



**Towards Sustainable & Equitable
Financing of *Higher Education***
in Bosnia and Herzegovina, Montenegro and Serbia

Towards Sustainable & Equitable Financing of Higher Education in Bosnia and
Herzegovina, Montenegro and Serbia

Report on the System Funding of Higher Education
in Federation of Bosnia and Herzegovina

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List of Abbreviations

ABC	Activity based costing
BD	Brcko District of Bosnia and Herzegovina
BIH	Bosnia and Herzegovina
EC	European Commission
EU	European Union
EUD	Delegation of European Union
FBIH	Federation of Bosnia and Herzegovina
FMoES	Federal Ministry of Education and Science
FLHE	Framework Law on Higher Education in Bosnia and Herzegovina
GER	Gross Enrolment Ratio
HE	Higher Education
HEA	Agency for Development of Higher Education and Quality Assurance
HEI	Higher Education Institution
IDA	International Development Association
IPA	Instruments for Pre-Accession
ISCED	International Standard Classification of Education
MoCA	Ministry of Civil Affairs of Bosnia and Herzegovina
MoE	Ministry of Education
NGO	Non-governmental Organization
PBF	Performance based funding
QA	Quality assurance
QF	Qualification frameworks
RC	Rectors' Conference
RS	Republika Srpska
WB	Western Balkans

1. INTRODUCTION

This Report is about the system of financing of higher education in Federation of Bosnia and Herzegovina and the system of financing of higher education in Brcko District of Bosnia and Herzegovina. The Report is prepared under the EU Tempus Project „*Towards Sustainable & Equitable Financing of Higher Education in Bosnia and Herzegovina, Montenegro and Serbia*”. The project design has foreseen the preparation of the two separate reports for Bosnia and Herzegovina (BIH) – one for Republika Srpska (RS) and the other for the Federation of Bosnia and Herzegovina (FBIH) and Brcko District BIH, in line with the administrative division of the country. In addition to the two entities, it should be noted that the Federation of Bosnia and Herzegovina itself BIH does not have the unique system of higher education.

Following the Dayton Peace Agreement (1995), BIH comprises of two entities: the FBIH and the RS. In 1999 the Brcko District BIH was established as an autonomous jurisdiction with the same powers as the two entities. The FBIH consists of 10 cantons. All aforementioned levels have a typical governmental structure, with parliaments, executive branches and courts. Competences are divided between government of BIH and entities, while in FBIH they are divided among the government of Federation and cantonal governments.

Constitutional responsibility for all levels of education in BIH lies with the RS, 10 cantons in the FBIH and the Brcko District. That means that there are 12 fully responsible education authorities (ministries). The RS, 10 cantons in the FBIH and the Brcko District have laws for all levels of education, budgets, strategies, policies and implementing bodies and institutions. The system of higher education and its funding is being elaborated in a separate report.

System of higher education in Brcko District BIH portrays simple structure of unique system, regulated by one High Education Law and single ministry for education (Department for Education of the Brcko District Government). Nevertheless, there are certain challenges ahead of this system: rapid development of private institutions, lack of regulation, accreditation and institutional capacities within higher education authority, and proven cases of diploma issuing abuse.

The remaining 10 cantons of the Federation of BIH have 10 higher education authorities (Ministries), each regulated by separate (10 in total) Higher Education Laws, and characterised by different practice of higher education funding. Of course, it is possible to show higher education in FBIH as the sum of higher education in cantons, but it is not possible to discuss about coherent policies or approach to higher education in general, nor, consequently, about the unique model of higher education funding. Therefore, this Report presents different practices of HE funding in all cantons, coming up with joint recommendations for the whole FBIH.

The **purpose** of this Report is to analyse different practices regarding higher education financing, trying to contribute to answers to following questions: who pays for the higher education – students or governments, how has the public money been spent, is it possible to enhance the accountability of higher education and how the system can be more efficient and results oriented. The Report provides recommendations for both levels: higher education authorities and higher education institutions.

The rationale of all these activities is to encourage both policy makers and higher education institutions in Western Balkans countries to make a step forward towards establishment of a *performance based funding*. Numerous EU policy papers and official documents¹ have determined the performance base funding (PBF) as the main policy and very important strategic goal in the reform of higher education financing. All these documents have its roots at the *EU 2020 Strategy for smart, sustainable and inclusive growth* and entire *Bologna process*, as the main EU policy for higher education.

The report is organised into several chapters, which roughly follow the structure of the questionnaire used for data collection. After Introduction and overview of previous interventions, in Chapter 2, there is explanation of HE system in FBiH: policy, governance & trends, size, institutional landscape and the governance arrangements. In Chapter 3 we provide funding framework and the allocation mechanism for public funds, including model of integrated university included in the cantonal treasury, model of non-integrated university, grants to the public HEIs, grants for science, accountability and state student support system. Finally, Chapter 4 is dedicated to discussion of main conclusions.

1.1. Previous interventions

This exercise is not the first intervention in reform of higher education financing in Bosnia and Herzegovina. The first discussion about changes in funding of higher education started through the World Bank Education Development Project (2000 – 2004, IDA loan of 10 mil US\$). As a part of overall reform, all higher education institutions existed in that time in Bosnia and Herzegovina developed their Institutional Development Plans. That was the first strategic approach in higher education governance. Strategic planning is of crucial importance for the introducing of PBF (a higher education institution (HEI) needs to indicate its strategic goals and

¹e.g. The EU Council Resolution of 23rd November 2007 on modernising universities for Europe's competitiveness in a global knowledge economy (OJ L 289, 3.11.2005, pp. 15-22.); The conclusions of the EU Council and of the Representatives of the Governments of the Member States, meeting within the Council, of 26 November 2009 on developing the role of education in a fully- functioning knowledge triangle (OJ C 302, 12.12.2009, pp. 3-5.); The EU Council conclusions of 28th November 2011 on the modernisation of higher education, and so on.

plans to be clear and transparent what is going to be financed by public money). Development of strategic planning at the level of HEIs in Bosnia and Herzegovina has significantly growth after the Agency for Development of Higher Education and Quality Assurance (HEA) adopted the Criteria for Accreditation of Higher Education Institutions in BIH (Official Gazette of BIH No 75/10 and 44/13) in 2010, as a part of quality assurance process in BIH. The first criterion is *Development and strategy of higher education institution*². Nowadays, almost all HEIs in BIH have developed their strategies, according to aforementioned criterion. That has been showed through the process of accreditation of higher education institutions in BIH³.

In 2008 EU Delegation in BIH under the IPA programme commissioned a Feasibility Study for Reform of Higher Education Financing. A comprehensive report was presented in early 2009. Expectedly, but on very credible and evidence based way, the Feasibility Study showed that the system of higher education financing in Bosnia and Herzegovina (meaning in both entities, RS and FBiH) was inadequate, based only on inputs, very often suffered the lack of real criteria, and as a such completely non-efficient in both, economic and academic sense. *“Barely 50 percent of students who begin studies survive until graduation (522/1,000) ... The financial implication of these figures is that some 43 percent of the budget of public universities is going to finance those who leave and repeat, obviously without any educational or economic effect.”*

The Feasibility Study resulted with a large two-year EU technical assistance project “Reform of Higher Education Financing in Bosnia and Herzegovina”, which was implemented from October 2011 to February 2014 with the budget of app. 1.5 mil €. The purpose of the Project was to contribute to improvement and modernisation of the system of financing of higher education in BIH in order to create a system which is economically sustainable and efficient. The representatives of public universities, responsible ministries of education and ministries finance had worked jointly for almost two and half years to develop better models for higher education financing in BIH. Activity-based-costing (ABC) was developed as a pilot methodology, which converts the input budgets (TS line-item allocations, grant transfers, university fee-income, other income sources) into ‘output’ costs; calculates the costs of the university activities by study-programme, cycle, faculty, and type of student (public fulltime student, self-financing students, part-time students, and distance learners); calculates and graphically represents surplus and deficit-making study programmes and cross-subsidisation between public and private sources. User Guide has been produced for the ABC excels sheets. Training on analysis and exploitation of collected information was provided to all public universities. Some indicative analyses were

² „Higher education institution develops its strategy in the process of public consultation with all the stakeholders, adopts it formally and makes it publicly available. With its strategy, higher education institution defines its vision and mission, strategic goals and relevant plans and activities for each strategic goal.“

³According to data at the HEA web-page (www.heg.gov.ba), 19 out of 47 HEIs passed process of accreditation, additionally 12 is in the process. All 31 (out of 47) HEIs have developed their strategies, according to Criterion 1.

done in individual universities, but mainly for management purposes. Analysis of relevant policies and strategies within BIH, with particular focus on areas relevant to work was conducted. HEF context, road map and recommendations document was drafted. So far, responsible ministries and managements of public universities have accepted none of the documents from the Project and exercises have remained at the level of pilots.

To conclude, the reform of higher education financing in Bosnia and Herzegovina has been the topic for over 15 years. Some elements for improvement of model have been built, some new models were developed, staff at ministries and institutions was trained, and awareness was raised. However, various external circumstances have put the system of financing of higher education under more pressure and effects of mentioned changes under question. Economic crises influenced to liquidity of governments' budgets, and universities were faced with cuts. Unfortunately, this situation was not recognised as a trigger to increase efficiency and to start with changes. At both sides, ministries and universities managements, there has been no political will for serious reform of higher education financing.

2. THE HIGHER EDUCATION SYSTEM: POLICY, GOVERNANCE & TRENDS

Bosnia and Herzegovina joined Bologna process in 2003. After long political debate, lasted for four years, the legislative reform in the field of higher education began with the adoption of the Framework Law on Higher Education in Bosnia and Herzegovina (FLHE) in July 2007. The FLHE was the main reform act, introduced the Bologna reform in higher education system in BIH, and was adopted with the aim of coordination and harmonization of policies of higher education in 12 education authorities. The FLHE has direct application to the entities, cantons and District; it represents a unique framework for the 12 education authorities to regulate their legislation. Therefore, Article 63 of the FLHE set a deadline of six months (until February 2008) in which all relevant education authorities across Bosnia and Herzegovina should harmonize their higher education laws with the FLHE. The matching process lasted much longer, almost six years actually, as can be seen from the following Table.

Table 1 – Higher Education Laws in FBiH

Canton	HE Law published	Date of adoption
Tuzla	Official Gazette of Tuzla Canton No. 08/08	28.7.2008
Zenica-Doboj	Official Gazette of Zenica-Doboj Canton No. 06/09	27.4.2009
Una-Sana	Official Gazette of Una-Sana Canton No. 08/09	15.6.2009
West Herzegovina	Official Gazette of West-Herzegovina Canton No. 10/09	6.7.2009
Canton 10	Official Gazette of Canton 10 No.09/09	10.11.2009
Bosnia-Drina	Official Gazette of Bosnia-Drina Canton No.02/10	28.1.2010
Posavina	Official Gazette Posavina Canton No. 01/10	18.2.2010
Sarajevo	Official Gazette of Sarajevo Canton No. 22/10	27.8.2010
Herzegovina-Neretva	Official Gazette of Herzegovina-Neretva Canton No. 4/12	13.4.2012
Central Bosnia	Official Gazette of Central Bosnia Canton No. 4/13	30.1.2013

The Higher Education Law of Brcko District BIH was adopted on 23rd September 2009 and is published in Official Gazette of Brcko District BIH No. 30/09.

Of course, some of these laws have been amended since their adoption to date. Some universities started with Bologna structure of their study programmes before their cantons harmonized the HE Law with FLHE.

Particularly, some cantons allowed opening of private higher education institutions (e.g. Central Bosnia and Herzegovina- Neretva Canton) although they did not have HE Law adopted (old law from Socialist Republic of Bosnia and Herzegovina had not predicted private higher education institutions). Actually, not only did they not have HE Law which can provide for the establishment of private higher education institutions, but they did not have any regulations, such as standards, norms or criteria for the performance of activities of such higher education. It was common for entire BIH (included RS) that private HEI start with work without any regulations. Regulations have come afterwards.

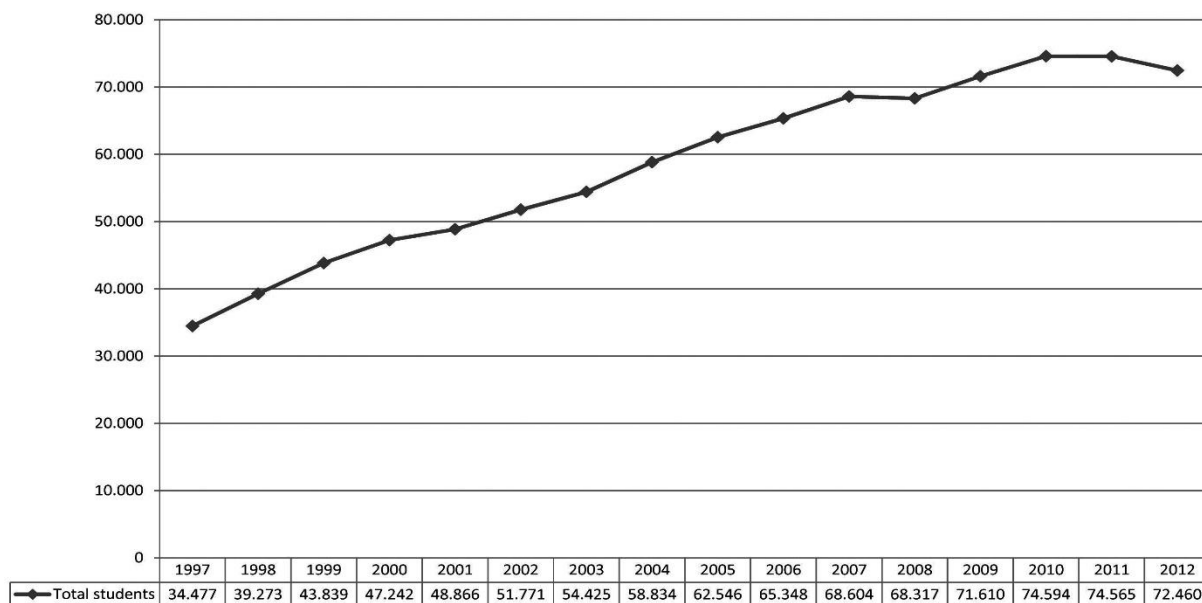
Nevertheless, FLHE and all HE laws followed in cantons, RS entity and Brcko District. All HEI established the three cycle system of higher education, introduced quality assurance and the system of recognition of foreign qualifications, conditions and requirements for academic staff were fully harmonized. Policy institutional framework was set-up and micromanagement of a HEI was prescribed.

The most challenging process of the reform was the integration of universities. Traditionally, autonomy had always belonged to the faculties, while universities were associations of autonomous faculties. FLHE and all HE laws changed that, requiring the integration of universities and abolition of legal status of the faculties. That has been successfully implemented at about half of the number of universities, while the rest of the universities still have disintegrated structure with autonomous faculties. It will be shown in this report that this fact is closely connected to financing of higher education in Bosnia and Herzegovina.

2.1. Size of the system

The HE system started its growth just after the war in BIH in 1996. Between 1997 and 2012, the growth was particularly noted in the number of students at the first cycle of studies.

Figure 1. Students of all three cycles in FBIH (total)



Source: Federal Institute for Statistic

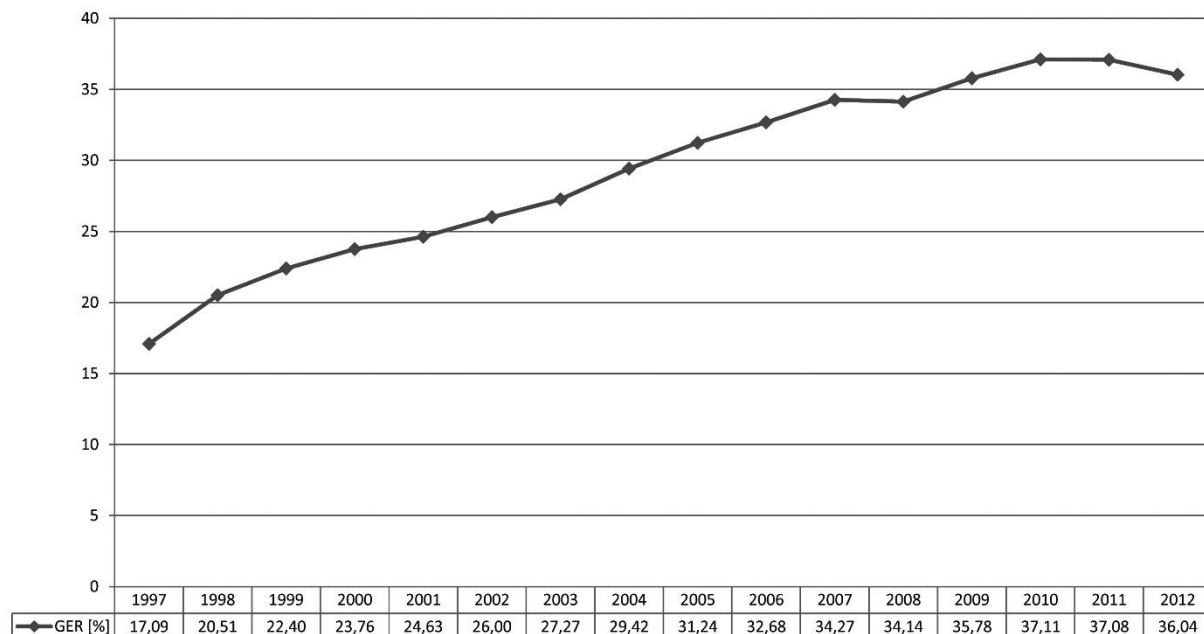
For 15 years the number of students increased for more than double (110.17%, from 34,477 in 1997 to 72,460 in 2012). The growth in the number of students stopped in 2010 and the curve actually weighs toward saturation. The number of students at the end of 2015 (enrolled in the academic year 2015/2016) is amounted to 72,601. The number of students shown at the Figure 1 is total number, included students of pre-Bologna and Bologna, students of the first, the second and the third cycle. The number of students of the second and particularly of the third cycle was very small, especially before 2006. They did not influence significantly the total number of students.

Gross Enrolment Ratio (GER – the percentage of students in population from 18 to 27 years of age)⁴ was also doubled in the same period (1997 – 2012) and it could be said that the higher

⁴ GER is calculated for this Report, the number of students is officially announced, while the population from 18 to 27 years of age were estimated. The Federal Institute for Statistic estimates number of population each year, based on census and official data from municipals registrar's offices.

education in FBIH has expanded from an elite (17,09% in 1997) to the mass (37,11% in 2010). GER is shown on Figure 2.

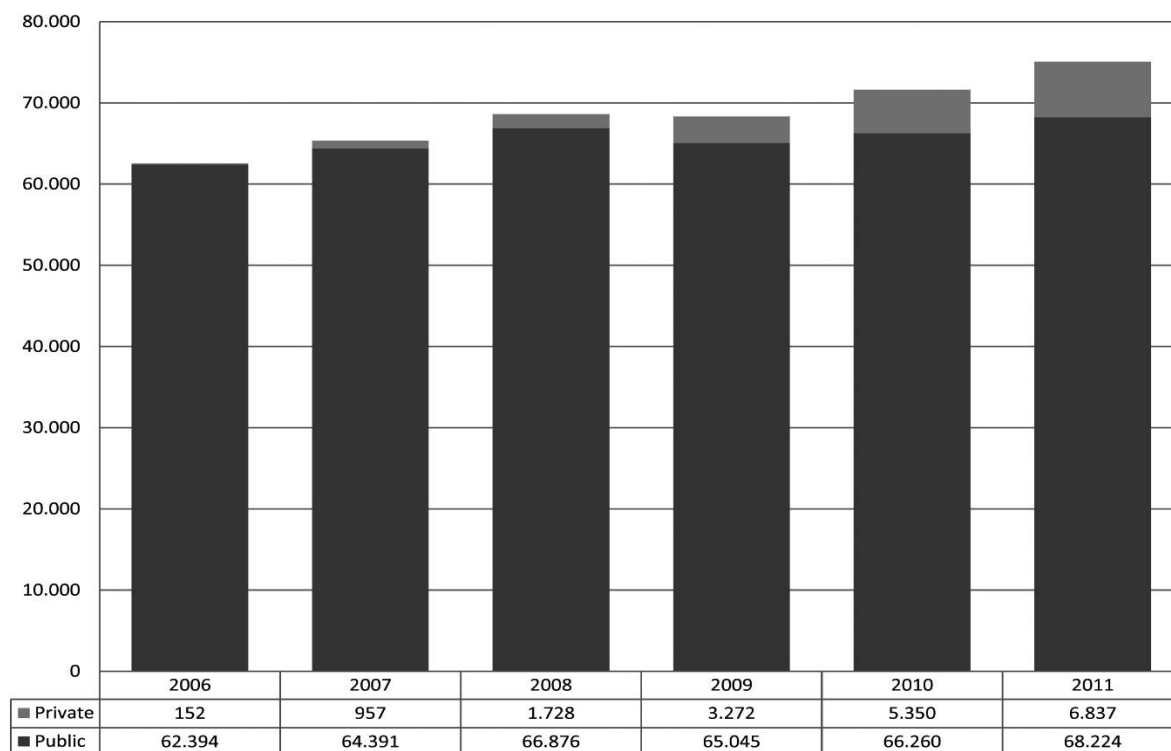
Figure 2. Gross Enrolment Ratio



Short after the war in BIH in late 1990s, FBIH actually suffered of lack of HE capacities. Strong brain-drain and physical destroying of universities' infrastructure influenced to quite low GER (about 20%), and BIH was on the bottom of scale of European countries regarding the GER. The same influenced to almost total and no-recoverable destroying of science capacities, which had been in solid condition before the war (3% of BIH GDB – approximately 1.5% at universities and 1.5% at companies was invested annually in science, research and development).

Renovation of the HE capacities in BIH excluded science and new type of university was established – university with strong focus on teaching. Expectedly, the number of study programmes in the field of social sciences has increased, as well as the number of students in some existing programmes, such as economics, management, business, law, pedagogy and humanities. The growth was consequence of opening of the new public universities (Zenica in 2000) and new study programmes. Introduction of private HEI which started in 2007 did not have significant influence (so far the number of students at private HEIs is about 10%), which is shown at Figure 3.

Figure 3. Ratio between the number of students at private and public HEIs

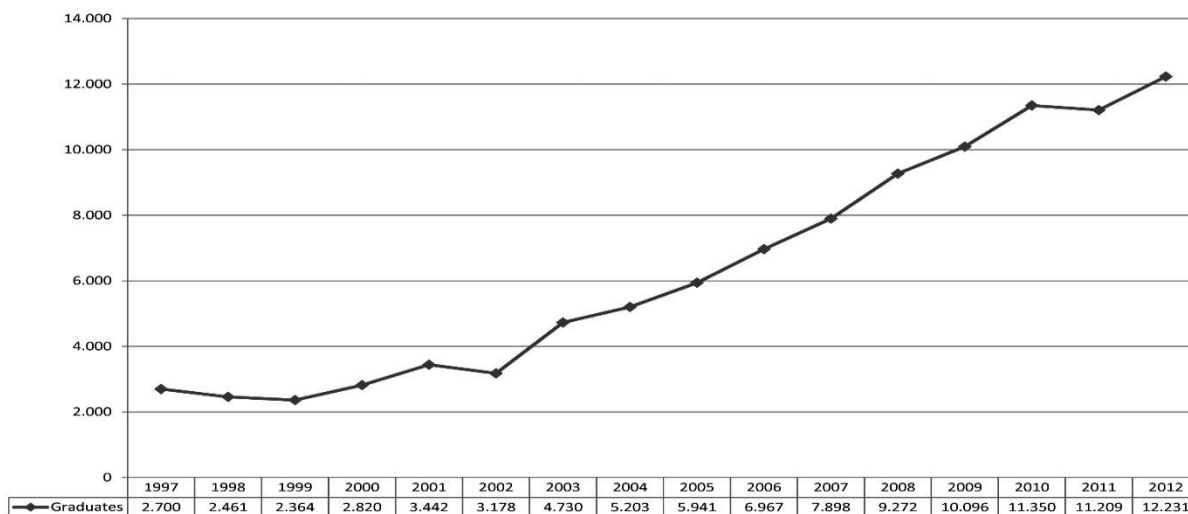


Source: Federal Institute for Statistics

In Federation of BIH, there is a great number of higher education institutions (nine universities and six colleges), but these theyareof smaller size. 2,830 or 41.40% of the total number of studentshave been studying at private HEIs, where teaching is organized in English with international teaching staff. The highest concentration of higher education institutions and consequently the largest number of students in the private sector is in the Central Bosnia Canton (4 universities and one high school), where 3,765 or 55.06% of the total number of students at private higher education institutions have studied.

The number of graduates has had faster growth than the total number of students. That is shown at Figure 4.

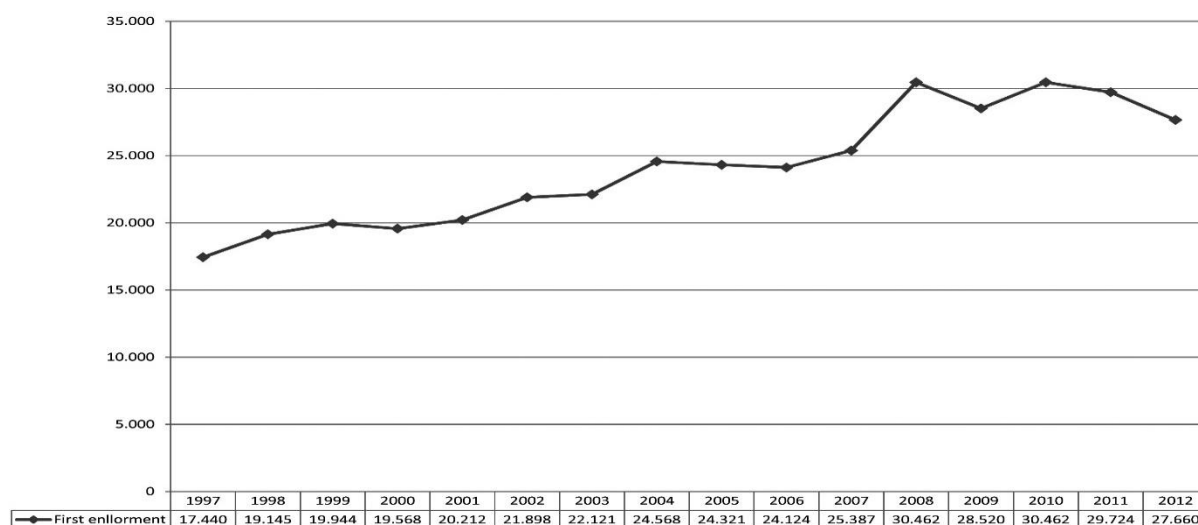
Figure 4. The number of graduates in FBIH (all three cycles)



Source: Federal Institute for Statistics

An important indicator of the size of system is the number of the first enrolled students at HEIs (the first cycle only), which is showed at Figure 5.

Figure 5. The number of the first enrolment



Source: Federal Institute for Statistics

Peak on the curve is especially noticeable in 2007, when the expansion of private higher education in the Federation actually began. Postponed expansion was also happened in Brcko

District after opening two private universities in the end of 2012. The number of students and graduates in BD is presented in the Table 2.

Table 2: Number of students and graduates in BD

	2011	2012	2013	2014
Total number	942	1.925	2.768	2.108
Graduates	115	164	356	N/A

Source: Agency for Statistics of BIH

2.2. Higher education institutions

FLHE and all HE laws in FBIH and BD recognize only two types of HEIs: university and college. University is HEI undertaking both education and research, offering academic degrees in all three cycles in at least five different subject groups in at least three scientific areas (natural sciences, technical sciences, biomedicine and health, biotechnical sciences, social sciences and humanities). A college is HEI which offers diplomas and degrees of the first cycle only in at least one subject group in one scientific area. There is no strong distinction between academic and applied (professional, vocational) study programmes (academic study programme could be offered by the college, but at the level of first cycle only).

All faculties in entire BIH, according to laws, have to be integrated into university, meaning that the independent legal status of faculties is not foreseen. However, that legal obligation has not been fully implemented in 3 public universities (e.g. University of Sarajevo, University of Dzemal Bijedic Mostar, and University of Mostar).

All institutions exercise high level of autonomy, which is in practice realised as a freedom to develop and finally adopt their study programmes, to appoint academic staff, to issue diplomas and to elect their leadership. Although there is a certain political influence to HEIs reflected in practices that all university rectors are politically connected, many university professors are active in politics and other, all aforementioned elements of autonomy are de facto implemented into all HEIs, and direct influence of ministries or other parts of political structures to these elements of autonomy were very rare.

There are 21 higher education institutions in FBIH (out of totally 45 in Bosnia and Herzegovina): six public universities, nine private universities and six private colleges. In total, there are 108 faculties with 996 study programmes: 466 study programs of the first cycle, 470 of the second and 60 study programmes of the third cycles. The number of HEIs, number of organizational units (faculties), and the number of study programmes by study cycles is shown in Table 3.

Table 3: Number of HEIs (universities and colleges), faculties and study programmes in 2013

No.	Higher Education Institution	No of faculties	Number of study programmes			Total No of SPs
			1 st cycle	2 nd cycle	3 rd cycle	
1	University of Sarajevo	23	102	205	25	332
2	University of BIHac	7	37	27	-	64
3	University of Mostar (West)	11	62	71	10	143
4	University of Zenica	8	28	30	-	58
5	University of Dzemal Bijedic Mostar	8	36	14	-	50
6	University of Tuzla	16	53	40	-	93
7	University "Vitez" Travnik	4	17	8	-	25
8	University of Travnik	5	35	18	-	53
9	Sarajevo School of Science and Technology	5	9	5	5	19
10	International University of Sarajevo	3	12	12	12	36
11	Intern. Burch University, Sarajevo	3	6	5	4	15
12	American university in BIH, Tuzla	3	14	9	4	27
13	University of Hercegovina Čitluk	3	10	13	-	23
14	International University of Travnik	4	13	13	-	26
15	University "Inetrlogos"	5	10	-	-	10
16	Faculty for public service, Sarajevo	0	1	-	-	1
17	College for industrial and business management B. Krupa	0	9	-	-	9
18	Faculty of international finance and banking, Sarajevo	0	2	-	-	2
19	Centre for business studies Kiseljak	0	2	-	-	2
20	College "Logos-centre , Mostar	0	5	-	-	5
21	College for tourism and management Konjic	0	3	-	-	3
TOTAL		108	466	470	60	996

Source: HEA

From the Table 3 is obvious that the public sector is the most important HE resource in FBiH. The number of students per HEI in the FBiH and BD is shown in Table 4.

Table 4: Number of students per HEI in FBiH – 2013

Higher Education Institution	Number of students	%
University of Sarajevo	29.892	40,22
University of Tuzla	13.024	17,52
University of Zenica	4.263	5,74
University of Dzemal Bijedic Mostar	4.275	5,75
University of Mostar (West)	10.007	13,46
University of BiHac	4.455	5,99
Totally public universities	65.916	88,69
Private HEIs	7.463	10,04
Religious HEIs	944	1,27
Total Federation	74.323	100

Source: Federal Institute for Statistics

There are four higher education institutions in BD – two private universities, a private college and a Faculty, as a branch of University of East Sarajevo (statistics for the Faculty is included in total statistics for RS). The number of students per HEI is presented in the Table 6.

Table 5: Number of students per HEI in BD – 2014

Higher Education Institution	Number of students	%
European University	763	36,19
International University	730	34,64
Faculty of Economics (UoEast Sarajevo)	120	5,69
“Empirica”, college for informatics	495	23,48
Total BD	2.108	100

Source: Agency for Statistics of BIH

The institutional accreditation of HEIs in the FBIH was completed, but in BD is very weak. The next phase is the accreditation of study programs for which HEIs are facing with the problem of its financing. Proliferation of private education in BD and particularly in Central Bosnia Canton remained intact of any inspection, QA mechanism or any serious control of relevant ministries. Of course, all HEIs, whether public or private, are officially recognised by relevant educational authorities in entire country and abroad, as well as all diplomas that they issue.

2.3. Governance

Each canton, as well as BD, has simple structure – the Ministry of Education (MoE) and HEIs. There is no other, either advising or decision making body in cantons and BD. All important issues are regulated by cantonal HE law (or HE Law of BD). MoEs are responsible for the HE policy (laws, sub-laws, strategies), for funding of public HE and admission quotas at public universities.

All cantonal MoEs, as well as the Department for Education of the BD Government suffer from lack of staff. Some ministries have just a few civil servants (very often 2 or 3) who cover all levels of education. They can't be very committed to HE policies. At the Department for Education in BD there are no civil servants responsible for HE. HE sector is predicted by Rule of Works of the Department, but nobody has been hired so far.

Coordination of educational policies at the level of BIH is conducted by the Ministry of Civil Affairs (Department for Education) and for the FBIH by Federal Ministry of Education and

Science. The Conference of Educational Ministers was established at the level BIH, composed by all educational ministers from entities, cantons and a district, while Coordination Office of Educational Ministers was established at the level of FBIH. The Rectors' Conference, as an association of public universities, is established at the level of BIH and all eight public universities are members of the RC. Although there are several bodies in charge of coordination of educational policies at the level of BIH (two coordinating ministries and three conferences), the entire HE system in BIH suffers of lack of coordination between these bodies. These results in the following: learning outcomes are not listed; standards of qualifications or standards of profession are not developed. Although all programmes are in line with the Bologna, this situation still affects the mobility of students which is weak.

The biggest challenge in the past ten years in BIH has been an adoption of legislation on higher education in all cantons. Serious pending in adoption and implementation of the HE laws is related to the resistance of the integration of the public universities. Although all laws have eventually been adopted, the process of integration is not yet completed at all universities.

There are the three of the six public universities in the FBIH (50%) are still not integrated. When their size is measured by the number of students, they represent 59.41% of the total higher education resources of FBIH. For example, this provision is still not implemented at the University of Sarajevo, although the Law was adopted in 2007. The problem of integration is connected with the tradition of higher education and it is geographically connected to the area of former Yugoslavia, Austria and the former Czechoslovakia. In these three countries, HEIs emerged in the way that the autonomy belonged to the faculties, not to the universities, which represented a loose association of faculties. In the rest of the world universities have always emerged as an integrated, and autonomy belonged to the university that could uniquely make their strategic decisions. Czech Republic and Slovakia integrated their universities in the early 90s, and Austria's law on integration was adopted in 2000.

Integration is process of optimization which enables more efficient work of HEIs through a centralized policy and management, overall planning for all faculties, optimization of administration, student services, scientific research work, quality assurance, library, premises, common curricula, financial management, international cooperation and direct strategic arrangements with the relevant ministries. Integration undoubtedly leads to more efficient use of public funds at a university.

Integration of the University is regulated by the FLHE in Bosnia and Herzegovina (2007) and according to that law it is supposed to be completed within one year (2008). It is prescribed also by all cantonal laws. The essence of integration is the loss of legal status that today the faculty at non-integrated universities have, and the transfer of jurisdiction (including the portion of income) deriving from the status of a legal entity from the university to university. As already

mentioned, 50% of public universities or about 60% of the total higher education resources of the Federation nowadays does not have the organizational structure in compliance with laws and regulations.

Regarding the regulation on governance of the HEIs, it guarantees the rights of HEIs to select their governing and managerial bodies, to define their structure and activities with internal regulations in line with the law, to appoint their academic and other staff members, to determine the rules of study and access, to independently develop and implement study programmes, research and art projects, to freely engage in partnerships with other higher education institutions, and to assign titles to academic and other employees. Besides, public institutions are free to manage the land and property they own, and, with the permission of the founder, to lease them out to third parties. They are also unrestricted to accumulate funds from all legit sources and manage them freely. Public higher education institutions propose the amount of tuition fees to the ministry. However, institutions are free to set the prices of other services. Tuition fees at private higher education institutions are set by the institution, and do not require an approval from the ministry. The FLHE stipulates in Article 48 that the Agency for Higher Education Development and QA of Bosnia and Herzegovina is competent for provision of recommendations on the lowest tuition fees for all students at accredited higher education institutions, aimed at harmonization of the lowest tuition fees on the whole territory of Bosnia and Herzegovina, but such recommendations have not yet been adopted.

It is stipulated by the law that a HEI has strictly divided business and academic functions. Business functions are responsibility of the Governing Board of the HEI, which is, inter alia, responsible for:

- giving opinion on the statute of the higher education institution, and adopt a general act on internal organisation and systematization of jobs and other general acts in compliance with law and the statute of the higher education institution;
- adopting decisions on the establishment of other legal persons, in compliance with law and the university statute;
- adopting financing and development plans,
- adopting the annual plan of work of the higher education institution, at the proposal of the senate of the higher education institution,
- adopting the financial plan and adopt the annual financial reports;
- guide, control and assess the work of the rector in the area of financial affairs,
- resolving issues related to the founder;
- deciding on utilization of resources exceeding the amount set by the statute of the higher education institution;

- deciding on objections by employees on decisions of higher education institution bodies which decided in the first instance on the rights, duties, and responsibilities of employees arising from their employment status;
- submitting to the founder, no less than once a year, an annual report on the work of the higher education institution;
- performing other duties in compliance with law, the founding act, and the university statute.

Responsibilities for academic issues at a higher education institution shall rest with the Senate as the highest academic body comprising of representatives of academic staff and students. Senate of the higher education institution decides on all academic issues, in particular:

- decide on issues related to teaching, scientific, artistic and professional activities of the higher education institution;
- adopt the statute of the higher education institution, with a previously obtained opinion of the Governing Board,
- adopt general acts in accordance with the law and the statute of the higher education institution;
- adopt curricula for undergraduate, postgraduate and doctoral studies,
- elect the rector and vice-rector of the university, i.e. director of the college;
- elect academic staff, at the proposal by the scientific and teaching council, i.e. the scientific and research council of organisational units,
- appoint committees in the process of acquiring the title of doctor of science,
- grant honorary titles “professor emeritus” and “honorary doctor of science”;
- give initiatives to the Governing Board for the organisation or abolishment of faculties and other organizational units of the university;
- perform other tasks in compliance with this law and the statute of the university.

A university is managed by a rector and a college is managed by a director. The rector of a university or director of a college is accountable to the Senate for his/her work in relation to academic issues, and to the Governing Board in relation to business activities.

Student representation is organised through student parliaments/unions. They exist within each HEIs as a formal student representative body. The parliament is considered as autonomous in its work and authorized to represent and protect the rights and interests of students. Its work is further defined by its statute. According to the law, at least 15% of each decision-making body at faculties, universities and Senate consists of student representatives.

Students are also organized in local student unions (as interest groups such as the Association of students of student dormitories or thematic organizations, such as Youth Lawyers, most often organized according to general Law on Associations and Foundations) as well as branches of European / international student organizations (eg. European Association of students registered under the Law on Associations and Foundations of BiH, with official procedures and acceptance by the parent European / international organization represented in BiH).

3. FUNDING FRAMEWORK AND THE ALLOCATION MECHANISM FOR PUBLIC FUNDS

Public funding of HE in FBIH is performed by cantons from their budgets. All public universities charge the tuition fees from students, which makes up a total of 40% - 80% of their total income. Private higher education institutions do not receive public funds.

In 2007, the consumption of public higher education in the Federation amounted to 4.53% of all income of all cantons in the Federation, which accounted for 0.82% of the GDP of the Federation for 2007⁵. This percentage is comparable to the percentage of GDP that is at the level of the similar countries (Latvia 0,5%, Japan 0,6%, Russia 0,7%, Italy 0,8%, Slovakia 0,8%, Croatia 0,8%, Turkey 0,8%, but Germany 1,3%, Finland 1,9%, Denmark 2,3% and so on.)⁶.

Since the world economic crisis started in 2009, public universities have had funding problems. All public universities have insufficient investment funds (for development, new facilities, equipment or library), while in recent years the HEIs in the FBIH are beginning to record the difficulties and liquid funds, even with funds for payment of salaries.

Neither in BD nor in the FBIH there are regulations or criteria for the allocation of public funds to higher education institutions. Currently, public funding of higher education is performed according to the criterion of historical consumption (for the previous year) and it is in principle based on the "*funding per teacher*." This model is obsolete and there is a need to reform public finances, so the links between the level of resources and results that individual institution exercised ("*funding per student*") are established.

Public funding for higher education is determined in line with the budgetary planning procedures for each budgetary year in a canton. It is based on a negotiation process between the HEIs and the cantonal government. Every year, universities propose an institutional budget for the government, which is later on negotiated between the parties. The basis of these negotiations is the institution's previous budget and the financial results it obtained. The budget is calculated according to input indicators: the number of employees at the institution, the number of students, and the number of study programmes, which represent the starting point of the negotiations. This process usually results in a certain percentage of budgetary increase or decrease of the institution's overall funding. The final budget of the higher education institution (which relates primarily to teaching activity) is finalized by the MoE with the Ministry of Finance. The final

⁵ The data are taken from the document Feasibility study for higher education reform in Bosnia and Herzegovina (2009), commissioned by the DEU. The study took the data of the Federal audit office. GDP to calculate the percentage is taken from the Bulletin of the Federal Institute for Statistics no. 120, November, 2008.

⁶ Data from the UNESCO Institute for Statistics

proposal of the budget is then integrated into the government's yearly budget which is approved by the cantonal assembly (Parliament).

Public funding for higher education covers the following types of costs: salaries of academic staff, salaries of administrative and support staff, maintenance costs, and other types of costs, such as professional services, travel costs, and so on. Cost related to the purchase of equipment, salaries of research staff, and printing and publishing are usually not covered by the public budget. Often practice in some cantons is to allocate lump-sum to HEI, or even to treat allocations for HE as grants. There is no practice in any canton that the level of allocations is regulated by any kind of sub-law or any regulations. Regulations related to salaries for all budgets users are applied. Although the governments approves the number of the first enrolled students (the first time enrolled in the first grade of the first cycle), even these numbers are not connected with level of funding.

Different example comes from BD. BD has full constitutional responsibility for HE, has HE Law adopted and regularly allocate public money for HE. The level of annual allocations is shown in the Table 6 and 7.

Table 6. Investment in higher education from national public sources from 2006 to 2012 (in BAM) – Public HEIs in the FBiH

Year	2006	2007	2008	2009	2010	2011	2012
<i>Government funding for HE</i>	-	4.000	5.252	37.000	34.340	-	-
<i>Government funding for research only (separate from HE) allocated to HEIs (FMoES and Sarajevo Canton)</i>	1,337.000	3.394.397	4.222.067	5.696.143	7.269.756	6.880.146	3.478.160
<i>Entity level</i>	-	-	998.806	365.639	801.382	505.010	387.216
<i>Cantonal level</i>	73.515.037	87.308.819	109.919.942	108.378.581	113.218.618	112.902.815	109.863.292
<i>City/municipality</i>	-	150.500	67.000	950	20.000	41.500	9.500
<i>Total:</i>	74.852.037	90.857.716	115.213.067	114.478.313	121.344.096	120.329.471	113.738.168
<i>% of GDP</i>	0,62	0,64	0,81	0,74	0,76	0,73	0,68

Table 7. Annual allocations for HE in the budget of BD

Year:	2012	2013	2014	2015
BAM ⁷	520.491,76	504.511,82	578.719,20	708.719,21

Source: Budget of BD⁸

However, these amounts have been paid as grants to HEIs out of BD (to the University of East Sarajevo for operations of Faculty of Economics in Brcko, to the University of Mostar for branch departments in Orasje, Posavina County and to University of Sarajevo).

There are the three models for budget allocations for HE in FBiH:

- i.* Model of integrated university included in the treasury system;
- ii.* Model of non-integrated university;
- iii.* Grants to the public HEIs.

Common point to all three models is non-existence of criteria and relations between HEI's strategic goals or number of students and level of funds allocated.

3.1. Model of integrated university included in the cantonal treasury

In this case, universities do not have their own accounts and they are included in cantonal treasury. This model is introduced in Tuzla Canton for University of Tuzla, Zenica-Doboj Canton for the University of Zenica and Una-Sana Canton for the University of Bihać. Cantonal treasury pays for salaries and operational costs. Different sub-accounts are opened in the treasury (i.e. for projects, research, investments and so on) and payment is made by Ministry of Finance upon the order of the University given electronically. In this system, all tuition fees and all other incomes go to the treasury. System operated well in early 2000s, until the economic crises. Afterwards, however, cantonal budgets were faced with deficits, insolvency and problems occurred.

⁷ Currency rate: 1 € = 1,95583 BAM

⁸ Available at: <http://www.bdcentral.net/index.php/ba/vani-akti/budet-brko-distrikta-BIH>

University incomes usually boosts up in September and February, which are the months of students payments for tuition fees. Universities' money has become to be used for regular cover of insolvency. Insolvency of overall budget was transferred to the universities and their business operations went wrong. Nowadays, the treasury system is an obstacle for development of universities. The system became very non-transparent.

Additionally, in such a system the financial management of the university is carried out by the Ministry of Finance. It can't be said that such university has a financial autonomy.

3.2. Model of non-integrated university

In such system public money is paid to the faculties. Faculties have their own accounts in banks. University receives funds only to cover expenses of the Rectorate. This model is completely outdated. In 2006. University of Sarajevo made following exercise: together with cantonal MoE, it calculated gross salaries for all staff, fees for guest professors for each faculty. Given amounts were increased for 10% for operational costs. This exact formula has not changed since then, so the faculties at the University of Sarajevo still receive public money accordingly, although the number of staff has significantly changed in the past 10 years. Additionally, each faculty has created its own policy for salaries, depending on the level of tuition fees. Teachers at different faculties have different level of salaries. Integration has started in 2014, but serious results have not still occurred.

3.3. Grants to the public HEIs

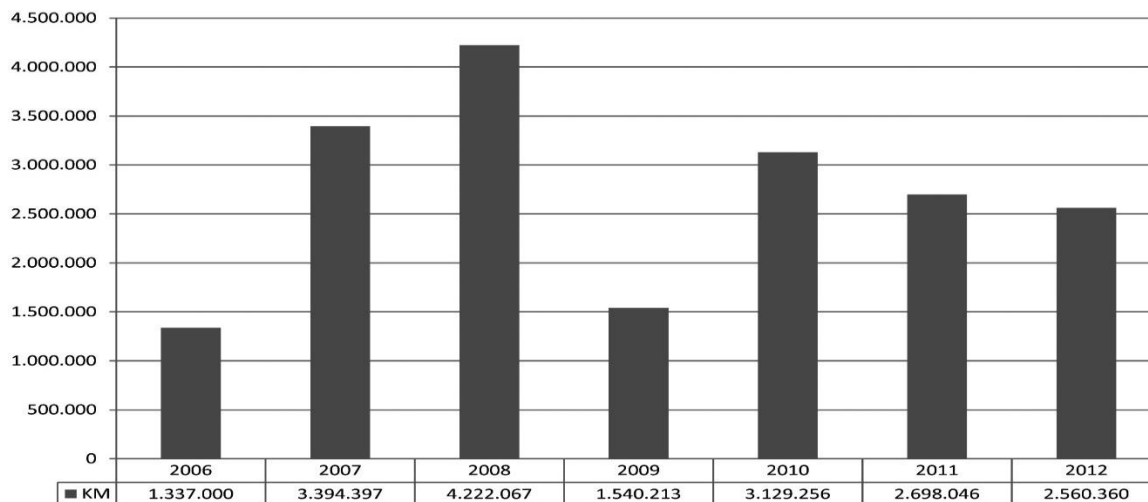
Two universities in Mostar do not have their budget line at all. They receive grants from the MoE of Herzegovina-Neretva Canton. Grants are paid to the faculties at the University of DzemalBijedic, while the University of Mostar receives grants for its faculties and make the transfer to them. Faculties at the University of Mostar have their own bank accounts. University of Mostar also receives grants from four cantons more. Faculties at these two universities have its own policy for salaries and they are highly dependent on tuition fees.

Grant scheme could not be consider as sustainable funding. That is the reason these two universities have serious problems with financing. They have very small number of places for students who do not pay tuition fees.

3.4. Grants for science

Additionally, FMoES allocates grants for science mostly available to universities' researches. Grants are allocated to projects in public procedures. Applicants are mainly universities which apply with projects by their researchers (professors). The level of these transfers is shown in the Figure 6.

Figure 6: Allocations for science in FBIH – grant schemes



Source: FMoES

Obviously, the level of these grants is symbolic related to overall GDP of FBIH. These grants are mostly not connected with the 3rd cycle of studies. All universities have started with doctoral studies, but it is completely unclear who finance them. High level of tuition fees is applied, but the purpose of such payments is mostly for administrative procedures (to pay tutor and panel members for evaluation and public defence of the thesis). Funding of research projects which should be a part of doctoral programmes is not solved.

3.5. Accountability

Undoubtedly, the system of allocating of public money to HE is inadequate. However, it is impossible to estimate is the level of funding sufficient or not. Of course, universities will always object to insufficient level of public funding. The true is that students' fees really cover 40% – 80% of total universities' costs. Money for investments has not been paid to universities for years and the level of science allocations is really symbolic.

In the same time, academic staff at some universities or faculties seems to be overpaid. According to existing practice at almost all HEIs teachers in addition to their salaries are separately paid for activities such as teaching for part-time students, teaching at 2nd and 3rd cycle, tutoring masters and doctoral theses, participation in evaluation panels for theses and dissertations, engage in scientific research or services, and so on. These payments are made in a way that HEIs conclude individual contracts (service contract, authorship contract, teaching contract, contract on additional engagement) with the individuals who are their employees and receive regular salaries. In addition, a large number of HEIs pay teaching staff depending on the number of hours of teaching, so most of the teaching staff at these institutions have the opportunity to get a salary increase of up to 50% (typically 50%).

Is it not possible to characterise the system of financing as transparent. In addition, it leads to the appearance that the curricula (which determine the number of classes per each school subject, and consequently the number of classes to be taught by individual teachers) are created in such a manner that professors could have as much as possible hours of teaching, in order to have a better pay.

All public HEIs, generally speaking, apply a system of public procurement when awarding contracts for supplies, services or goods. Private HE institutions are not obliged to do so.

Regarding financial reporting and transparency, different practice is in different cantons. Some universities (Tuzla, Zenica and Bihać) regularly submit their annual report to the cantonal assemblies, and public debate in cantonal Parliament is conducted every year. It regularly contains basic financial reports, which could be regard as transparent procedure. However, common practice in other cantons is not reporting to any authority about spending the public money.

In some cantons, Cantonal Audit Office regularly make financial audit of all university's accounts, as a part of audit of overall budget of the Government. However, such practice is not applied in all cantons.

Federal Audit Office conducted a thematic performance audit of all HEIs in 2007. A comprehensive report was made. Incomes and expenditures were compared with all results (business and academic). The Report was submitted to Federal Parliament which does not have authorities under the education. Recommendations were shared with HEIs managements, but neither subsequent reactions nor serious changes followed.

3.6. State student support system

All students at private HEIs pay tuition fees which level is from 2,500 to 10,000 BAM per academic year. Students of public universities are divided in two categories: students who pay symbolic participation (like 100 BAM per semester), and students who pay tuition fees (from 1,200 to 12,000 BAM per academic year). Level of fees is decided by HEIs, very often with approval by cantonal government. Students of 2nd and 3rd study cycles mainly pay tuition fees. At the 1st cycle it is possible to change the category (example from the University of Tuzla: tuition fees are applied only at the 1st year of 1st cycle – according to HE Law of Tuzla Canton each student who pays tuition fee and obtain right for admission in the 2nd grade is not obliged to pay tuition fees any more).

Similarly to other countries and entities in the WB region, in the FBiH there are the systems of loans, scholarships/grants, as well as subsidized accommodation in dormitories, meals in student restaurants, public transportation subsidies, etc. Regular students have rights to:

- Health care,
- Accommodation and food in students' dormitories (limited number of places),
- Students' loans (for best students or students who belong to some social groups),
- Scholarships for best students,
- Getting local and inter-city public transportation expenses,

The level of allocations is presented in the Table 8.

Table 8. Annual allocations for students' standard in FBiH

	2006	2007	2008	2009	2010	2011	2012
Grants and scholarships from the ministry responsible for higher education	281.275	341.889	585.084	511.404	508.536	409.559	482.673
Grants and scholarships from other ministries	350.000	400.000	510.000	630.000	659.000	681.000	781.564
Grants, scholarships for disabled and Roma as well as talented students, students associations(FMON - FMoES)	132.500	980.771	1.046.745	182.474	395.828	138.414	193.220
Student loans	-	500.000	500.000	281.999	500.000	490.000	441.000
Subsidies for student accommodation	60.280	113.300	119.777	152.857	257.354	297.895	251.686
Subsidies for student restaurants	175.300	274.378	498.855	582.744	606.922	593.741	579.591
Subsidies both for accommodation and student restaurants	616.415	468.180	666.612	737.289	775.279	824.323	797.958
Other type of government student support	58.000	49.700	60.024	89.150	79.620	10.000	14.000
Support to student mobility periods abroad	-	-	-	-	50.000	50.000	50.000
Total allocation	1.673.770	3.128.218	3.987.097	3.167.917	3.832.539	3.494.932	3.591.692

Source: FMoES

Comparing the level of allocations with total number of students, it could be concluded that these allocations are not sufficient. They are more symbolic to encourage the access to higher education for all categories in society.

Fund for students' loans in the Federation of BiH

Students who are not beneficiaries of another loan and / or scholarship of public administration at the municipal, cantonal, federal and state level will have priority/be eligible for the allocation of student loan under the same conditions.

Student loans are awarded according to the ranking list established on the basis of scoring of the following academic and social criteria:

- Average score for the current academic year, or - for the first year students - general grade point average during high school;
- Number of remaining semesters or years envisaged by the curriculum to obtaining a qualification to work on the basis of completion of studies
- Specific social student status: Status of a disabled person with a disability of at least 60%, civilian victims of war (except for disabled persons with a disability of at least 60%), child of a killed soldier, child without parents, child without prior parental care or child without a parent (except for children of a killed soldier), child of both unemployed parents with whom lives in the same household, child of both retired parents or child from the household with three or more children attending school and /or studies on full time basis (mostly on the basis of two criteria most advantageous for student).

4. SUMMARY AND DISCUSSION

Higher education reforms in entire BIH started in early 2000. The most important lesson learnt is that there are no fast reforms in FBIH. Harmonization of legislation and formal adoption of HE laws in cantons lasted almost six year, although it was foreseen to have it completed in six months. Some reforms stipulated by laws were implemented, but a great part of them is still on hold– nine years after the FLHE was adopted and almost 13 years after BIH joined to the Bologna process.

Reform of higher education financing was part of overall reform and a lot of actives have been conducted for last 15 years. Unit cost model was developed; the staff at universities were trained, necessity for introducing PBF is made quite clear to main stakeholders. However, it is quite obvious there is no political will to make step forward. In such a complex country, not only by its constitutional structure, but also by very complicated political and social situation, the higher education hardly becomes a real priority to key decision makers.

HE system in FBIH is very fragmented with full responsibility of cantons. Cantons do not have strategies of HE development and policies are conducted on an ad-hoc basis. Coordination of policies hardly exists. Evidence base policy making is rare, almost non-existing practice.

In preparation of this report we faced with lack of data. Although the Federal Institute for Statistics receives all data about all students each year from all HEIs, they publish very limited number of data related to HE. We did not succeed to collect number of students who pay tuition fees and who do not pay. Federal Institute for Statistic does not collect data about science at all.

All above mentioned show that HE policy is not in the focus at any level. Ministries are lack capacities and they mainly decide about proposals from HEIs. In such system it is not clear who drives the policy.

Policies regarding the HE financing are ad-hoc driven. There are no criteria for allocation of public funds and public funding is based on historical approach. It is not linked to inputs in any way.

The HE reform had momentum in the first decade of 2000s. FLHE (2007) and all HE laws followed in cantons (2008 – 2013), entity and district, established the three cycle study system, introduced quality assurance and the system of recognition of foreign qualifications, conditions and requirements for academic staff were fully harmonized. Policy institutional framework was set-up and micromanagement of a HEI was prescribed. The most challenged reform was the integration of universities. That has been successfully implemented at about half of the number

of universities, while the other universities still have disintegrated structure with autonomous faculties.

For the past 15 years the number of students increased for more than double (110.17%, from 34,477 in 1997 to 72,460 in 2012). GER was also doubled in the same period and it could be said that the higher education in FBiH has expanded from an elite (17, 09% in 1997) to the mass (37,11% in 2010).

Nowadays, there are 21 higher education institutions in FBiH (out of totally 45 in Bosnia and Herzegovina): six public universities, nine private universities and six private colleges. As part of all higher education institutions there are a total of 108 faculties, and to them the teaching process is organized in a total of 996 study programs, of which 466 study programs first, 470 second and 60 third cycles. The biggest university is University of Sarajevo followed by University of Tuzla and University of Mostar (West). At six public universities 88, 69% students study and public universities are the most important HE resource.

Expansion of higher education was not followed by appropriate funding. Universities started to charge tuition fees from students. Tuition fees nowadays more and more cover the costs of HE. There is no real data about efficiency of the system.

Both, public and private higher education institutions should regularly, on an annual basis undergo financial audit. The audit of public HEIs should be made by a federal (or cantonal, where exists) audit office. Private HEIs should also engage an independent auditor who would externally examine their business on annual base. Reports of the audit are to be published on the Internet, and submitted to the Federal Audit Office which make them summarized and published an analysis of the level of the higher education sector. This would become publicly available data on the operations of all institutions of higher education, or to be able to analyse and costs ("per student", or personnel costs, for example).

Similarly to other countries and entities in the WB region, FBiH has its own national system of loans, scholarships/grants, as well as subsidised accommodation, meals in student restaurants, public transportation, etc. The amounts are very limited and a very small amount of these funds are intended for the enhancement of the social dimension of higher education.

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