



THE APPLICATION OF INTERNATIONAL EDUCATION STANDARDS IN THE ACCOUNTING EDUCATION SYSTEM IN BOSNIA AND HERZEGOVINA

Teodor M. Petrović^{a,1}, Radojko Lukić^{b,2}

^aUniversity of East Sarajevo, Faculty of Economics Brčko, Bosnia and Herzegovina

^bUniversity of Belgrad, Faculty of Economics, Serbia

ARTICLE INFO

Received 06/25/2020
Sent to revision 07/15/2020
Accepted 08/25/2020
Available online 11/20/2020

Keywords:

international Education Standards
professional accountants
certification
education system

ABSTRACT

The accounting profession is facing high standards in the context of complex business transactions, internationalization of business, application of new information technologies and frequent changes in accounting regulations. In order to respond to many challenges, the accountants must go through quality education, a sound foundation of accounting knowledge, skills and continuous training. International Accounting Standards, International Financial Reporting Standards, and International Education Standards set the benchmarks for designing an initial accountant education program and a continuing learning and professional development program for the accounting profession. The aim of this paper is to investigate and analyze the necessary conditions for obtaining a certificate and license to perform accounting operations in Bosnia and Herzegovina. The analysis of the regulatory framework, the study programs of higher education institutions and the characteristics of the education process, which are related to the acquisition of knowledge and skills for future professional accountants, shows that there are differences in formal education, continuing professional education and training for accountants. The adopted education rules in Bosnia and Herzegovina have created the preconditions for the quality development of future accountants. A high level of expertise and competence is one of the basic conditions and prerequisites for quality accounting performance. The method of analysis and comparison of study programs discovered significant differences in the process of reducing the examinations for acquiring accounting professional titles at higher education institutions in Bosnia and Herzegovina. It was concluded that it is necessary to standardize the system of formal education for professional accountants by developing, adopting and implementing international standards of education by prescribing requirements for entry into professional accounting education programs, initial professional development and continuing professional development of future accountants.

Introduction

The world is open, we live in a time of the biggest and growing international mobility of capital, goods, ideas, and people. Today's accountants are expected to do much more than making clear and up-to-date records of business changes and financial statements. Today, accountants, in addition to having technical accounting knowledge and skills, should be comprehensive information support to the management of a business (and other organizations) in all management activities. Only highly educated economists oriented towards accounting can take the role of an accountant. In addition to general economic knowledge, he/she is expected to have a high level of knowledge and skills in management, business organization, finance, and in particular business finance, financial accounting with auditing, cost accounting, decision-making, and cost-benefit analysis for these purposes, systems, methods and techniques for planning and controlling achievements, information systems, learning about human behavior, motivational systems, etc. This knowledge is acquired at the university and afterward through professional education and practice.

¹ teodor.petrovic@efb.ues.rs.ba

² rlukic@ekof.bg.ac.rs

Accounting certification stems from an expanding understanding that this responsible profession should be licensed, which is coupled with very high educational and professional requirements.

In our country, there is a great need for highly educated and trained accountants, not only in audit firms, but above all in companies, banks, insurance companies, and other organizations. In accordance with that, we plan to have certified accountants and it can be expected that, over time, the International Education Standards for professional accountants will be largely applied, both at university and in the programs of professional associations of accountants and auditors.

The main aim of the paper is to analyze the regulatory framework and the formal education system of future accountants at undergraduate and master degree studies at faculties of economics in Bosnia and Herzegovina which have study programs in accounting, business finance and auditing, as well as identifying direct and indirect links to acquiring knowledge and skills necessary for aspiring professional accountants. Bearing in mind that special education standards have been developed at the international level in the accounting profession, their basic regulations have been presented with the aim of systematizing conditions, knowledge, skills, and personal values that accountants need to have for the continued development of the accounting profession.

1. International education standards for accountants

The International Federation of Accountants – IFAC is a global organization for the accounting profession, founded in Munich (Germany) in 1977 at the 11th World Congress of Accountants and is based in New York. IFAC initially had 63 founding members from 51 countries and now it has more than 175 members in 130 countries, representing nearly three million accountants in public practice, education, civil service, industry, and commerce (IFAC, 2019). The Association of Accountants and Auditors of Republic of Srpska (AAA RS) became a full member of IFAC in 2010 and in 2015 a full member of the Federation of European Accountants (FEE). In 2015, the Union of Accountants, Auditors and Financial Workers of Federation of Bosnia and Herzegovina (UAAFV FBH) became a full member of the FEE/AE (Federation of European Accountants/Accountancy Europe), and in 2016 a full member of the IFAC. Through its independent standard boards, IFAC sets international standards for ethics, auditing and assurance, education and accounting standards in the public sector and publishes guidance that contributes to a high-quality work of professional accountants. There are four standard-setting committees within IFAC: the International Auditing and Assurance Standards Board (IAASB), the International Accounting Education Standards Board (IAESB), International Ethics Standards Board for Accountants (IESBA) and the International Public Sector Accounting Standards Board (IPSASB) for public sector accounting (national governments, regional and local governments and related government bodies).

The International Accounting Education Standards Board develops education standards and guidance with the aim to be used by IFAC members and other interested parties in the professional accounting education process (universities, employers) that have a significant role in the design, development, implementation, and evaluation of programs for professional and aspiring professional accountants; the regulators responsible for overseeing the accounting profession; government bodies responsible for legislation related to professional accounting education; professional accountants and aspiring self-educated professional accountants, as well as all other parties interested in his work. The IAESB develops standards and guidance as part of a common standard-setting process that involves the Public Interest Oversight Board (PIOB) and oversees the activities of the IAESB and the IAESB Consultative Advisory Group, which provides background information in terms of public interest. IFAC provides financial, operational, and administrative support to the IAESB (2015).

The International Education Standards are comprised of eight individual standards covering Initial Professional Development (IPD) and Continuing Professional Development (CPD) of professional accountants. An overview of the structure, objectives and effective dates of each standard is presented in Table 1.

Table 1. International Education Standards

Level of education	Standards	The aim of a Standard	Effective date
Initial Professional education	IES 1: Entry requirements to program of professional accounting education	Establish appropriate entry requirements for initial education programs in the public interest by establishing and maintaining high-quality standards.	01/07/2014
	IES 2: Technical competences	Define the technical competencies that aspiring professional accountants need to develop and demonstrate at the end of the initial professional education program so that they can perform the role of a certified accountant.	01/07/2015
	IES 3: Professional skills	Establish professional skills and knowledge that aspiring professional accountants should develop and demonstrate upon the completion of the initial professional education program for certified accountants.	01/07/2015
	IES 4: Professional values, ethics and attitudes	Development and demonstration of professional and ethical values and attitudes that every certified accountant should show at the end of the initial education program.	01/07/2015
	IES 5: Practical experience requirements	Define the required number of years and means to prove practical experience in accounting	01/07/2015
	IES 6: Assessment of professional capabilities and competence	Based on the Standard provisions, IFAC members authorized to conduct certification and Initial Professional Education for accountants should assess whether the level of professional education of potential professional accountants has been achieved.	01/07/2015
Continuing education and professional development	IES 7: Continuing professional development	The Standard is intended for IFAC member bodies authorized to carry out certification and education of professional accountants. The aforementioned bodies should act in the public interest to develop and upgrade the competencies of professional accountants who have completed the Initial Education Program, since continuing education ensures high quality of service in order to meet the needs of clients, employers, and other stakeholders.	01/01/2014
	IES 8: Competence requirements for engaged partners responsible for auditing financial statements	Establish the professional competencies that professional accountants need to develop and maintain when auditing financial statements.	01/07/2016

Source: (IAESB, 2015, 2017; Dečman & Rep, 2015: 4; Žager et al. 2016: 394-395)

Six International Education Standards (IAS) for professional accountants were published in 2003, effective from 1/1/2005. In 2004, the seventh standard was published, effective from 1/1/2006 and this year the eighth standard was published, effective from 1/7/2008. These standards are continually being improved under the challenges that the accounting profession faces.

The application of new information technologies, the increased use of computer data processing, and requirements for the acquisition of new knowledge and skills requires accountants to be good communicators of different interest groups so that they implement and apply standards, laws, and regulations correctly in accordance with the company business policy. Nowadays, accounting surpasses making business records, and is expected to be more of an advisory and less executive function in a company (Žager et al. 2016: 394). The requirements for greater accountability for financial reports, which require a high level of expertise maintained through education, practical experience, and continuing professional development are also justified (Tušek, 2009: 47).

The Initial Professional Development requirements are defined for aspiring professional accountants and entry requirements for Professional Accounting Education Programs (IES 1.1 - Entry Requirements to

Professional Accounting Education Programs), content for professional accounting education (IES 2 - Initial Professional Development - Technical Competence), IES 3 - Initial Professional Development - Professional Skills, IES 4 - Initial Professional Development - Professional Values, Ethics, and Attitudes, practical experience (IES 5 - Initial Professional Development - Practical Experience) and assessment (IES 6 - Initial Professional Development - Assessment of Professional Competence). These International Education Standards lay the foundation for further learning and development in which professional accountants are required to undergo continuing professional development and specialization in accounting and auditing in order to develop and maintain their professional competence. In defining the frameworks governing the entry conditions for the education of professional accountants, the IAESB does not strictly define the conditions for program admission, but leaves it to the organizations in charge of their implementation (Žager et al. 2016: 396).

The aim of IES 1 is for IFAC members to establish fair and reasonable entry requirements for professional accounting education programs and protect the public interest by setting and maintaining high-quality standards (IAESB, 2015: 25). There are different ways of engaging in the accounting profession, traditional involvement with a university degree, gaining experience while working in a particular industry, and entry from a high school education level. IES 2 and IES 4 define the necessary professional competencies for accountants as well as learning outcomes (Table 2):

Table 2. Professional competencies of accountants according to IES

Competencies, skills, values, ethics, attitudes	Professional competencies of accountants	
Technical competencies	<ul style="list-style-type: none"> ▪ Financial accounting and reporting ▪ Management accounting* ▪ Finance and financial management ▪ Taxation ▪ Audit ▪ Corporate management, risk management and internal control 	<ul style="list-style-type: none"> ▪ Laws and regulations ▪ Information technology ▪ Business and organizational environment ▪ Economy* ▪ Business strategy and management
Professional skills	<ul style="list-style-type: none"> ▪ Intellectual skills ▪ Interpersonal and communication skills 	<ul style="list-style-type: none"> ▪ Personal skills ▪ Organizational skills
Professional values, ethics, and attitudes	<ul style="list-style-type: none"> ▪ Professional skepticism and the ability to make judgments ▪ Ethical principles 	<ul style="list-style-type: none"> ▪ Commitment to the public interest

Source: (Dečman & Rep, 2015: 5; Žager et al. 2016: 397; IAESB, 2015: 34-38 and 171-176; IAESB, 2017)

International Education Standards define one of the mandatory requirements (IES 5) for receiving the professional qualifications of a Certified Accountant in the initial education phase, previous practical experience. IES 6 essentially lays down the conditions for the final assessment of whether a program participant meets the required level of professional competence within the initial professional education (Žager et al. 2016: 398). Continuous professional development requirements are set for the development and maintenance of professional competencies for all professional accountants, including partners engaged in auditing financial statements (IES 8). Special attention has been paid to designing lifelong education and professional development for accountants (IES 7), which is an upgrade of the initial education program. This standard requires obligatory development and maintenance of competencies of professional accountants, regardless of the size or the business branch in which they operate.

The method of assessing the activities for continuing professional development of accountants is selected individually by each IFAC member, and the standard requires measuring continuing professional development in one of the following ways: an output-based approach (professional competence demonstrated through results); an input-based approach (professional competence determined by the scope of learning activities); and a combined approach (professional competence achieved by combining elements of input and output-based approaches) that provides flexibility in measuring activity.

IES 8 defines the professional competencies that professional accountants must develop and maintain when performing the role of the engaged partner responsible for auditing financial statements. This standard is intended for IFAC members and addresses the shared responsibilities of engaged partners, public accounting firms and regulators as part of the quality control systems of the teams auditing financial

statements. The standard is of interest to employers, regulators, government bodies, educational organizations, and other interested parties who support the development of professional accountants.

Professional accounting education programs provide progress in the development of the accounting profession and are incorporated at universities around the world. They are expected to contribute to reducing international differences in the requirements for the qualifications and work of professional accountants, facilitate the global mobility of professional accountants, and provide international criteria for good practice for professional accounting education (IAESB, 2017). The study programs at public universities in BiH are largely structured in such a way as to ensure a good connection of teaching materials with the requirements of professional accounting practice based on the application of IES (Šnjegota & Šnjegota-Milošević, 2017: 11).

2. The application of international education standards in Bosnia and Herzegovina

In accordance with the provisions of Article 1 and 2 of the Law on Accounting and Auditing of BiH (Official Gazette of BiH, 2004) the Accounting and Auditing Commission of BiH (Commission) adopted the IES 1-7 in 2006 and made the Decision to define the conditions for obtaining the title in the accounting profession (accounting and auditing, services, and other related services) in BiH and the Unique Candidate Testing Program for Certified Accounting Technician, Certified Accountant and Chartered Auditor (Official Gazette of BiH, 2016). The professional title of Certified Accounting Technician (CAT) implies that a candidate meets the following requirements:

Table 3. Certified Accounting Technician

No.	Requirements for acquiring the title (<i>and proposed changes</i>)
1.	To have a four-year secondary general or technical education.
1.1.	If he/she graduated from a secondary school of economics, he/she should have two years of practical experience in accounting, of which at least one year in (<i>participating in</i>) the preparation of financial statements, or three years in accounting.
1.2.	If he/she graduated from a secondary school which is not a school of economics, he / she should have three years of practical experience in accounting, of which at least two years in (<i>participating in</i>) the preparation of financial statements, or four years in accounting.
2.	To have passed the professional exams required for the professional title of Certified Accounting Technician.
3.	To accept the rights and obligations of the (International) Code of Ethics for Professional Accountants, in particular the obligation of continuing professional development for the purpose of updating and innovating their professional knowledge, provided for this level of professional title, in accordance with Article 6, Paragraph 3 of the Law on Accounting and Auditing of BiH.
4.	Practical experience is demonstrated through the employer's belief that the candidate has performed the tasks in accordance with subclauses 1.1. and 1.2.
5.	Practical experience may be gained before, during, or after passing the examination, provided that the candidate cannot acquire a professional title until he or she has completed the requirements for practical experience.
6.	Subjects in which candidates take exams for this title:
6.1.	Introduction to financial statements
6.2.	Cost accounting and introduction to management accounting
6.3.	Management and communications, 6.4. Information technologies and application

Source: (Adapted Komisija za računovodstvo i reviziju BiH, 2016)

The professional title Certified Accountant (CA) may be acquired by a person who meets the following requirements (*and proposed changes*):

Table 4. Certified Accountant

No.	Requirements for acquiring the title (<i>and proposed changes</i>)
1.	That he/she has completed:
1.1.	Economic academic/scientific third-cycle studies and acquired a Ph.D. in economics, or
1.1.1.	If the person has completed the studies under Point 1.1. economic academic/scientific third cycle studies and acquired a Ph.D. in economics, or 1.2. economic academic/scientific second cycle studies and the title of Master of Science in Economics, or 1.3. Bachelor's Degree in Economics in accordance with the

	programs applied prior to the Bologna Process and the title Bachelor of Economics or 1.4. economic academic first cycle studies in accordance with the Bologna process with 240 ECTS credits, must have at least two years of practical experience in accounting, of which at least one year in preparing financial statements, or four years of practical experience in accounting.
1.1.2.	If a person has completed the studies under Point 1.5. economic/academic first cycle studies according to the Bologna process with 180 ECTS credits, he/she should have at least three years of practical experience in bookkeeping, of which at least one year in preparing financial statements or participating in the preparation of financial statements or four years of practical experience in accounting.
1.1.3.	If the person has completed studies under Point 1.6. professional economic studies according to the Bologna process, or 1.7. two-year post-secondary school of Economics (according to the programs applied before the Bologna Process), or 1.8. academic/scientific or vocational non-economic professional studies, he/she should have at least four years of practical experience in bookkeeping, of which at least two years in preparing financial statements or five years of practical experience in accounting.
1.2.	Economic academic second-cycle studies and acquired the title Master (300 ECTS credits) or Magister of Economics (according to the programs applied before the Bologna Process), or
1.3.	Bachelor's Degree studies in Economics according to programs before the Bologna Process and acquired the title Bachelor of Economics, or
1.4.	First cycle of Economic academic studies according to the Bologna process with 240 ECTS, or
1.5.	First cycle of Economic academic studies according to the Bologna process with 180 ECTS, or
1.6.	Professional Economic studies according to the Bologna process (completed at business colleges or faculty departments), or
1.7.	Two-year post-secondary school of Economics (according to the programs applied before the Bologna Process), or
1.8.	Academic/scientific or professional non-economic studies.
2. That he passed professional exams required for the title Certified Accountant in the following subjects:	
2.1.	Business Law and Taxes
2.2.	Application of management accounting
2.3.	Financial Reporting 2
2.4.	Audit and Internal Control Systems and
2.5.	Application of Financial Management

Source: (Adapted Komisija za računovodstvo i reviziju BiH, 2016)

Continuing Professional Education (CPE) contributes to the expertise of accountants, auditors, and related professions and activities that contribute to the development of the professional knowledge, skills, values, ethics, and attitudes of accountants, auditors and other related titles in related professions (Chartered Internal Auditors, Certified Appraisers, Certified Forensic Accountants). The content of the CPE of professional accountants, auditors and related professions is determined by education standards and consists of accounting, auditing, finance and other related knowledge, organizational and business knowledge, and competencies in the field of information technology (Komisija za računovodstvo i reviziju BiH, 2009).

The Law on Accounting and Auditing of BiH regulates that continuing professional education is based on the input data. People from the accounting profession (CAT, CA, CA) should spend at least 120, that is 40 classes per year during a three-year period (or continuing educational units - CEU), in activities relevant to professional development, with a minimum of half of those classes in professional lectures; activities relevant to professional development should be verified and proven by professional bodies; professional bodies, on the basis of this evidence and verification, issue a work permit for the following year (Komisija za računovodstvo i reviziju BiH, 2009). Professional bodies (non-governmental, voluntary and professional associations recognized by the Accounting and Auditing Commission BiH as professional accounting organizations with good reputation) are empowered to require their members to accept the proposed forms of continuous professional education for the activities awarded with credits within one year.

Table 5. Forms of Continuing Professional Education

No.	Activities	Credits
1.	Participation in congresses and symposia organized by a professional body or company authorized by a professional body.	up to 10 classes
2.	Participation in seminars, courses and workshops organized by a professional body or company (legal entity) authorized by a professional body.	up to 7 classes for one-day programs and up to 8 hours for longer programs
3.	Teach a course or a CPE session in an area related to professional obligations organized by a professional body or company (legal entity) authorized by a professional body	up to 5 classes
4.	Participation and work in technical committees	up to 3 classes
5.	Professional journal published by professional bodies or professional journals published by other legal entities (companies) approved by the Commission	up to 8 classes
6.	Published book in the field of accounting, auditing and other related knowledge with the review of a university professor	up to 15 classes
7.	Published article in the field of accounting, auditing and other related knowledge in a professional journal approved by the Commission	up to 5 classes
8.	Self-education and other forms of education	up to 5 classes
Total:		up to 59 classes

Source: (Adapted Komisija za računovodstvo i reviziju BiH, 2009)

Continuing professional education takes place in the form of an individual and formal engagement, education organized by a professional body or other legal entities upon the approval of professional bodies. Individual education is reflected in the personal engagement of individuals in the expansion of knowledge by studying the professional literature that accountants, auditors, and members of the accounting profession need to demonstrate. One proof is the study of articles in professional literature published by professional bodies and/or companies authorized by professional bodies. International bodies give priority to formal continuing education organized by professional bodies and companies accredited by professional bodies. Formal continuing education is quantified by scoring the organizational forms the candidate participated in (Komisija za računovodstvo i reviziju BiH, 2009). This approach has its disadvantages as it does not allow measuring the results of education and does not show the level of competence that has been achieved, and professional bodies providing education must nevertheless strive for adequate solutions to meet the basic objective of continuing professional education (Kovačević, 2006: 13-14).

3. The analysis of the accountant education system in Bosnia and Herzegovina

Accounting activities cover a wide range of jobs, from the simple one to those very complex, which require the appropriate competencies which are achieved at different levels of education (Dečman & Rep, 2015: 7). The beginning of aspiring accountants' education begins at the secondary school of economics, although this is not a prerequisite for enrollment in the faculties of economics, where the education of future accountants primary takes place. Practices in BiH and the surrounding countries show that there are differences in approach to aspiring professional accountants' education (Dečman & Rep, 2015: 7). Most of the faculties of economics (public and private) in BiH have study programs in accounting, business finance and auditing at the graduate level, while some colleges combine this choice with master's or magister's degrees or higher degrees of education. Significant differences exist in the duration of education (4+1 or 3+2), the number of compulsory and elective subjects, the number of ECTS credits awarded for undergraduate, graduate and master's thesis, the number of theoretical and practical classes, forms of mastering the subject, etc.

Public faculties of economics in BiH, which have study programs in accounting, auditing and business finance, place greater emphasis on subjects related to the accounting profession and those which are in accordance with the potential recognition of exams for aspiring certified accountants. In private higher education institutions, the accounting, auditing and business finance study programs are not as present, and there is a smaller number of classes for some subjects and a smaller number of ECTS credits awarded. The analysis of the study programs of some higher education institutions in BiH showed that there are significant differences in the education system of accountants and that it is necessary to harmonize the

study programs if aspiring professional accountants are to be allowed to adopt and apply the IES principles. This is one of the key prerequisites for the harmonization of the domestic and international regulatory framework and for the recognition of the titles acquired in the accounting profession.

Provisions on Conditions and procedure for recognizing exams for acquiring a title in the accounting profession of BiH (Komisija za računovodstvo i reviziju BiH, 2016), which was passed on 1/7/2016 persons who have completed the third cycle studies in economics and obtained the title of Doctor of Economic Science in accounting, auditing or business finance may be recognized as a Certified Accountant. A person who has completed a second cycle of economic academic studies and acquired a master's degree in accounting, auditing or business finance may be exempt from certain exams. Individuals who have completed undergraduate studies in economics according to the programs prior to the Bologna Process and obtained a degree Bachelor of Economics or completed first cycle economic academic studies in accordance with the Bologna Process and acquired the title Bachelor of Economics with 240 ECTS credits may be exempt from certain exams. A candidate may be exempt from exams in one or more subjects if he/she has collected at least 60 ECTS credits during the I cycle studies or 50 ECTS credits during the II cycle studies in accounting and business finance study program courses, narrow scientific field of accounting, audit, and business finance, in accordance with Art. 5 Paragraph 1 of the Basic Provisions on the Conditions and procedures for recognizing exams for acquiring a title in the accounting profession of BiH (Official Gazette of BiH, 2016).

The Commission Working Group determines the degree of compatibility between the exams taken by the applicant during the studies and the exams established by the Commission Decision. The comparison between the course in question for reduction and the course necessary for the acquisition of an appropriate title is based on the degree of conformity of the syllabuses, literature for the course and competences of the responsible teacher. The syllabus of the course is considered if it is foreseen in the curriculum for acquiring the title in the professional association of accountants. After the comparison, the Commission Working Group shall determine the percentage of compatibility between the applicant's passed exams with the exams determined by the Decision. If the Working Group determines that the degree of compatibility between the applicant's exams with the exams determined by decision of the Commission is 75% or more in volume and content, it will issue a proposal for recognition of exams, however if the degree of compliance is less than 75% it will reject the applicant's proposal. The Working Group submits the proposal to the Commission that accepts or rejects the request in accordance with Art. 10-13. of the Basic Provisions on the Conditions and procedure for recognition of exams necessary for acquiring a title in the accounting profession of BiH (Official Gazette of BiH, 2016). Differences in the education system of aspiring professional accountants also occur in I and II cycle of study programs completed by the curriculum which do not specify ECTS credits for individual subjects (before the Bologna process) and it is necessary to determine ECTS credits based on the curriculum, which is done on the basis of the number of classes held in accordance with Article 5 Paragraph 2. of the Basic Provisions on the Conditions and procedure for recognition of exams necessary for acquiring a title in the accounting profession of BiH (Komisija za računovodstvo i reviziju BiH, 2016).

Table 6 shows the data on the submitted candidate requests for the recognition of exams necessary for acquiring the title Certified Accountant, in the period 1/3/2018 – 1/3/2019, for the courses Application of Management Accounting (6), Auditing and Internal Control Systems (8) and Application of Financial Management (9) who completed their studies at public colleges and the Commission Decision (2016) on accepting or rejecting the applications.

In accordance with IES and the Commission Decision (2016), all 14 courses, whose proficiency is required of those who wish to enter the accounting profession established by the syllabus in the first, second and third cycle of studies at the Faculty of Economics in Banja Luka, are in accordance with the professional education program for acquiring a title in the accounting profession (Šnjegota & Šnjegota-Milošević, 2017: 12). Faculty of Economics in Zenica, Mostar and East Sarajevo have a high level of compatibility with the program of professional education, while the subjects in accounting, auditing and financial management are less compatible at the Faculty of Economics in Tuzla, Sarajevo and Bihać. However, there is considerable compatibility that enables the students who have completed university studies to have a level of knowledge and skills necessary to qualitatively integrate into the accounting profession.

Table 6. Recognition of exams necessary for Certified Accountants- public higher education institutions

University	Faculty of Economics	Study program on undergraduate studies	Financial management, banking and insurance			Financial management		Accounting and Auditing		Accounting and Finance		Submit a request	Approved %	Rejected %
University of East Sarajevo ¹	Brčko	Courses	6							13	3	13	77	23
			8							15	3	15	80	20
			9							6	4	6	67	33
	Pale	Courses	6				4	1				4	75	25
			8				3	1				3	67	33
			9				3	1				3	67	33
	Bijeljina	Courses	6											
			8											
			9											
University of Banja Luka ²	Banja Luka	Courses	6	15	4	15	1	26	1	5		61	90	10
			8	14	5	15	1	24	1	6		59	88	12
			9	14	4	16	1	25	1	8		63	90	10
University of Sarajevo ³	Sarajevo	Courses	6	3	3	9	9	30	3	8	8	50	54	46
			8	2	2	8	8	30	4	9	9	49	53	47
			9	4	4	9	9	21	5	9	9	43	37	63
University of Tuzla ⁴	Tuzla	Courses	6	2	2			7		28	14	37	57	43
			8					7		32	16	39	59	41
			9	2	2			7		25	5	34	74	26
University of Zenica ⁵	Zenica	Courses	6					18	1	2	1	20	90	10
			8					18	1	2		20	95	5
			9					18		2	1	20	95	5
University of Bihać ⁶	Bihać	Courses	6	1				1	1	8	3	10	60	40
			8					1	1	9	3	10	60	40
			9	1				1	1	8	3	10	60	40
University of Dž. Bijedić in Mostar ⁷	Mostar	Courses	6			1	1			3	3	4	-	100
			8			1	1			2	2	3	-	100
			9			1	1			3	3	4	-	100
University of Mostar ⁸	Mostar	Courses	6							36	4	36	89	11
			8							37	5	37	86	14
			9							35	5	35	86	14

Source: Komisija za računovodstvo i reviziju BiH. Pravilnik o uslovima i postupku redukcije ispita za sticanje zvanja u računovodstvenoj profesiji BiH. Službeni glasnik BiH, br. 70/16; 1) <https://www.efb.ues.rs.ba>, 2) <https://www.ef.unibl.org>, 3) <https://www.efsa.unsa.ba>, 4) <https://www.ef.untz.ba>, 5) <https://www.ef.unze.ba>, 6) <https://www.efbi.unbi.ba>, 7) <https://www.sum.ba>, 8) <https://www.ef.sve-mo.ba>

Table 7 shows the data on the number of candidate requests for the recognition of exams necessary for the title of Certified Accountant in the period 1/3/2018 – 1/3/2019 for the courses Application of Management Accounting, Auditing and Internal Control Systems and Application of Financial Management, who have completed their studies at private colleges and the Commission Decision on accepting or rejecting the requests. The number of requests for the exam recognition submitted by candidates who have completed their studies at private colleges is significantly smaller, as is the number of accepted requests for the recognition of exams necessary for the title of Certified Accountant. Out of the nine private colleges, which are often not faculties of economics, the Commission accepted the request for the exam recognition in only three cases.

Table 7. Recognition of exams necessary for Certified Accountants-private higher education institutions

University Faculty	Study program on undergraduate studies	Management, Banking, Finance and Commerce	Accounting and Auditing	Finance, accounting and audit	Management, Accounting and Auditing	Not specified	Submit a request	Approved %	Rejected %						
Pan-European University Banja Luka ¹	Faculty of Business Economics Apeiron	Courses	6	1	1					1	-	100			
			8	1	1						1	-	100		
			9	1	1						1	-	100		
University of Business Studies Banja Luka ²	Faculty of Business Economics and Finance	Courses	6			6	5				6	17	83		
			8			6	5				6	17	83		
			9			6	5				6	17	83		
Independent University of Banja Luka ³	Faculty of Economics Banja Luka	Courses	6			1	1				1	-	100		
			8			1	1				1	-	100		
			9				1	1	1			1	-	100	
University of Business Engineering and Management Banja Luka ⁴	Faculty of Economics Banja Luka	Courses	6							2	2	100	-		
			8							2	2	100	-		
			9							2	2	100	-		
International University of Brčko District ⁵	Faculty of Management Brčko	Courses	6			2	2				2	-	100		
			8			2	2				2	-	100		
			9			2	2				2	-	100		
European University of Brčko District ⁶	Faculty of Economics Brčko	Courses	6			1	1				1	-	100		
			8			1	1				1	-	100		
			9			1	1				1	-	100		
University of Travnik ⁷	Faculty of Management and Business Economics Travnik	Courses	6				1			1	1	2	50	50	
			8				1				1	100	-		
			9				1	1		1	1	2	-	100	
University "Vitez" in Travnik ⁸	Faculty of Business Economics Travnik	Courses	6						2	1		2	50	50	
			8						2	1		2	50	50	
			9						2	1		2	50	50	
Sinergija University of Bijeljina ⁹	Faculty of Business Economics Bijeljina	Courses	6			3	3					3	-	100	
			8			3	3					3	-	100	
			9			3	3					3	-	100	
Slobomir P. University Bijeljina ¹⁰	Faculty of Economics and Management Bijeljina	Courses	6			1	1	1	1	1	1		3	-	100
			8			1	1	1	1	1	1		3	-	100
			9			1	1	1	1	1	1		3	-	100

Source: Komisija za računovodstvo i reviziju BiH. Pravilnik o uslovima i postupku redukcije ispita za sticanje zvanja u računovodstvenoj profesiji BiH. Službeni glasnik BiH, br. 70/16; 1) <http://www.apeiron-uni.eu/fpe.html>, 2) <https://univerzitetps.com>, 3) <http://nubl.org/fakulteti/ekonomski-fakultet>, 4) www.univerzitetpim.com, 5) <http://iu-bd.org>, 6) <https://eubd.edu.ba>, 7) <http://fmpe.edu.ba/index.php>, 8) <https://unvi.edu.ba>, 9) <http://upis.sinergija.edu.ba>, 10) <http://fem.spu.ba>

Unlike the relatively solid connection and interdependence of the education process at public higher education institutions in BiH and the process of professional education of persons who intend to enter or are already in the accounting profession, the data show that there is no significant compatibility with IES in private higher education institutions, as shown by the data on the submitted requests for the exam recognition in the accounting profession.

Conclusion

The emergence of new and complex forms of transactions, business arrangements and requirements causes the business to become more complex and the pressure to monitor changes and challenges comes

from different sides, starting with information and communication technologies, a greater number of information users, and the need to understand the global business context. In order for accountants to be able to face a number of challenges in a quality manner, it is necessary for them to have a quality education in the accounting profession, which means establishing the conditions under which a person can obtain the status of an accountant. Expertise and competence in the accounting profession imply formal education and the ability to apply theoretical knowledge in practice, and the testing consists of exams taken after completing practical training, which is one of the basic requirements for quality work. However, in addition to acquiring practical experience, passing exams and having a Certified Accountant certification, a proper program of continuous improvement of theoretical knowledge and practical skills is also required in order to obtain a license for quality work.

The research and analysis of the requirements for obtaining certificates and licenses in accounting profession required the presentation of the existing system of formal education at the faculties of economics in BiH, as well as the possibility of recognizing the exams necessary for accounting title of a Certified Accountant which is a licensed profession. Practice shows that there are significant differences in the formal education system of higher education institutions with study programs in accounting, auditing and business finance, while there are fewer differences in continuing professional education. In the future, it is necessary to focus on the standardization of the formal education system of professional accountants and aspiring professional accountants by developing, adopting and implementing International Education Standards by defining entry requirements for professional accounting education programs, initial professional development, and continuing professional development for aspiring professional accountants. This is aided by the application of IES for professional accountants adopted in BiH, which, in addition to IFRS, is one of the bases for achieving international accounting harmonization that significantly reduces international differences in requirements for professional accountants, facilitates global mobility and provides international benchmarks of good practice for professional accounting education.

Literature

1. Dečman, N. & Rep, A. (2015). Analiza sustava obrazovanja računovođa u Hrvatskoj i Europi. *Zbornik Ekonomskog fakulteta u Zagrebu*, 13 (1), 1-17. Retrived April 24, 2019, from <https://hrcak.srce.hr/141093>.
2. International Accounting Education Standards Board. (2018). *Inventory of Implementation Support Materials*. Retrived Jun 24, 2019, from <http://www.ifac.org/system/files/publications/files/IAESB-Implementation-Support-Materials-Catalogue.pdf>.
3. Komisija za računovodstvo i reviziju BiH. (2006). *Odluka o prihvatanju međunarodnih obrazovnih standarda*. Retrived April 24, 2019, from <http://www.komisija-rrbih.org/srr/wp-content/uploads/2017/11/Odluka-o-prihvatanju-medjunarodnih-obrazovnih-standarda.pdf>.
4. Komisija za računovodstvo i reviziju BiH. *Odluka o prihvatanju međunarodnih obrazovnih standarda*. Službeni glasnik BiH, br. 18/16.
5. Komisija za računovodstvo i reviziju BiH. (2006). *Odluka o uslovima za sticanje zvanja u računovodstvenoj profesiji BiH*. Službeni glasnik BiH, br. 18/16.
6. Komisija za računovodstvo i reviziju BiH. (2016). *Pravilnik o uslovima i postupku redukcije ispita za sticanje zvanja u računovodstvenoj profesiji BiH*. Službeni glasnik BiH, br. 70/16.
7. Komisija za računovodstvo i reviziju BiH. (2009). *Uputstvo o osnovama i kriterijima kontinuirane profesionalne edukacije u BiH*. Retrived April 24, 2019, from <https://www.komisija-rrbih.org/srr/hr/>.
8. Kovačević, M. (2006). Primjena MOS - ulazak u profesiju profesionalnih računovođa i kontinuirana profesionalna edukacija. *Zbornik radova: Mjesto i uloga računovodstvene i finansijske profesije pri donošenju efikasnih poslovnih odluka*, 9. Međunarodni simpozijum, Udruženje-Udruga računovođa i revizora Federacije BiH i FEB Sarajevo. Sarajevo.
9. Šnjegota, D. & Šnjegota-Milošević, B. (2017). Uloga institucija srednjeg i visokog obrazovanja u razvoju računovodstvene profesije, *Zbornik radova Ekonomskog fakulteta Brčko*, Volumen 12.
10. The International Accounting Education Standards Board. (2015). *Handbook of International Education Pronouncements*. International Federation of Accountants. Retrived May 2, 2019, from <https://www.ifac.org/publications-resources/2015-handbook-international-education-pronouncements>.

11. The International Accounting Education Standards Board. (2017). *Handbook of International Education Pronouncements*. International Federation of Accountants. Retrived April 24, 2019, from <http://santafe-bschool.eu/intranet/wp-content/uploads/2017/02/IAESB-Handbook-of-International-Education-Pronouncements-2017.pdf>.
12. Tušek, B. (2009). Međunarodni standardi računovodstvene edukacije. *Računovodstvo i financije*, 09/2009.
13. Zakon o računovodstvu i reviziji Bosne i Hercegovine. Službeni list BiH, br. 42/2004.
14. Žager, K., Sever Mališ, S. & Dečman, N. (2016). Certificiranje i licenciranje računovodstvenih i revizijskih zvanja. *Zbornik radova Ekonomskog fakulteta Sveučilišta u Mostaru, Posebno izdanje*.

Web resources

15. European University of Brčko District, Faculty of Economics. Retrived September 26, 2019, from <https://eubd.edu.ba/>.
16. IFAC. Retrived April 25, 2019, from <https://www.ifac.org/about-ifac>.
17. International University of Brcko District, Faculty of Management. Retrived September 26, 2019, from <http://iu-bd.org>.
18. Independent University of Banja Luka. Faculty of Economics. Retrived September 26, 2019, from <http://nubl.org/fakulteti/ekonomski-fakultet/>.
19. Pan-European University Banja Luka, Faculty of Business Economics Aperion. Retrived September 26, 2019, from <http://www.apeiron-uni.eu/fpe.html/>.
20. Sinergija University of Bijeljina, Faculty of Business Economics. Retrived September 26, 2019, from <http://upis.sinergija.edu.ba/>.
21. Slobomir P. University Bijeljina, Faculty of Economics and Management Bijeljina. Retrived September 26, 2019, from <http://fem.spu.ba/>.
22. The International Accounting Education Standards Board. Retrived April 25, 2019, from <https://www.iaesb.org/>.
23. University of Banja Luka, Faculty of Economics. Retrived May 7, 2019, from <https://ef.unibl.org/>.
24. University of Bihać, Faculty of Economics. Retrived May 9, 2019, from <https://www.efbi.unbi.ba>.
25. University of Business Studies Banja Luka, Faculty of Business Economics and Finance. Retrived September 26, 2019, from <https://univerzitetps.com/>.
26. University of "Džemal Bijedić" in Mostar, Faculty of Economics. Retrived May 9, 2019, from <https://www.sum.ba/>.
27. University of East Sarajevo, Faculty of Economics Brčko. Retrived May 6, 2019, from <https://www.efb.ues.rs.ba/>.
28. University of East Sarajevo, Faculty of Economics Pale. Retrived May 6, 2019, from <https://www.ekofis.ues.rs.ba/>.
29. University of East Sarajevo, Faculty of Business Economics Biljeljina. Retrived May 6, 2019, from <http://www.fpe.ues.rs.ba/>.
30. University of Mostar, Faculty of Economics. Retrived May 9, 2019, from <https://www.ef.sve-mo.ba/>.
31. University of Sarajevo, Faculty of Economics. Retrived May 6, 2019, from <https://www.efsa.unsa.ba/>.
32. University of Tuzla, Faculty of Economics. Retrived May 9, 2019, from <https://www.ef.untz.ba/>.
33. University of Travnik, Faculty of Managment and Business Economics Kiseljak. Retrived September 26, 2019, from <http://fmpe.edu.ba/index.php>.
34. University "Vitez" in Travnik, Faculty of Business Economics. Retrived September 26, 2019, from <https://unvi.edu.ba/>.
35. University of Zenica, Faculty of Economics. Retrived May 9, 2019, from <https://www.ef.unze.ba>