge various administrative fees to all students. Although only Slovenia has some comprehensive data available on the total student expenditure while studying, the costs of the studies in the countries under study are significant.

It is relevant to point out that there is a considerable divide between the developed (mostly urban) and underdeveloped (mostly rural) areas within the

analysed countries. This poses significant challenges for students who want to continue their education, but don't leave near the urban university centres. Although there is no in depth research on the composition of the overall student population in the analysed countries, the overall statistics on education stratified by region point towards a continuous trend of widening the gap between the developed and underdeveloped regions in terms of high school graduates continuing their education.

Thanks to their parents' social and cultural capital students from better socio-economic background tend to do better in lower levels of education; therefore they rank higher on the rankings determining access. Furthermore, the common practice of paying for private tutoring or special schools which are preparing pupils for entrance exams in the countries under study gives an additional advantage to those of better economic standing. Due to their parents' social and cultural capital students from better socio-economic background tend to do better in lower levels of education, therefore having a starting advantage at higher education level. Moreover, the common practice of paying for private tutoring or special schools which are preparing pupils for entrance exams in the countries under study gives an additional advantage to those of better economic standing. The available studies show that the students from better socio-economic background are over represented in higher education in general and particularly in universities compared to their representation in overall population. Additionally, the students from better socio-economic background are even more overrepresented in the no tuition fee places then in the overall higher education population (Vukasovic, 2007).

The support system for students is largely based on the system of indirect support, rather then direct support to students. All students, with the exception of Croatia where only full time students have access to direct and indirect state support, have the right to health and dental insurance, subsidised food and in most cases subsidised local transport. Subsidised accommodation is also available but to a limited number of students and solely those students whose place of residence is situated outside the city in which the institution is located. The state also provides incentives for student employment through lower taxes on student employees.

When it comes to the direct support to students, the grant system is not universal. The number of available grants is limited to a small number of students. While Serbia and Montenegro award the available grants solely based on the success of the students in their studies, Croatia and Slovenia have an additional category for students which also takes into account the socio-economic background of students. However, the number of available grants is so small, particularly in Croatia (less then 3% of student population), that even in the grants designated for students with low socio-economic backgrounds success during studies plays a major role.

In all of the countries commercial loans set up by the banks are available to students. The criteria under which students apply, decision on which loans

will be granted and the repayment conditions are at full discretion of the banks. Only Serbia and Montenegro have an established system of loans, although again not a universally available system. The number of loans awarded annually is also limited. Although the total number of loans is somewhat higher then the number of grants available to students, the overall number of loans is still rather low — approximately 20% of student in the overall population have access to the loans. The loans are awarded to the students based on the success of the students in their studies and to a very limited extent take into account the socio-economic background of students. Still due to a small number of loans available the criteria of success in the studies plays a relevant role in granting the loans to students.

Although there are no studies that would look at the composition of the overall student body and the grant and loan holding students, it's relevant to note that students in the most difficult financial position who need to work next to their studies and who don't have good study conditions at home, most probably have lower grades. Therefore, the neediest students may be effectively excluded from the current grant system.

The rationale behind the system set up in the countries under study is the criterion of excellence — often presented as an objective criterion which enables a fair dissemination of the total available study places and state funded places to students, as well as the grants and loans. This view is rarely challenged in the academic community, or even the society, due to a long tradition of limited access to higher education, which is in the early stage of the massification process. However, the socio-economic background of students in the system set up on the principle of excellence plays a decisive role in the access opportunities of students, as well as their chances of finishing their studies. Consequently, the analysis points towards a conclusion that the current access procedures and student support systems limit the access of students with lower socio-economic background, particularly those coming from underdeveloped regions.

Role of information in the policy process

Higher education reforms are ongoing in all the countries under study. The discussion on financing higher education at all levels and in all aspects remains to be one of the highlighted topics. The role of information, data and research is of key importance in ensuring a well based public discussion and development of comprehensive policies in the countries under study.

One of the most demanding tasks throughout the study was gathering information and data on higher education systems, especially with regards to financing higher education. There are several challenges that the countries under study face when it comes to collection and availability of data. On one hand, the countries don't have a developed tradition of collecting information on higher education, therefore the methodology and the span of the collected data and statistics is currently under development in majority of the countries. Additionally, the countries are not members of organisations that regularly

collect higher education statistics, thus some of the data that is easily accessible for other countries is simply not available in the analysed countries. Another challenge in collecting data is the disintegrated university which leads to universities with insufficient capacity and in some cases insufficient authority to demand data, especially when it comes to sensitive data such as finances and budgets of independent faculties. Furthermore, when data does exist, it is often not publicly available and easily accessible. The collected data is often kept within the Ministries and different higher education buffer bodies or within Universities. The practice of publishing data online or in regular periodical publications in a transparent, accessible, widespread manner is still non existent. To a certain extent Slovenia is an exception as one country where access to data is easier and where a wider span of data on higher education is available.

The availability of data on the higher education system is of key importance in the development of any higher education policy. In order to assess whether or not it is possible to develop a comprehensive and coherent system for funding of higher education, greater efforts need to be put into collecting and systemising data and information on higher education. Particular emphasis should be put on the analysis of income and expenditure at the faculty level and the socio-economic background, as well as the financial conditions for studying and its effects on the student population, since these are literally non existent in the analysed countries. If such data is not easily accessible to a wider public, various stakeholders are not in the position to evaluate to what extent the system in question is indeed appropriate. Therefore, the fact that some key data related to funding of higher education is not available across countries, illustrates the limitations for sound policy making. Additionally, any goals or objectives of the higher education and specifically the goals behind a specific higher education funding policy can't be evaluated without relevant and reliable information on the system as a whole and as individual institutions in particular.

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Mihajlo Babin and Predrag Lažetić

4.
FINANCING A DISINTEGRATED UNIVERSITY IN SERBIA
An Institutional Case Study

4.1 Introduction

The system of financing of higher education is analysed in this publication mainly from the macro perspective. The case study presented in this chapter focuses on the mezzo and micro level, i.e. financing of individual faculties and departments within one institution (university). The financial system at the institutional and departmental level reflects the practical implementation of the system regulations, but also offers an insight into the distinct reality of higher education institutions in this region compared with other parts of the world. This specific institutional nature lies in the unique feature of universities in the former Yugoslav republics: the institutions are typically disintegrated in terms that each faculty within one institution represents an independent legal entity. Legal independence of individual faculties within a university determines also their financial position, manifested by the absence of any integrated financial policy at the institutional level. The organisational sub-units of universities (faculties and in some cases departments) are financially independent entities and therefore enjoy wide competences concerning their own income. Such situation favours diversity of systems and policies concerning distribution of income even within one institution.

Having the aforementioned characteristics in mind, for the purposes of this case study we selected one university in Serbia. The main intention was to describe the diversity of solutions concerning financial policies and structures at the various faculties within the institution selected.

Firstly, our goal is to describe the general functioning of the financial systems at the micro level. Starting from that, we plan to present the historical development of the present higher education funding system in Serbia, in terms of: the relationship between budgetary planning and allocation of state funds for higher education, the regulation concerning the distribution of state funding as well as dynamics and stages of income planning at the faculty level and the situation concerning systems of control of expenditure and realisation of financial plans. Furthermore, we aim to identify and conceptualise the typical micro models concerning distribution of income but also other resources at the faculties based on the following three aspects:

- structure of income,
- organisational and academic differentiation and
- rationales and beliefs among decision makers at the faculty level.

Instead of a conclusion, we offer a summative assessment of the current system of financing of higher education based on the findings from the institutional and the faculty level.

4.2 Methodological remarks

Following the aforementioned argumentation and analytical approach, we selected for this case study three faculties within one institution in Serbia. The intention was that these cases are distinct enough and reflect as much as possible the diversity concerning sources of income as well as their absolute amount, difference in organisational structures and distinct faculty approaches concerning management of finances.

We decided to apply a combination of qualitative methods, using as a primary instrument and source of information semi-structured interviews with the faculty representatives who still are or previously were in charge of finances at their faculties (usually as deans or vice-deans) as methods of research. In addition, we used text-analysis of the relevant state regulations about funding of higher education and statistical overviews about sources of income and expenditure which were provided to us by the selected faculties.

The interviews were structured around three sets of questions. The first set of questions aimed at finding out more details about the financial system within the university in question, the second set was about the modes and principles of distribution of own income at the faculty level (income from fees and service to third parties). The last set of questions was focusing on the perception of the persons interviewed about the financing of higher education in Serbia at the macro level. They were asked about opinions on state regulations for funding of higher education institutions, their visions of the future development of the system of financing higher education and similar questions.

The most important methodological remark is however our deliberate decision to treat all sources of information, "identity" of faculties and the university and persons interviewed in an anonymous manner. This was due to our dedication to study as much as possible the reality of the situation in terms of the local perspective about the systems of management of finances at different faculties. This includes problems and solutions, which may involve some creativity in interpreting state regulations. The decision not to provide any information which would enable identification of the analysed case may have made the text of the analysis too meta-level oriented and lacking concrete examples and illustrations. Nevertheless, we hope that despite these deficits it still represents a valuable and interesting piece of new knowledge.

Another methodological remark concerns the potential applicability of the findings of the analysis for generalisations concerning the situation in the whole. Certain ground for comparative approach and regional generalisation exists, especially in the case of countries where the model of disintegrated university with financial autonomy of individual faculties dominates the higher education system. In our view, the internal organisation of universities and amount of autonomy given to the departments or faculties represents a much stronger influence on the shape of the mezzo and micro level solutions concerning financial system in comparison with the macro level regulations. In this respect, we should stress that any broadening of the conclusions to the whole region should not be done without major reserve and cautiousness, since the regulation concerning funding of higher education institutions differ in every country (see chapter 3).

4.3 State funding of higher education in Serbia

4.3.1 Historical development

The analyses of funding of higher education in Serbia in this subchapter will provide key information about the structure and allocation of public funds to higher education.

Looking from the historical perspective, there are two important parallel processes which had tremendous impact on the development of the system of higher education financing: decentralization of management from university towards faculty level and massification of higher education.

1) The process of disintegration of universities started in 1980s. It was rooted in the idea of self-management and the aim was to restructure the university to be similar to the so-called "organizations of associated work" (Zgaga, 1996). This process resulted in all faculties obtaining the status of a separate legal entity. Having this status later on allowed them to propose *numeri clausi,* to set the level of tuition fees and to create distinct internal systems of distribution of own income.
2) Massification of higher education in Serbia started in the 1960s and the newest intense increase of student participation in higher education started in 1990s and still lasts (Vukasovic, 2007). Various rationales have determined massification and most of them are similar with the rest of Eastern Europe, at least concerning the latest wave of massification (changes in the economy, transitional unemployment, growth of demand for new professions etc.). In Serbia, massification had also an additional dimension characterised by certain specific

circumstances which occurred in Serbia during 1990s: inflow of refugees, wars in ex-Yugoslavia[71] etc.

Besides the mentioned circumstances, the current system of funding of higher education was influenced by the following challenges that the state was faced with:

a) increasing unemployment (economic downturn after 1992 introduction of UN economic sanctions),
b) higher demand for higher education and
c) lack of funds for higher education.

Due to the fact that it is very difficult to determine interactions between mentioned challenges, analyses can be only based on facts and chain of events. During the following period (after 1992), government gradually enlarged enrolment quotas and allowed gradual introduction of tuition fees. The effects of such decision were that more students could enrol into higher education after completing secondary education. Subsequently, this decreased the immediate pressure on the labour market. On the other side, faculties gained more own income from tuition fees and relaxed the demand on the state budget.

The present system of financing has been developing since the beginning of 1990s. The first structural change happened in 1992 with the introduction of the new category of students who were obliged to co-finance their studies (Zakon o univerzitetu, 1992). This change did not have a significant impact on participation of students from lower socio-economic backgrounds, since co-financing implied that students had to pay a symbolic amount. The third category of students, entirely self-financed, was introduced later through the Law on University from 1998 (Zakon o univerzitetu, 1998). According to this law, higher education was "free of charge" for state funded students (i.e. they did no pay the tuition fee although had other costs related to studying (books, administrative fees) or living) and the co-financed students were still paying a modest tuition fee. However, the tuition fee for self-financed students was very high at some faculties. Division between state funded, co-financed and self-financed students was made during enrolment and students were ranked according to the results from high school (maximum is 40% of overall number of points) and results from an entrance exam(s) (maximum is 60% of overall number of points). Students were able to change their status during studying on the basis of results (passed exams). It is interesting to notice that the introduction of tuition fees in Serbia was not primarily driven by the state budget gaps and lack of financial resources. Although the economic crisis had a peak during 1992-1993, introduction of tuition fees was implemented five years later, in 1998.

71 Full-time studying offers a legal possibility to delay the military service, which is still obligatory (although from 2003 onwards it is possible to state conscientious objection). It was especially important and used by male students to avoid drafts and possible transfer to the battle field. This implies that certain, although undeterminable, number of administratively registered students weren't actively studying.

The current system originates from 2002 when the category of co-financed student was abolished through the legislative changes (Zakon o univerzitetu, 2002). This solution definitely widened the gap between state funded students and self-financed students and this is still present. The latest legislative change, the Law on higher education, was adopted in 2005 (Zakon o visokom obrazovanju, 2005) and introduced new dynamics of studying and to a certain extent also a new arrangement for funding of higher education — negotiated funding. But, in practice, funding of higher education is still implemented according to the sub-legal regulations set initially set during the 90s.

The introduction of tuition fees was followed by development of regulations and mechanisms for their approval, use and distribution. The amount of tuition fees is initially proposed by the individual faculties and has to be approved at the university level and afterwards by the Government. However, this procedure is strictly formal and lacks real power, since in practice the faculty proposals are rarely modified. The ongoing process of accreditation of higher education institutions will introduce new mechanisms of determination of *numeri clausi* and essentially will diminish the state control of enrolment policy. The overall number of students is prescribed by standards for accreditation and should be calculated according to the number of employed academic staff and faculty facilities (Nacionalni savet za visoko obrazovanje, 2007). Apart from the formal approval of the level of tuition fee, the only real control mechanism of enrolment policy the state will have will be through setting the ratio between state funded and self-financed students.

Other important source of own income for the faculties is the introduction and charging of various forms of administrative fees. The ratio between public funding and own income in overall faculty income strongly influences the level of autonomy in managing expenditures. Public sources are itemized and must be used according to their specific purpose, limiting the financial autonomy when it comes to managing funds obtained from the state. On the other hand, the faculties are completely independent in the management of their own income. This aspect will be additionally analyzed for three selected faculties.

4.3.2 Macroeconomic aspect and structure of funding higher education in Serbia

Research on institutional aspect of funding higher education should be put into the wider context of state budgetary planning. The system of funding of higher education is defined by a specific sub-law act called The Regulation of normatives and standards of working conditions of universities and faculties for activities funded through the budget (in further text: Regulation, see Vlada Republike Srbije, 2005).

Present approach of defining rules for funding higher education through sub-legal acts, has an advantage because the Regulation, as a sub-law, can be

changed more easily by the Government's decision, which also implies that the time lags caused by the lengthy parliamentary procedure are avoided. However, the overall budgetary policy determines the level of disposable public expenditure for higher education each year. According to the projected change of public revenues and the desirable level of budget balance, the Ministry of Finance prepares the Bill on the State Budget with prospective changes in all kinds of public expenditures. This means that the process of preparing the Bill on the State Budget directly influences the level of funds to be allocated to higher education. Upon Government's verification, the Parliament adopts the Law on the State Budget. This all needs to be done before the start of the next calendar year[72].

The amount of allocated public expenditures for higher education is part of overall budgetary funds allocated for education, which are part of overall public expenditures. On the macro level, allocated public expenditures are upward rigid and cannot be changed during the implementation of budget. The main reason for such rule is preserving budgetary balance and maintaining macroeconomic stability. This rule directly implies that it isn't possible to increase funding for any specific public function during budget implementation. Funding of higher education is highly influenced by this rule. In practice, if there are some changes on the micro level which imply an increase of the needed state funding (later discussed in greater detail), despite the obligation prescribed by the Regulation, the state will not be able to transfer sufficient funds to the faculties. However, because funds for higher education are itemized, during implementation of budget some funds can be reallocated from one itemized component to another and through this partly provide necessary funds for certain needs on the micro level. Nevertheless, the total amount for higher education remains the same.

4.3.2.1 Instruments of state funding for academic staff salaries

The bulk of the state funding of higher education is dedicated to the salaries of academic (and administrative) staff. This part of the Regulation is the most complicated and therefore will be explained in detail.

It is important to understand that the amount of salaries of academic staff at one faculty is solely calculated on the basis of weekly teaching hours and does not take into account time spent on research or administrative work. The non-teaching activities are part of the Regulation dedicated to the job description of the academic staff within their full working time, but the Regulation actually does not take these activities into account when calculating the total amount the State provides (or should provide) for the salaries of academic staff.

The formula for the calculation of the **amount of funding for the salaries of academic staff (A)** on the first glance may look simple.

72 In Serbia, budgetary year is the same as calendar year.

Basic instruments for calculating amount of funds allocated from state for funding academic staff salaries are:

1. **Number of needed academic staff (NNAS)** for all study programmes at the faculty level
2. **Average Coefficient (AC) of the complexity of work** for all academic staff members at respective faculty
3. **Basic Salary (BS)** for employees in the higher education sector.

A = NNAS x AC x BS

The **basic salary (BS)** is an element of the formula which is determined by the collective agreement between trade unions and the state. It is usually negotiated every year and adjusted from time to time to account for inflation. On the basis of basic salary all other employer contributions to health, social, unemployment and pension insurance are calculated and the gross amount is taken as the basis for further calculation. The **average Coefficient (AC)** represents an average of all coefficients of the academic staff employed at a specific faculty. Every member of academic staff has certain coefficient by which the basic salary is multiplied in order to determine his/her actual salary. The coefficient is dependent on the educational degree and academic rank and it should reflect complexity and responsibility of the specific work position. The Regulation prescribes the coefficient for each category of academic staff and these coefficients are used for calculation of funding for budget transfers for salaries. However individual faculties are free to determine other coefficients with their employees in specific collective agreements.

The **number of needed academic staff (NNAS)** in the formula is the most complicated factor to calculate. The classification of academic staff is done according to a legal procedure that prescribes condition for appointment to a certain academic rank. Basically, academic staff is divided into two different categories: lecturers and assistants. The Regulation foresees allocation rules taking into account these two categories. A typical study programme in Serbia consists of a certain number of hours of lectures and certain hours reserved for exercises (seminars) in each course. According to the Law, the academic staff entitled to teach lectures are the lecturers (academic ranks from docent to full professor). Teaching assistants are entitled to give the so-called "exercise-courses" or seminars[73] (academic ranks from novice teaching assistant to full teaching assistant)[74].

The Regulation defines that lecturers teach **6 teaching hours per week**

73 Lecturers are also entitled to give exercises, but this is an exception.

74 The academic ranks are to a certain extent connected to the qualifications: in order to become a full teaching assistant one needs to hold the old master degree (the so-called Magisterium), while to become a docent, one needs to have a PhD. The Law on higher education from 2005 does not include teaching assistants, but refers to such positions as collaborators in teaching.

and that assistant teach **10 teaching hours per week**. The purpose of these quotas is primarily to define the amount of state funding for salaries of academic staff at specific faculty.

The **number of needed academic staff (NNAS)** at one faculty is therefore the sum of needed lectures and needed assistants. The needed number of lecturers and assistants is calculated when the so called **total number of normative weekly teaching hours (NWTH) for lectures** is divided by 6 and the so called **total number of normative weekly teaching hours (NWTH) for exercises** is divided by 10.

NNAS = (Σ NWTH for lectures / 6) + (Σ NWTH for exercises / 10)

The sums of normative weekly teaching hours (NWTH) for lectures and exercises is the most complicated to calculate and explain. The term "normative" in this case indicates that these numbers of weekly teaching hours have nothing to do with the educational reality and real number of teaching hours per week taught by the academic staff. On the contrary, the term is used to stress that these numbers are product of the norms set by the Regulation. The **number of normative weekly teaching hours (NWTH)** for lectures and exercises is determined by the following three factors:

1) **Number of students (NS) financed by the state enrolled for the first time in a specific year of studies**. The concept of enrolment in the academic year of studies is formally out-dated as of academic year 2005/06, since the students (according to the Law on higher education from 2005) should enrol into specific courses in order to accumulate credits. Students financed by the state are however obliged to accumulate 60 credits in one academic year. However, one should bear in mind that the Regulation is not amended to include the changes foreseen by the Law on higher education and it still "sees" students, in terms of funding, as being enrolled into a particular academic year, despite innovative solutions of the new legislation[75].

75 Events from the autumn 2007 and 2008 show that the not-updated Regulation undermines the innovative solutions of the Law on higher education. Since large proportions of state-funded students failed to secure the necessary 60 ECTS to enrol into the next year of study as state-funded, the universities asked the government to allow them to enrol students with less ECTS accumulated. The government approved the proposal, essentially allowing the universities to break the Law on higher education, in 2007. In 2008, a significant pressure was made both by the students and by the higher education institutions to amend the transitional provisions in the Law, allowing students to be state funded if they collect 42 ECTS in the 2007/08 academic year, 48 ECTS in 2008/09, 54 ECTS 2009/10 and finally the required 60 ECTS in 2010/2011.

2) **Sum of weekly lecture classes (ΣWLC) individual student is obliged to attend within one specific semester according to the study programme**. This is calculated for each semester of the study programme within regular duration of studies. Values for two semesters belonging to one academic year are added together and divided by 2 in order to get the number of weekly lecture classes for a specific year of studies. In case that faculty organizes more study programmes average number of all lecture classes within all study programmes in one semester and in all years of studies is relevant.
3) **Sum of weekly exercise class (ΣWEC) (lab classes, seminars and similar; further referred as exercises). These are exercise classes individual student is obliged to attend per week within one specific semester according to the study programme**. This is calculated for each semester of the study programme within regular duration of studies. Values for two semesters belonging to one academic year are added together and divided by 2 in order to get the number of weekly exercise classes for specific year of studies. In case that faculty organizes more study programmes average number of all exercises within all study programmes in one semester and in all years of study is relevant.

This summing up of all lectures and exercises for each semester and year of study is possible based on the old system of the organization of study programmes where almost all courses were obligatory and curriculum very rigid with each course located in the specific semester and year of studies. Out-datedness of the Regulation is even more obvious if we have in mind that the current system of studies includes increased proportion of elective courses within one study programme and that it is based (or should be based) on the accumulation of ECTS credits. In practice, importance of this aspect is smaller because curricula reforms aren't implemented in the full scope at all faculties in Serbia. But on the other hand, present system prescribed in the Regulation is hampering further curricula reforms, since it does not support the different organisation of studies.

For example, if students according to the study programme have to choose one elective course of 6 credits at the second year of studies and if faculty organizes several electives in parallel for students with different interests, work of academic staff within these courses will not be financed through the (old-fashioned) Regulation. The Regulation recognizes that only one course with one lecturer within programme is organized while in reality several courses with different academic staff run in parallel.

The listed three factors for **determining number of needed normative weekly teaching hours (NWTH)** are cross-related in the present Regulation through the establishment of nine **"normative groups"** that are the crucial instrument of allocation of state funding for the salaries of academic staff.

Normative groups separate faculties according to some specifics of the educational process. They set norms in terms of number of student which should participate in one class of lectures and one class of exercises at a faculty in a specific normative group.

Below is the list and description of nine normative groups with list of faculties belonging to each group.

Normative group 1

Faculties	Faculties of law, faculties of political sciences.				
Educational groups	1st year	2nd year	3rd year	4th year	5th year
Lectures	140	105	85	65	55
Exercises	50	45	40	35	30

Normative group 2

Faculties	Faculties of economics				
Educational groups	1st year	2nd year	3rd year	4th year	5th year
Lectures	110	85	65	50	40
Exercises	40	35	30	30	25

Normative group 3

	Faculties of sports, faculties of security studies, faculty of special education and rehabilitation, faculty of organizational sciences, technical faculties in Čačak and Zrenjanin (outside of university centres), faculty of occupational safety				
Educational groups	1st year	2nd year	3rd year	4th year	5th year
Lectures	95	75	55	45	35
Exercises	35	30	25	25	20

Normative group 4

Faculties	Faculties of Agriculture, faculty of Forestry				
Educational groups	1st year	2nd year	3rd year	4th year	5th year
Lectures	90	70	50	40	30
Exercises	30	25	20	15	15

Normative group 5

Faculties	Faculties of civil engineering[76], faculties of architecture, faculties of mechanical or electrical engineering, faculties of traffic and transport engineering, faculties of mining and geology, faculties of technology and metallurgy					
Educational groups	1st year	2nd year	3rd year	4th year	5th year	6th year
Lectures	85	65	45	35	25	25
Exercises	25	20	15	10	10	10

Normative group 6

Faculties	Faculties of medicine, faculties of dental medicine, faculties of pharmacy, faculties of veterinary medicine					
Educational groups	1st year	2nd year	3rd year	4th year	5th year	6th year
Lectures	80	60	45	30	25	25
Exercises	25	20	15	10	10	10

Normative group 7

Faculties	Faculties of natural sciences				
Educational groups	1st year	2nd year	3rd year	4th year	5th year
Lectures	70	50	40	30	25
Exercises	25	20	15	10	10

Normative group 8

Faculties	Faculties of philosophy, faculties of philology, faculties of teacher training				
Educational groups	1st year	2nd year	3rd year	4th year	5th year
Lectures	60	40	30	20	20
Exercises	20	15	10	10	10

Normative group 9

Faculties	Faculties of arts
Educational groups	All years of studies
Lectures	12
Exercises	5

76 Faculties that are part of normative groups 4, 5, 6, 7 and 8 are at some universities independent legal entities but at some universities they are departments within the same faculty.

These notional groups of students per lecture and exercise are not, in reality, related to the size and organization of the actual groups for lectures and other types of courses within a particular study programme, especially having in mind that there are also tuition-fee paying students and that different study programmes at one faculty in reality have different numbers of students enrolled into them. Normative groups should be understood as notional categories used solely to calculate the amount of money provided by the State for the salaries of academic staff based on the number of students financed by the state. They basically serve to calculate the **total number of normative weekly teaching hours of lectures and exercises (ΣNWTH**) at one faculty in all years of studies (see the formula below). The assumption therefore is that only students financed by state attend the faculty and that all students attend one notional study programme with certain number of obligatory weekly lecture and exercise classes in each semester and year of study. This number **of weekly lecture and exercise classes (ΣWLC and ΣWEC) for each year of studies** within notional programme is calculated as average of sums of weekly lecture and exercise classes for all actual study programmes at a faculty, separately for each academic year of studies.

ΣNWTH for lectures = Σ ((NS per each year of studies / size of the normative lecture group) x ΣWLC for each year of studies))

ΣNWTH for exercises = Σ ((NS per each year of studies / size of the normative exercise group) x ΣWEC for each year of studies)

Example 10: Number of academic staff in a faculty in the 4th normative group

The first input element is the structure of the average study programme. If we assume that at this faculty average study program lasts for 5 years and in every year of study student is obliged to attend 6 subjects with each subject being organized in the form of 2 lecture classes per week (WLC) and 2 exercise classes per week (WEC). Usually subjects vary in number of lecture and exercise classes, but for the sake of simplicity and illustration, we took that all subjects are same in this respect.

WLC = 6 subjects x 2 lectures classes = 12 lecture classes per week for all years of study
WEC = 6 subjects x 2 exercise classes = 12 exercise classes per week for all years of study

The second input element is the number of students financed by the state enrolled at each year of studies (NS). For example, it can be assumed that this faculty in all study programmes in total 180 students financed by the state in the first and the second year of studies. In the third, fourth and fifth year of studies we can assume that number of student financed by state in all

study programmes is 150. This is an idealistic case and the number of students financed by state is determined every year in October after all students register for the next year of studies[77]. The number of students financed by the state enrolled in every year of studies is than divided by the number of students in the normative groups for lectures and exercises for the specific type of faculty in order to get the number of normative lectures and exercises for every year of studies. The results are then rounded. The number of normative lectures and exercises for each year of studies is then added. Having in mind that the faculty in question is classified in the 4th normative group in the Regulation, the calculation for the number of normative weekly teaching hours **(NWTH)** for lecture and exercises looks as follows.

∑NWTH for lectures =
= ∑ ((NS per each year of studies / size of the normative lecture group) x WLC for each year of studies)) =
= (180 / 90) x 12 + (180 / 70) x 12 + (150 / 50) x 12 + (150 / 40) x12 + (150 / 30) x 12 =
= 12 (2 + 3 + 3 + 4 + 5) =
= 12 x 17 =
= 204 NWTH for lectures

∑NWTH for exercises = ∑ ((NS per each year of studies / size of the normative exercise group) x WEC for each year of studies) =
= (180 / 30) x 12 + (180/ 25) x 12 + (150 / 20) x 12 + (150 / 15) x 12 + (150/15) x 12 =
= 12 (6 + 7 + 8 + 10 + 10) =
= 12 x 41 =
= 492 NWTH for exercises

Number of needed academic staff (NNAS) for this faculty is then easy to calculate using formula. Results are always rounded upwards.

NNAS = (∑ NWTH for lectures / 6) + (∑ NWTH for exercises / 10) =
= (204 / 6) + (492 / 10) =
= 34 lecturers + 50 assistants =
= 84 of academic staff

Knowing the number of needed academic staff is the crucial element for the further calculation of the amount which needs to be transferred to individual

77 In order to keep up the status of students financed by the state they have to pass certain amount of exams in the previous year of studies. Tuition fee paying students can also become students financed by the state if they pass certain amount of exams from the previous year of studies with certain average grade. In the new system based on accumulation of ECTS credits students have to accumulate 60 credits in one year of studies if they want to be financed by the state in the next year of studies. In both old and new system, this leads to the fact that number of students financed by the state is not decreasing so significantly over the years of studies (drop out) because it is partly neutralized by tuition fee paying students changing their status into state financed students.

faculties for salaries of academic staff. To remind the reader, this number is multiplied with average coefficient of complexity (AC) of work and basic salary (BS). The formula used here is:

A = NNAS x AC x BS

We see that main input factors for determination of the amount of money for the salaries of academic staff are: the structure of the average study programme and the number of students financed by the state. In financial terms, the Regulation is solely input oriented and only the teaching function of higher education institutions is financially valued when core funding is allocated to individual faculties.

The classification of faculties into different normative groups serves to link the structure of the study programme and the number of students financed by the state at a specific year of studies. The underlying rationale seems to be that the costs of educational process are similar for faculties that are in the same normative group. Nevertheless, it is very hard to figure out the *ratio legis* in the classification of some faculties in a particular group. Some of the peculiar examples are:

a) most of the faculties of the technical sciences are classified into the 5th normative group, but two faculties (technical faculties in Cacak and Zrenjanin) are in the 3rd normative group, even though there are other technical faculties outside of their respective university centres;
b) faculties of economics aren't positioned in the same group with other faculties of social sciences; the 2nd normative group consists only of faculties of economics.

In practice, the Regulation is stimulating the faculties to adjust their employment policy towards calculated number of needed academic staff. If the number of the actual academic staff is different than the calculated number of needed academic staff, the state then takes into account 25% of this difference when allocating funds. Lower number of employed academic staff implies that salaries will be higher (and that the workload will also be higher) and higher number of employed academic staff implies that workload will be smaller, but so will the individual salaries. For example, if the number of employed academic staff at the faculty form the previous example is 92 and number of needed academic staff according to the Regulative is 84, then the state will finance 86 lecturers and assistants (84 + 0,25 x (92- 84) = 86) instead of 92 or 84.

In practice, faculty officials who informed this case study pointed out that state does not transfer funds according to this rule and is only transferring funds for number of needed academic staff. This rule has been changed without formal noticing and proper arguments from the state. Again, besides rules prescribed in the Regulation, the state is implementing decisions that are based on complete discretion. Possibly, this chain of events can be consequence of

macroeconomic aspect of funding higher education and lack of funds for other itemized components.

When it comes to other sources of income, individual faculties are autonomous to determine their own procedures of distribution of own income for salaries of academic staff. They can increase the basic salary or increase coefficients of the complexity of work. However the ratio between coefficients for different academic ranks determined in the Regulation must be respected when the internal distribution mechanism is determined.

In general, the Regulation directly influences the employment policy of each faculty, but the strength of influence depends on the ratio of own income in the overall income. Each year there may be certain changes in number of students funded by the state and/or number of employees may change, due to retirement or promotion to higher academic ranks. Each faculty internally determines the workload of academic staff. In practice, significant autonomy exists at faculties with high percentage of own income and faculties can decide to engage more employees or different groups of employees that aren't recognized (and consequently not paid) by the State. Implementation of a particular employment policy depends only on the decision of the faculty management. For example, faculty management can decide whether to employ 5 or 6 lecturers. Therefore, faculty management can decide to employ 5 lecturers with higher workload and consequently higher salaries or to employ 1 lecturer more that will diminish both workload of others and their salaries. The only obligatory rule according to the accreditation process is that faculty must have certain number of academic staff whose workload doesn't exceed the prescribed standard (Nacionalni savet za visoko obrazovanje, 2007). Although accreditation process is still on-going, there are already indications that this rule influenced faculties to employ more academic staff. In addition, faculties can "out-source" some disciplines and engage some part-time academic staff which also has effects on diminishing costs and enhancing disposable income.

4.3.2.2 State funding for salaries of non-academic staff

Allocation of funds for salaries of non-academic staff is done according to a number of rules prescribed in the Regulation. Similarly to the allocation of funds for salaries of academic staff, the Regulation prescribes the number of administrative employees that are funded through the state. An individual faculty has the autonomy to engage more non-academic staff, however, salaries of these staff are to be covered from other sources, i.e. own income.

The first step is to determine the minimum of non-academic staff at each faculty for maintaining the basic functions. The Regulation prescribes that the minimum of academic staff at each faculty is 10 and this number is not related to any variable depending on the size and or other characteristics of the faculty in question. It is very important to notice that all other instrument for calculating the additional number of non-academic staff funded by the state is connected

to certain variables. Each mechanism implicitly refers to some of the faculty organizational units where non-academic staff is employed.

Extra non-academic staff is approved according to the following rules:

1) one non-academic staff for each of ten academic staff (e.g. if there are 60 academic staff at faculty there should be 6 extra non-academic staff) — administration,
2) one non-academic staff for every 300 students — administration of student records,
3) one non-academic staff for every 800 square meters (enlarged by the ratio between laboratory space and overall faculty space) — cleaning personnel,
4) one non-academic staff for each laboratory — laboratory assistants,
5) one non-academic staff for each 15 000 library units — librarians,
6) three non-academic staff for each separate building or entrance gates with door keeper service — door keepers and security employees.

The salaries of non-academic staff are determined by the same formula as for the academic staff.

The formula for the calculation of the **amount of funding for the salaries of academic staff (A)** at one faculty looks simple and it contains following elements:

a) **Number of non-academic staff**
b) **Average Coefficient of the complexity of work (that is different from academic staff)**
c) **Basic Salary (BS)** for employees in the higher education sector

4.3.2.3 State funding of operational costs

The Regulation also defines the system of refunding for the operational costs of faculty. The rule is to allocate funds according to specific itemized costs (publishing, international cooperation, current and investment maintaining of facilities, overall running costs etc.). These specific activities are precisely connected with different variables and the Regulation prescribes the exact amount of money that state will allocate to certain activity or cost:

- funding of publishing activities is calculated per number of academic staff,
- funding of international cooperation and purchasing of international books and magazines is calculated per number of academic staff,
- funding of materials for education, culture and recreation for extra-curricular activities of students is calculated per number of students financed by the state,
- funding of current and investment maintaining of faculty facilities is calculated per square meter of the faculty facilities.

The most important group of operational costs are overall running costs of faculty (heating, electricity, phone etc.). The Regulation defines a completely different concept of financing running costs than for the rest of the operational costs. Essentially, the most important variable for calculating the rate of state participation in funding of these costs is the proportion of state funding in the overall faculty income. The Regulation prescribes that the proportion of funding overall running costs will be up to the ratio of state funding in the overall faculty income. The key formulation is construction *"up to the ratio"*. This means that state can make a discretionary decision about the extent of covering running costs[78]. If there is a lack of budget revenues, state can unilaterally decide to diminish the level of funding and therefore faculties would need to cover the difference between planned and transferred funds. This is a huge problem for faculties with smaller percentage of own income where functioning of the faculty can be endangered. It is possible that this group of faculties aren't able to pay running costs and that the working process at faculty is stopped.

Another problem arises from the fact that the level of funding of running costs is calculated according to the final accounting report for the previous year, since this report is the basis for determining the ratio between state funding and own income. However, in practice, the adoption of the final accounting reports for previous year happens after the beginning of the next budgetary year (till the end of February). Although, it can be concluded from available data that the ratio between the state and own income is steady during several years, this situation increases the possibility for discretionary decision making. This means that funding of running costs for the first two or three months of a specific (budgetary) year is done on the basis of data from two years ago. However, there seems to be no clear rule as to when the state will start to use the new ratio. Finally, it must be stressed that both the budgetary year and the faculty financial cycle aren't synchronized with the academic year, which lasts from October to the following September.

This has a strong implication if, for example, less self-financed students enrol at faculty in October, therefore decreasing own income of the faculty. Consequently, the ratio between state funding and own income is changed and state should transfer more funds for running costs, where, in fact, faculties will have fewer funding for operational costs till March next year, when the records from the previous year are known and the new ratio between own income and core funds can be calculated.

This may seem as a minor problem, however, prices of certain running costs may significantly increase within a short period of time in Serbia. Since the state[79] is controlling and determining price level of running costs, it can

78 Theoretically, the state can decide not to cover any percentage of operational costs, because this kind of decision will also fit the "up to the ratio" formulation.

79 Here, the term "state" is used both for central government and also local municipalities, because local municipalities are in charge for determining price level of certain running costs.

decide at a certain moment during the budgetary year to increase price of certain running cost (e.g. electricity) for a particular reason. On the other hand, the same state is providing funding of running costs according to price level of running costs at the beginning of the budgetary year and projected funds in the budget. This means that the state is funding expected level of running costs, not the actual level of running costs. So, when deciding to increase the price of e.g. electricity as a running cost, the state is indirectly worsening the faculty's financial situation. During previous years, faculties were trying to obtain from the state the amounts owed, i.e. the difference between actual and expected level of running costs. The difference of funds has never been transferred to faculties due to the already mentioned upward rigidity of the state budget.

4.3.2.4 Financial planning at the faculty level

Another difficulty in system of funding of higher education rises from the mismatched timing of the financial planning at faculty level and the timing of the process of state budget preparation. In order to inform the state budget preparation, the individual faculties are obliged to prepare and adopt their financial plans for the next budgetary year in June. However, such financial plan cannot be accurate in June because the total number of students enrolled is not certain until October when students register for the next year of studies, since there is another enrolment round into the first year of study in September faculties and students of higher years of study are having their final exam period. Until exams in September are over, it is very hard to determine how many students will fulfil the requirements necessary to enrol into the next year of study and to remain in the state-funded status. Similarly, it is not clear how many students will lose their previous status of students financed by the state and subsequently pay a tuition fee for the next year of studies. Although *de jure* financial plan is the highest act for financing of faculties, *de facto* it isn't obligatory in implementation and only provides general frame of managing faculty income and expenditure. There are almost no control mechanisms for the implementation of financial plans in practice. Since the state budget is adopted in December, faculties can be certain neither about the exact level of state funding they have for the next budgetary year, nor if it will be sufficient for the number of students enrolled in a particular status (state-funded or self-financed). For example, if there is a large difference between planned and real structure of income from tuition fees[80] this will also influence implementation of planned expenditures, so financial plans would need to be changed.

80 The same problem are expectations of certain percentage of financing from cooperation with the industry.

4.4 The models of distribution of income within the faculties

The previous subchapter explained the general functioning of the financial system at the institutional level as well as its relation with the regulations concerning state funding. This subchapter intends to firstly describe the system of internal distribution of the financial resources within individual faculties, with a special focus on investment into development. Secondly, it aims to conceptualise models of redistribution based on a number of aspects which represent the key determinants of the existence of a particular redistribution model.

4.4.1 Investment in development and infrastructure

Special focus on development planning and implementation of development projects is chosen because it reflects priorities of each faculty and also their attitude towards upgrading facilities in the future. Different approaches at faculties is even more interesting if we know that till recently there was no unique framework of standards that prescribes size, quality or condition of faculty facilities[81].

Generally, most faculties lack space for maintaining the educational process. Some faculties have improved conditions or in rare cases have built new facilities using income generated from tuition fees or cooperation with third parties. It is necessary to point out that the only factor which influenced involvement in such kind of development projects was the dedication of faculty management and support of employees. As a matter of fact, this is even more interesting because it implies that the employees made a clear decision to invest part of their prospective salaries into the improvement of faculty facilities. This model of development policy is also important, having in mind that faculties did not have any kind of obligation for having specific size and structure of facilities until 2007 (presently, sufficient space per student is one of the most important standard for accreditation of higher education institutions). Although state was occasionally co-funding this kind of projects, it was not a part of a clear state policy, e.g. development of certain study fields, investment in less developed regions, improving position of faculties with less own income or similar.

The pre-condition for the implementation of long-term development projects is the multi-year budgetary planning, which still does not exist in Serbia. Therefore, faculties are faced with uncertainty when submitting budget proposals each year. Apart from the high level of internal autonomy, this is one of the reasons why faculties have different approaches to development projects.

81 Until adoption of standards for accreditation in 2007.

4.4.2 Description of three cases

Three faculties in question differ significantly in the structure of their income. The first faculty has around 60% of income from the state (for salaries, operational costs and research), 15-20% coming from tuition and administrative fees and 20-25% coming from third party sources (from projects with companies, consultancy work etc.). The organizational structure of this faculty is very complex since it has 13 departments and 10 undergraduate study programmes which usually have various possibilities for specialization within each of them. There are also various master and doctoral programmes. Two third of all freshmen are enrolled as state funded students, while only one third of first year students pays for tuition. The tuition fee is the same for all study programmes even though difference in attractiveness (evaluated in terms of number of candidates for number of places offered) of individual study programmes exists. Usually there are no free places left after the enrolment period. The income based on tuition and administrative fees is gathered at the faculty level and it is not distributed to the departments. These financial resources are usually firstly assigned to cover the operational costs of the faculty (communication, heating, electricity, maintenance etc.), then for investment in the infrastructure at the faculty (according the investment priorities) or distributed to staff salaries (usually part of the income from charging administrative fees). In case that they supplement the salaries, the distribution is equal regardless of the department where individual staff member works and regardless of the number of students in the study programmed organized by a particular department. It is dependant only on the staff category (academic rank and level of education) and years of work at the institution. Essentially, this is the same system used for calculation of the salaries defined by the Regulation or/and collective agreements. The income gathered from third sources through cooperation with the private sector, different projects and consultancies is distributed directly to the personnel in charge for these projects and their departments. For these purposes the faculty adopted special regulation which postulates that only 5% of such income remains at the faculty level as a kind of administrative charge. In this way, the individual motivation of the academic staff for earning money from such activities is quite high. This can be one of the reasons why the proportion of income from third sources is slowly increasing over the years. For the development policy of the faculty 1, it is crucial to understand that it adopted a centralized model of generating and managing own income. This model allows coherent development policy, which is proposed by the faculty management and then verified by the faculty council. Various projects are part of development policy and each of them is ranked according to its priority. However, the faculty is constantly facing significant obstacles since the disposable own income is often not sufficient and the implementation of more ambitious development projects depends on co-financing by the government. This implies that sometimes lower priorities were implemented because state decided to co-fund them instead of larger projects. Due to these co-funding constraints, the investment in development of this

faculty can be severely harmed if state decides not to support some multi-year projects which are high on the priority list.

The second faculty depends more on state funding which equals 70-80% of its entire income. The rest is coming mainly from income gained by charging fees to students, both for tuition and for administrative services. The organisational structure of this faculty is also very complex with 17 departments and 18 undergraduate study programmes. The interest of students for study programmes varies significantly. There are 5 study programmes for which interest is so immense and up to 3 students apply for one study place. On the other hand, some study programmes have difficulties even to fill the quota of students financed by the state budget. Every year around 60% of all freshmen study places are offered as financed by the state and around 40% are tuition paying students. In general, some departments take care about several hundreds of students, while some departments have as little as 10 students in total. This imbalance between departments with respect to attractiveness of study programmes and number of students in each of them led to the distinct solutions concerning distribution of the financial resources at the faculty level. The financial autonomy of individual departments is significant. Each department has its own sub-account within the faculty and many decisions concerning the use of money from fees are made at the department level. Tuition fees for 5 more attractive programmes are 50 percent higher than tuition charged for all other programmes. Income from tuition fees is equally divided (1:1) between faculty and departments. Administrative fees are distributed in various ways depending on the kind of fees. For example, fees charged to all students for exam registration are distributed in such a way that 70% of amount belongs to departments and 30% to the faculty, while the fees charged for registration for the next semester of studies in total belong to the faculty. Income from the cooperation with third parties and from different projects is extremely small and in total left to the financial management of individual departments or to the academic personnel involved in these activities. From the interview with the person involved in the finances and accounting at this faculty, we found out that almost all income gathered at the faculty level from charging fees is spent on operational costs and investment in the building of the faculty. The distribution models for the money gathered at the departmental level are very diverse, but in general money is spent on supplementing staff salaries. One of the consequences of this model is the fact that departments that have higher number of students have more opportunities to improve the conditions for teaching and learning (books, equipment etc.). This faculty does have neither a formal plan of development and investment priorities, nor a plan for allocating part of the own income at faculty level. It can be concluded that this approach is mainly influenced by two factors:

1. smaller number of self-financing students in comparison to other two faculties and consequently smaller ratio of own income and
2. specific model of internal organization which is determining specific distribution of own income.

The structure of income sources of the third faculty in this analysis is characterised by relatively small participation of the state funding in the overall budget (state funding represents less than one third of the total faculty budget). From the data provided by the faculty, it is not possible to identify with precision the structure and exact percentages of the income gathered from charging fees to students and third sources (only the sum of these two is expressed). However, from the interview with the official coming from this faculty it can be concluded that both student fees and income generated through projects with companies and offering courses to the general population (computer courses etc.) are both significant sources of income, although income from fees is larger. The structure and study offer of this faculty is much simpler in comparison with the two previous cases. There is basically one general study programme with 9 specialisations which student choses after the second year of studies. Only one third of first year students enrol in the state-funded status. The budget is entirely managed at the faculty level and most of the non-state financial income is spent on salaries and operational costs of the faculty, with the strong preference for supplementing salaries of the academic staff. The supplement to the salaries from the income gained from charging fees is distributed equally to all staff following salary categories defined by the state Regulation or/and collective contracts. Supplementing salaries based on the work efforts and outcomes of individual staff is seen as welcomed by our informant, althought it seems that it is seen as such by the majority of staff. There is a strong belief that income based solely on fees will be stagnating or decreasing in future. One of the potential mechanisms for diversification of income sources at this faculty is fostering cooperation with the private sector. The income from the third party sources (projects and consultancy activities) are expected to significantly increase in the future, due to economic growth. However, the distribution of this kind of income at the faculty level is not precisely regulated and it is done in an ad hoc manner. Another important achievement is founding of specific organizational units which are providing special courses (languages, ICT) for students and other citizens. An interesting management model was developed for such units: most of the teaching staff is engaged part time, but the executive manager of the unit is appointed as a full-time employee at the faculty. Since the model of distribution is centralized and formally egalitarian it allows for development projects and larger investment in infrastructure. However, implementation of development projects at this faculty heavily depends on management. The former management team had strong dedication to invest funds into the faculty facilities but this trend didn't continue. Employees were against continuation of investing in faculty facilities and consequently development projects will not be implemented in the near future. The investment in the infrastructure is done reluctantly because of the understanding that investment of the own income in the "state property" is not seen as economically rational.[82]

82 If there would be some form of separation of property between the state and the faculty the property that was obtained from own-income of the faculty would become collective private property.

Table 10: Overview of the three faculties concerning sources of income and number of programmes and departments (average period 2004-2007)

	State funding (% of the total budget)	Student fees (% of the total budget)	Other income (% of the total budget)	Number of departments	Number of study programmes
Faculty 1	60	20-25	15-20	13	10
Faculty 2	70-80	20-30	0	17	18
Faculty 3	25-30	Not available	Not available	6	1

4.4.3 Distribution of resources – Trilogy of aspects

The short description of the practice of internal financial management at the three faculties selected for this case study illustrates the diversity of solutions within the system of a disintegrated university. Based on the insight into the practice from these three faculties, an analytical model named **trilogy of aspects** is constructed in order to analyse models of distribution of financial resources within the faculties. The trilogy of aspects is seen as dynamic and aspects within it as interdependent.

Three aspects within this analytical model are:

1. Structure of income
2. Organisational and academic differentiation and
3. Rationales and beliefs of institutional decision makers

Original assumption of the trilogy of aspects which influence distribution of the income at individual faculties is that they are equally important and interrelated and therefore do not stand in a causal relationship nor they preceed each other in a hierarchical or historical order.

Two out of three aspects in the trilogy can be characterised as being objective in nature (structure of income and organisational and academic differentiation) and these aspect can be easily determined. The third aspect (rationales and beliefs of institutional decision makers) is subjective and it can only be observed through its manifestations in interviews and overall discourse within the faculty in question.

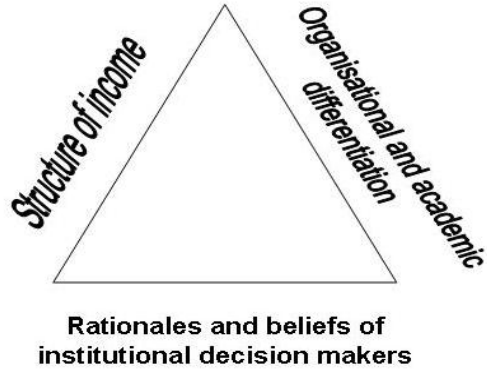

Figure 2: Interacting aspects of financial distribution models

4.4.3.1 Structure of income

There are two indicators related to this aspect:

1. **Financial dependence from the state funding**: Expressed in percentage of total faculty budget coming from state with three main categories: low = below 33%, moderate = between 33%-66% and high = more than 66%
2. **Orientation towards generation of own income**: Seen as ratio between income gained from charging fees to students and income from cooperation with third parties (projects, consultancies). Here we can identify three categories of non-state funding: income dominantly **student fees based**; income **balanced** between student fees and third party funds; and income dominantly **based on third party funds;**

If we try to categorise three faculties from our case study we would identify them in the following way in respect with their structure of income: Faculty 1 — moderate dependence from the state and balanced orientation towards sources of non-state financing; Faculty 2 — high dependence from the state and orientation towards fees; Faculty 3 — low dependence from the state and orientation towards fees (see Table 11).

Table 11: Structure of income

	Faculty 1	Faculty 2	Faculty 3
Financial dependence form the state funding	Moderate	High	Low
Orientation towards sources of non-state income	Balanced orientation between fees and third party funds	Orientation towards fees	Orientation towards fees

4.4.3.2 Organisational and academic differentiation

The aspect of **organisational and academic differentiation** is marked by four main indicators:

1. **Diversity**: Number of different undergraduate programmes (high = more than 15, medium = 5-15, low = less than 5)
2. **Interdisciplinarity**: Percentage of the courses offered within all study programmes taught by academic staff from the other department at the same faculty but not from the department mainly in charge for the programme (high = more than 40%, moderate 15-40%, low = less than 15%)
3. **Distribution of students**: Ratio between number of students at the most populated and the least populated study programme at faculty. Faculty 3 is taken as point of reference because they have only one study programme. Other faculties are ranked with respect to the faculty 3.
4. **Difference in attractiveness**: Ratio between two most different programmes in terms of: number of candidates and number of offered study places within the first enrolment period. Faculty 3 is here taken again as point of reference because they have only one study programme although with 9 specialisations which student chooses after the second year of studies. However, students indicate their preferences for specialisation upon enrolment and they can change them during their studies (the three faculties were ordered as high difference, medium difference, no difference)

Application of these indicators with the data from the three faculties creates Table 12:

Table 12: Three faculty cases
according to the organisational and academic differentiation

Organisational and academic differentiation	Faculty 1	Faculty 2	Faculty 3
Diversity	Medium	high	low
Interdisciplinarity	Moderate	low	low
Distribution of students	ratio between 2 and 3	most unequal	equal
Difference in attractiveness	medium difference	highest difference	no difference

In general, it can be assumed that the high diversity of study programmes, low interdisciplinarity within organisation of the study programmes, extremely unequal distribution of the students between study programmes and significant difference between attractiveness of the individual study programmes are

on the one extreme side of the aspect named organisational and academic differentiation. This aspect can be represented as a continuum with two extreme poles (see Figure 3).

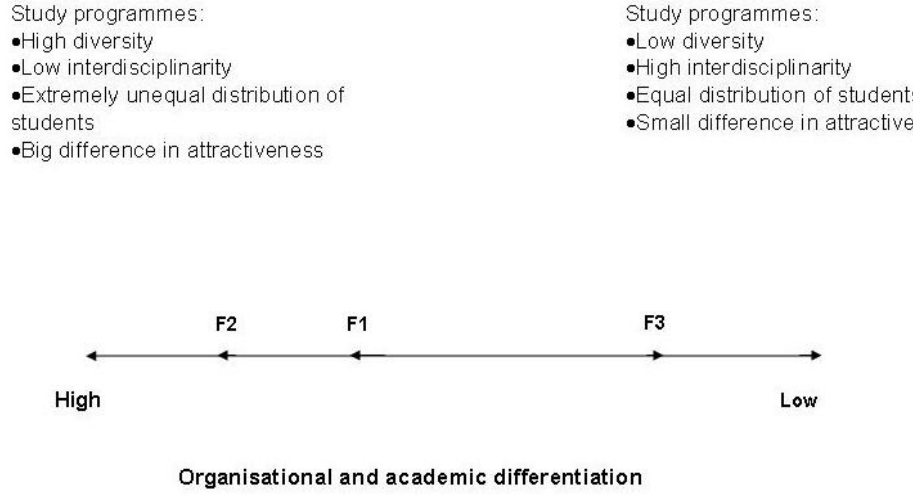

Figure: 3 Continuum of differentiation

It is however important to stress that extreme poles are only ideal theoretical models and that there is probably no institution with such extreme academic differentiation. Most faculties are placed between the two extremes of the continuum with different level of diversity, difference in attractiveness, interdisciplinarity and equality of student distribution among their study programmes. For example, the Faculty 1 would be located somewhere in the middle, but tending towards higher organisational and academic differentiation; Faculty 2 shows almost extreme organisational and academic differentiation and Faculty 3 is much closer to the opposite pole being far less academically differentiated.

4.4.3.3 Rationales and beliefs of the institutional decision makers

The third category from the triology of aspects concerns the political aspect of trilogy which influences the distribution of the resources within institution. This aspect is neither easily expressed through indicators nor it was possible to conduct a detailed analysis in the scope of this case study. Existence of certain rationales and beliefs concerning distribution of financial resources is not solely dependent on the external (objective) factors (in this case structure of income and academic differentiation), but it has partly also intrinsic set of rationales

dependant on the political dynamics in each faculty. With regard to this we can identify mostly two general types of rationales and beliefs concerning distribution of own income: the first which is more egalitarian and the other which places a stronger emphasis on internal competition.

Another big dividing line concerns general orientations towards alternative sources of income other than student fees. Some faculties have more financial independence and develop entrepreneurial strategies, while other remains more closed and sceptical towards alternative sources of financing. More equal distribution of the resources is characteristic for faculty 1 and faculty 3, while internal competition for resources dominate faculty 2. Our interviews show a significant amount of preference, conviction and rationalisation for specific choice concerning distribution of income. Finding roots for such rationales and beliefs requires a more complex study of individual decision makers at the faculty and their mutual interaction.

4.4.4 Models of distribution

The first step in conceptualising models of distribution of income within the faculties under study was to classify faculties according to the indicators developed for the aspects of sources of financing and academic and organisational differentiation (see previous sections). The findings were compared with responses from the interviews which served as a reference for the aspect of the rationales and beliefs of policy makers (see previous section), which lead to the models which are named according to the **idea guiding the distribution of resources**. These leading ideas have the nature of implicit principles of action observable at relevant faculties more than they represent explicit policies stated by people we interviewed. The main idea of Faculty 1 is the distribution of income in the function of **integration** of the faculty departments into one strong institution. Faculty 2 is much more aligned towards the idea of intensifying **internal competition for scarce resources** which leads to the disintegration of the faculty. Faculty 3 is lead by the idea of increasing as much as possible **financial independence** from the state and relying on own income and profitable activities. These models can be described with elements of the trilogy of aspects as well as rationales of the actors concerning relationship of the faculty towards state as provider of funding and regulator of the system.

1. **Integrative model**: moderate academic differentiation, moderate dependence on state funding, balanced orientation towards third party money and student fees as a new sources of income are related with egalitarian centralised distribution of income from fees, strategic investment planning and existence of models which stimulate academic staff to be entrepreneurial and bring more third party income. The tendency of this model is **internal integration for the best use of current resources and strategic investment and planning** oriented towards **diversification of the sources of income and long-term**

stability. The current state regulations concerning funding are seen to be supporting the development, but the state should develope a long-term strategy for higher education and fund it.

2. **Disintegrative model**: high academic differentiation, high dependence on state funding and orientation only on student fees as only source of own income is related with the development of the internal completion for (scarce) resources and unequal decentralised distribution of own income, non-existence of strategic planning and no initiatives towards alternative sources of financing. Tendency of this model is **further feudalisation of the resources at the faculty level and potential instability** in case of decrease of the present sources of income. The current state regulations are seen as unsupportive of the diversity of programmes and the level of investment from state is seen to be too low.
3. **Pro-independence model**: low academic differentiation, low dependence on state funding and orientation towards fees as a source of income is related with centralised egalitarian distribution of own income, which is spent mostly on salaries and creation of the own service oriented profitable units. The **financial sustainability of this model of faculty is increasing and the features of a traditional public institution are disappearing**. Tendency of this model is potential full independence from the state and orientation towards market and profit. The current state regulations are seen as a burden for development.

Described models: integrative, disintegrative and pro-independence, with their dominant ideas represent the reflection of the faculty level financial systems on the disintegrated structure of university on the one hand and on the other hand reflection on the state as funding provider and coordinating factor within the system of higher education. The integrative and disintegrative model responds to the decreasing but still dominant role of state as provider of funds by having no independence tendencies in relation to the state and to the university. They adjust to the disintegrated university either by copying the university structure and organisation of finances to the faculty level (e.g. disintegrative model which basically represents a disintegrated faculty within a disintegrated university) or by choosing integration within own faculty being aware of the negative repercussions of the disintegration at the university level (this can be characterised as a small integrated university within a bigger disintegrated university). The third model, with already low presence of state as provider of income, may mean that it becomes increasingly difficult to classify the faculty as a public higher education institution and to justify belonging to a public disintegrated university. This model of pro-independence is characterised by lack of confidence for the present legal and institutional framework. This faculty demonstrates tendencies towards leaving fully this framework and functioning like a private higher education institution.

Table 13: Models of distribution of resources and their leading ideas

	Integrative	Disintegrative	Pro-independence
Structure of income	Moderate dependence from the state and balanced orientation towards alternative sources of financing	High dependence from the state and orientation towards fees	Low dependence form the state and orientation towards fees
Organisational and academic differentiation	Moderate towards high	High	Low
Rationales and beliefs of institutional decision makers	Egalitarian Centralisation	Fostering internal competition Decentralisation	Egalitarian Centralisation
Relationship towards state as provider of funds and regulator	State regulation is seen as satisfactory for development. State should indicate long-term strategies and fund it.	State regulations seen as blind for diversity among faculties. Level of state funding is seen as too low.	State regulations seen as a burden.

4.5 Concluding remarks

The previous sections of this institutional case study show the strengths and weaknesses of the system of financing higher education in Serbia from the perspective of a typical disintegrated institution and its constituent units.

The structure of a disintegrated university seems to be the crucial factor which influences the functioning of financial system at the institutional level. Disintegration of universities into legally independent entities with financial autonomy appears to be a stronger factor in determining financial procedures, models of distribution and management of resources than the complex rules prescribed in the Regulation. These macro level solutions are designed to follow the structure of disintegrated university and incorporate faculties as crucial and independent actors. One of the results of such specific positions of faculties is a significant amount of internal diversity within the system of finances within one institution (university). This diversity is manifested most of all in the distinct models of distribution of resources influenced with three aspects: structure of income, organisational and academic differentiation and rationales and beliefs of the faculty decision makers.

This situation has both positive and negative effects on the institution.

Positive effects of the financially disintegrated university could be observed through the creativity in the design of individual solutions concerning management and distribution of resources at different faculties. Such creativity of solutions carries in itself potential for greater adaptability to the changes in the external environment which influence financial situation of higher education institutions (changes in the legislation and funding regulation, further withdrawal of the state from funding of higher education, competition from other higher education institutions, demographic changes in the student population etc.). Not having the whole institution organised and financed in a single manner may allow for a better flexibility of some of the organisational units. It appears that a good recipe for long-term adaptability to the changes is to balance different sources of income and emphasise cooperation and integration within the faculty.

Negative effects of the financial disintegration of university are various and are potentially outnumbering positive effects. Firstly, benefits from potential economy of scope at institutional level do not exist. Every faculty develops solutions and services for itself and sharing of resources for the mutual benefit of participating faculties is a very rare phenomenon. Secondly, within the present system motivation for competition among faculties for academic prestige and resources becomes stronger. The gap between the so called "poor" and "rich" faculties becomes wider, stimulating some faculties with a lot of own income to almost totally loose characteristics of public higher education institutions. This means that they become more similar to private faculties and keener to liberate themselves from the parental role of the state as a provider of funding as well as from association with other faculties within the university (see pro-independence model of distribution of resources). Third negative set of repercussions of the financially disintegrated model of university is the limited space for coherent development strategy of the institution in terms of investment plans, joint research projects and integrated study offer. In the present system such kind of strategy either does not exist of it is fragmented into several uncoordinated faculty initiatives with very limited impact.

Beside the dominant influence of the disintegration of university on its financial functioning, the influence of the macro or system level solutions regarding funding of higher education plays a significant role in shaping of the financial system of the institutions in Serbia. The biggest deficit of the present system of state funding is the lack of any analysis of the micro-efficiency of the predominantly input based Regulation. The present system prescribed in the Regulation, which is in many parts written very arbitrary and lacks precision, is seen by faculty representatives to be obsolete. There is no assessment of its effects, therefore it is not possible to evaluate to what extent the present regulation supports the proclaimed goals of higher education. For example, the Regulation is solely focusing on funding teaching and doesn't include research. Research activities of staff are funded through a separate funding channel (via the Ministry of Science). The work in administration or research performance is not a factor which influences salaries of academic staff, which may lead to a

significant focus on teaching. Teaching orientation opens space for gaining own income through charging fees instead on gaining funds through cooperation with industry or application of research results. The substantial financial autonomy of individual faculties is directly related to the percentage of income gained from fees and third party funds, having in mind that the Regulation stimulates faculties to go into this direction in order to avoid uncertainties of state funding (especially for operational costs).

In addition, the present system of state funding does not make a distinction between type of education and study programmes which require direct state support in order to survive (e.g. study programmes in minority languages and cultures) and study programmes for which there is strong demand. Instead, the state Regulation treats all faculties and study programmes equally, regardless of their actual need for state funding (the only difference being the normative groups for allocation of staff salaries which focus on faculties and not individual study programmes). The existence of some expensive, not particularly popular, but socially important programmes is left in the hands of individual faculties which are forced to decide if they want to maintain and finance them from other sources of income. Lastly, the Regulation is oriented towards keeping status quo in the higher education system by avoiding any output oriented financial incentives. Individual members of academic staff and individual faculties are not financially motivated to achieve more in their work or to be involved in the activities related to reform of higher education.

It is important to stress that input and line-budget system of funding higher education institutions (in this case faculties) is not in line with the latest higher education legislation which assumes negotiated funding of higher education institutions (negotiations between the state and the university). Reasons for inaction in implementation of the new system of funding higher education may lie in the path-dependency behaviour of the major actors (state, institutional leadership and management and individual academics) which keep the old and well-worked solution despite its deficits in order not to face difficulties related to change. The second speculative explanation would be that there is a minimal equilibrium of interest of different actors to maintain the present situation. The main concern of the state may be that the new negotiated funding could enlarge public expenditures. Management of faculties is concerned that the change of funding higher education would decrease state funding so they would need either to decrease salaries or try to enlarge own income. This shift can be especially unfavourable for faculties with small number of tuition fee paying students and limited cooperation with third parties. The interest of employees is mainly focused on amount of salaries and any change of system of funding that will preserve or increase amount of salaries would be acceptable. Influence of students unions and other higher education stakeholders who can ask for more accountability of the higher education institutions is rather weak. The administrative capacity of university for change of the funding system is very limited and presently it is questionable if it is capable of handling any centralization of functions at

university level, negotiate effectively with state for the funds or implement coherent policy for distribution of income.

Presently it is not possible to assess, on the basis of policy documents, regulations and decisions, whether higher education is considered to be one of the priorities for development of Serbia. Although the funding of higher education is still part of the current budgetary planning, faculties are not able to clearly recognize any kind of state strategy in future. Usually, state officials pointed out that ratio of funding each public service should be enlarged in comparison to the growth of GDP. Instead of a superficial quantitative comparison of investment into (higher) education as % of GDP, inclusion of structural aspects of funding higher education as well as a clear differentiation of aims and possible effects of the alternative increase of expenditure should become an important part in the future development strategy. Mere fulfilling of international guidelines (e.g. 6% of GDP for education as a whole) may not be a proper solution. Therefore, it is essential that macro level perspective (ratio of higher education funding to GDP) is followed with micro-efficiency analysis of allocation of disposable funds.

Finally, alternative mechanism of funding higher education can be provided by fiscal policy measures. Enlargement of public expenditure is not the only instrument of increasing higher education financing. Introduction of tax deductions would create an opportunity for closer cooperation between economy and higher education and it would stimulate companies to allocate more sources into financing of higher education (Babin, 2008).

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5.
BY WAY OF CONCLUSION

The concluding chapter starts off with a summary of findings from the regional and institutional analysis (chapters 3 and 4). The chapter continues with a brief discussion on how to choose an appropriate funding model for a particular higher education system.

5.1 Summary of findings

The summary of findings will be organised on the basis of different levels of analysis (system, institution and student).

In terms of the system level, the first conclusion is that there is a wide gap between funding instruments and the proclaimed goals for higher education. It is not possible to adequately analyse the effects of the current systems of funding higher education due to lack of data. Nevertheless, it was possible to make some observations as to the extent to which the funding arrangements (do not) correspond to higher education policy. The discussions related to financing of higher education tend to focus on details, instead of a thorough analysis of the entire system. The sensitivity of funding arrangements with respect to small study programmes of specific national or cultural importance (e.g. minority languages) but of low attractiveness is limited to none, possibly leading to the situation in which institutions are forced to close this programmes and departments. The policy for funding higher education is not comprehensive (i.e. various aspects of funding are not tuned to each other or are not discussed as a whole) and there is also internal incoherence of funding arrangements (e.g. funding is not tuned to the new legislation or other regulation). Allocation of core funds is characterised by the so-called “spoon feeding” (i.e. line-item budgets) and input based criteria, the latter being in clear contradiction with the trend to focus on learning outcomes, present in all the countries under study (as part of Bologna process reforms). It should also be noted that, despite the fact that national legislation underlines the connection between teaching and research and that policy documents or statements by government officials also support this view, higher education funding is, in reality, funding for teaching in higher education.

This means that, as far as funding policy is concerned, teaching and research are seen as two separate activities.

The above mentioned line-item budgeting also means that the institutions have a very low level of autonomy with respect to distribution and spending of core funds. Significant lack of transparency in terms of their own income (income from student tuition and administrative fees or other sources) can be observed in all countries under study. How own income will be distributed within an institution is more determined by the internal structure of the institution (disintegrated university) and specific characteristics of the faculty (as discussed in chapter 4), than by the arrangements existing at the system level. Therefore, one can observe a significant diversity between and within units of the university, i.e. between and within faculties. Similar to the situation at the system level, there is no evaluation to what extent the specific internal redistribution and allocation of finances support fulfilment of institutional or faculty goals. The lack of sensitivity of funding arrangements on small programmes (see above) may also lead to further disintegration of subunits of an already disintegrated university. Diversification of income of institutions is done predominantly through tuition fees. There is no clear criterion for determining the amount of tuition fee. Furthermore, individual institutions show to be quite inventive in setting and charging a variety of administrative fees.

From the student perspective, it should be noted, first and foremost, that students in the countries under study tend to be quite dependent on parents during their studies (unlike most countries in western or northern Europe). Countries do not collect and analyse data on student income and costs of living, which is one of the reasons why tuition fees are usually set quite high with respect to income (if seen relative to the average salary). Direct student support is limited to a very small number of students and it is, directly or indirectly, heavily based on merit, since direct measures of merit (grades, progress rate) are connected to the socio-economic background as well. It is interesting to notice that when discussing various aspects of financing higher education, the discussions on tuition fees and student support are separated. Despite the fact that most countries introduced tuition fees, the student support system did not change to a significant extent. This implies that there is a lack of consideration of consequences of introduction of tuition fees on equity or, even more, that the policy goal of equity in higher education is not adequately supported by policy instruments, in this case, funding.

In addition to this, the fact that the funding of higher education is heavily input based and that there is no adequate control of spending of income (including core funds), leads to the conclusion that there is no incentive in place that would assure fulfilment of any of the *Es* (economy, equity, efficiency and effectiveness) for higher education.

5.2. Which funding mechanism to choose?

The issues of the distribution between public and private expenditures for higher education, the consequences of different allocation mechanisms and the relationship between the state and the quasi-market in higher education are interesting since they boil down to the question of the best model of funding of higher education. Concerning this, Eicher and Chevaillier (2002: 72) give a cautionary remark:

> *"History has moulded the various national school systems in different ways so that there is no unique optimal "scientific" solution to the problem of the [financing] of post-compulsory education. One must be aware that it would be a dangerous mistake to impose radical changes which failed to take into account the practical and social constraints and the political process of each given society."*

Therefore, there is no such thing as *"best model"* that countries can import and simply introduce into their own higher education system. One should rather think about the most appropriate funding system for a given country. Eicher and Chevaillier (2002: 72) believe that *"it is still possible to find solutions suitable to each given situation, as long as one is clear about one's own priorities and objectives"*. Nevertheless, one should also be aware that *"objectives are often volatile and depend on political agendas and priorities"* (Jonbgloed and Vossensteyn, 2001).

For these reasons, it is of utmost importance that all stakeholders involved in the decision making, as well as various beneficiaries of higher education, are aware of each others' goals, values and beliefs as well as of the restrictions imposed by legislation or availability of resources.

As was presented, funding of higher education may affect to a significant extent various aspects of higher education, e.g. access to higher education. Some of these aspects are closely connected to a set of wider political goals or societal values, norms and beliefs, sometimes even reflected in the constitution of a given country.

There are examples of systems in which higher education is, constitutionally, seen to be free of charge (in public institutions), thus rendering tuition fees illegal (e.g. Finland). Even though there might be groups or sometimes even particular governmental representatives who might advocate the introduction of tuition fees, it is evident to all involved that such move would require extensive debates with high political intensity and, finally, a constitutional amendment. The political goal of equity, and also a shared societal belief[83] is, thus, translated

83 The discussion about the relationship between political goals on the one hand, and beliefs, norms and values on the other goes beyond the scope of this publication. Suffice to say that the authors do not assume any simple causal relationships between the two.

into a particular funding arrangement. This, of course, does not mean that a tuition-fee-free system is a guarantee of equity (see the example of Norway in chapter 2), but that, in this particular context, it is thought of being the most appropriate model to achieve the goal of equity[84].

This means that, within a particular society, the general political goals and societal norms, values and beliefs should be visible enough to enable the relevant stakeholders (including society at large) to evaluate to what extent higher education and its funding mechanism contribute to their achievement. If necessary, they can also be the background of the debate about the development of higher education and the appropriate funding mechanism to sustain this development.

Sometimes more evident goals are the goals of higher education. As was stated when discussing the role of higher education, these can be complex and diverse and conflicting, not only in terms of the relationship between teaching and research (be it a positive or a negative coupling) but also in terms of simultaneous pursue of *excellence* (especially in research), *efficiency* (in terms of the more favourable output-input ratio), *effectiveness* (referring to the idea of suitable output), *equity* (in terms of opportunity as well as in terms of outcomes) and *economy* (as frugality in expenditures).

Resources, both public and private, that can be allocated to higher education are, in fact, limited. While some countries may decide to invest a bit more into (higher) education and a bit less, e.g. in military, it is not realistic that such moves would increase the resources available to the point where trade-offs and prioritisation are not necessary. Therefore, it is important that careful decisions are made as to the relative importance of each of the above mentioned *E*s (exscellence, efficiency, effectiveness, equity and economy), with due analysis of possible short, mid and long term consequences. The relative importance of one *E* over the other is, primarily, an issue of political and social concern.

In addition, it should be recognised that an appropriate funding arrangement should be flexible enough to allow some parts of the system, some institutions or some programmes to be more focused on one or the other *E*. An appropriate funding system is, first and foremost, sufficiently flexible and sufficiently sensitive to differences between and within institutions and between disciplines and study programmes.

Finally, an appropriate funding system does not stand alone — it needs to be supported (and to support) an appropriate quality assurance system, in order to enable continuous monitoring of results on system, institutional and student level. Without continuous monitoring, it would be impossible to evaluate whether the model deemed appropriate by policy is indeed appropriate in reality.

84 Another example of how funding reflects wider political goals is the Lisbon Strategy of EU becoming the most competitive knowledge based economy in the world. Innovation and research are seen as they key ingredients of the so-called "knowledge triangle". Therefore, in 2002, the European Council set the goal of 3% GDP of research investment by 2010.

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Annex
Funding of higher education
— questionnaire —

Funding of higher education — questionnaire

Terminology and abbreviations

- HEI = higher education institutions
- Non-university sector = polytechnics, vocational HEIs, HEI that do not conduct research
- Staff = all staff employed in a particular HEI, regardless of their focus of work (e.g. academic staff, teaching staff, research staff, administrative staff, other support staff etc)
- Students = full time students
- Faculty = constitutive part of a university that has a legal identity of its own
- Department = constitutuve part of a university that does not have a legal identity of its own
- Chair (in Serbian katedra), Section etc. = units smaller than the departments or faculty which focus on a particular discipline or subdiscipline (e.g. Chair in theoretical mathematics within the Faculty of Mathematics, Section for sociology within the Faculty of Philosophy)
- Gross enrolment ratio — ratio between a. the total number of students enrolled in higher education of a particular level (e.g. bachelor) regardless of their age and b. the total population belonging to the age cohort relevant for that level of higher education (in case of 3 year bachelor this is usually 18-21).

A. Overall information about the HE system

a. Total number of:
   i. Students
      1. in public and in private institutions
      2. in university and non-university institutions
   ii. Staff
      1. teaching
      2. administrative
      3. research (if these can be separated from teaching)
   iii. Institutions
      1. How many accredited?
      2. How many private?
   iv. Programmes

b. Gross enrolment ratio for higher education.
    i. Historical trends (is it increasing or decreasing in the last ten years. Please provide a numerical estimate of the trend, e.g. it has doubled in the last ten years)
c. How many programmes are there and what portion of students are enrolled into the so-called "Bologna type programmes". Please give information for each cycle.
d. Is there a division between university and non-university (i.e. polytechnics, vocational higher education) in terms of regulation?
    i. If yes, how many students and how many institutions are in these two categories (university vs. non-university)
    ii. Were there any recent changes in this sphere?
e. Where does research take place:
    i. Within universities only
    ii. Within independent research institutes only
    iii. Within industrial research institutes only
    iv. A combination of the above (please explain)

B. System level funding — general information

a. What % GDP is allocated to (if possible to identify):
    i. higher education as a whole
    ii. teaching function of higher education
    iii. research
    iv. student welfare?
b. What are the historical trends in terms of investment into higher education:
    i. Increasing or decreasing
    ii. Provide numerical estimates
c. What is the ratio between public and private investment in higher education?
d. Can you identify the distribution of this allocation:
    i. According to the type: what % from the total public funds is intended for;
    ii. salaries of staff;
    iii. infrastructure and equipment (electricity, water, possible renting of space, supplies, computers etc.)
    iv. improvement of teaching (e.g. through specific reform programmes or projects)
    v. Depending on the type of the institutions, i.e. how much goes to universities and how much to the non-university higher education institutions?
e. Do private HEI have access to public funds

i. If yes, please explain
ii. If not, please state if this possibility is discussed within your country

C. System level funding — procedures and criteria for allocation of public funds

a. Are the procedures and criteria for the allocation of public funds the same for university and non-university sector?
If yes, please respond to questions C.b – C.d once; if not, please respond twice, for university and non-university sector separately and clearly indicate which responses are related to which type of institution.
b. Are the funds transferred to:
   i. Institutions
   ii. Students (e.g. voucher system)
   iii. A combination of the above

Please note that there is a separate section dealing with student support systems. Therefore, "public funds" here does not include the money that is available to students in the form of grants, loans, housing, food or other subsidies.

c. If the funds are allocated to institutions (replies C.b.i or C.b.iii above):
   i. How are the funds for teaching and research allocated
      1. separately
      2. not separately

      Explain
   ii. Are funds allocated as a lump sum or item-by-item (sometimes referred to as spoon feeding)?
   iii. Are funds allocated for each academic year separately or there are longer (or shorter) time frames, e.g. three-year cycles of funding?
   iv. Is there:
      1. a formula that determines the amount allocated to the institution (and if yes, what are the main characteristics of the formula)
      2. a contract between HEI and the state (and what is the time frame that the contract is "signed")
      3. a negotiation process between HEI and the state (please briefly explain the characteristics of the negotiation)?
   v. What is the criteria to determine the total amount allocated to HEI:
      1. input — e.g. number of enrolled students, number of employed staff etc.

2. output – e.g. number of graduated students, number of published research papers etc.
3. a combination of the above – please explain.

vi. Are there any discussions about the possible change in the procedures and criteria for the allocation of public funds?
vii. Are HEI part of the VAT system or not?
viii. Do local, regional or provincial authorities, where applicable and possible, allocate some of the public funds to HEI? If yes, please explain.

d. If funds are given to students through a voucher system (reply C.b.ii above), please explain the characteristics of the system in terms of the following:
   i. How many students are eligible for voucher funding (i.e. public funding), as a proportion of the total number of students?
   ii. If a portion of students is eligible for voucher funding, how is it determined which students will be eligible to receive vouchers?
   iii. Are vouchers usable for private HEI as well?
   iv. Is there any research done about the effects of a voucher system, e.g. student choice behavoir studies or studies about the effect of the public-private divide in higher education and the situation of public HEI?
e. Are there any extraordinary public investments in HEI? For example. funds dedicated specifically to the implentation of the Bologna declaration.

D. Institutional level funding

a. What is the average institutional budget in your country (total budget, private and public sources of funds)?
b. How are public funds distributed within the institution?
   i. From the institutional level to individual faculties or deparments, i.e. top-down. Please give an outline of the procedures of distribution of funds from the university to the faculty level.
   ii. From the faculties level to the institutional level, i.e. bottom-up. Please give an outline of the procedures of allocation of funds from the faculty budgets to the university. Is there a fixed portion of the faculty budget or a specific type if income that is tranferred to the university level or are there some other arrangements?
   iii. A combination of the two possiblities. Please explain.
c. Ratio between teaching and research funds with respect to:
   i. Public funds received by HEI
   ii. Total funds of a HEI

d. What is the structure and the amount (as % of the total budget of HEI) other sources (not public) of income (please provide an estimate of % of the total budget for each type of outer income, questions D.d.i to D.d.iv):
   i. Tuition fees
      1. what do they include (e.g. are books included or not)
      2. what is the average amount (please provide it in local currency and an estimate in euros) in public and private institutions? Are their significant differences between institutions or within institutions (i.e. some faculties charge more than others)?
      3. how is this amount calculated? Does it cover full cost of study?
      4. how many students pay the tuition fee in public institution? If a portion of students pay, what is the procedure and criteria for determination who is state funded and who has to pay the tuition fee?
   ii. Administrative fees
      1. do HEIs charge fees for certain administrative tasks (e.g. issuing of certificates)?
      2. if yes, what administrative tasks (several typical examples) are being charged and what are the amounts (please provide the amount in local currency and an estimate in euros)? Who decides on these amounts?
      3. can you give an estimate how much, on average, an institution can earn from charging administrative fees?
      4. do students pay these fees to:
         a. the faculty
         b. the university
         c. the state?
   iii. Cooperation with third parties (spin-offs, renting of facilities and space to third parties, consultancy services). Please provide a list of the most frequent and most lucrative forms of cooperation with business, industry, spin-offs and other forms of generating additional income to the university.
   iv. Donations, gifts, legacies

E. Student level funding

a. Tuition fees, please provide an average and the range (maximum, minimum) in local currency and an estimate in euros
b. Other costs related to studying — books, equipment, material, administrative taxes
c. Living costs — accommodation, food, transport, health services, culture & entertainment etc.

d. Opportunity costs — costs incurred through foregone earnings (on the basis of average earnings of persons with secondary education qualifications and average duration of studies; in comparison with expected average earning of graduates)
e. Income of students
    i. How much parents contribute? How? (e.g. providing funds, students still living at home)
    ii. How many students work while studying? Do you have any estimates how much on average they can earn?
    iii. Are their any state grants or loans available to students? Please explain.
    iv. What other support do students have from the state:
        1. Accommodation subsidies
        2. Food subsidies
        3. Health system
        4. Other discounts and subsidies (public transportation, discounts for cultural events etc.)
        5. Can students apply for a study related loan in a bank? If yes, please explain how, what are the terms, are their estimates of the total debt incurred and how many students apply?
        6. Are there other sources of student support apart from public funds (e.g. scholarships from private foundations)? Give examples of major schemes.

F. Observations and remarks

a. Do you have any observations and remarks regarding the content and format of the questionnaire?
b. Do you have any comments about the terminology used?
c. Would you like to comment on the availability of information about funding of higher education in your own country?
d. Do you have any other comments, suggestions, remarks etc?