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1.2 Guideline for the Reform of the MA Programme in Moldova (AESM)

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¹ The report structure was developed by the project experts. In fact the authors have done an international secondary research during the writing of the third chapter.

Introduction

This guideline is written in the context of implementation of the Erasmus project REFINE, which addresses the need for reform of study programmes in Finance with regard to contents and teaching methodologies / pedagogical approaches², and for aligning the study programmes with labour market demands to provide the Moldovan economy with highly skilled graduates in Finance.

Moreover, an implicit objective is to assure that students acquire the skills and competencies needed to engage in tomorrow's global labour market.

According to the “Detailed project-description-en_REFINE”, the specific objectives of the project are:

1) To improve six existing MA curricula in Finance taking into account the latest international developments in the subject area (reform till 10/2018, start of implementation - 09/2019);

2) To promote the quality and relevance of the MA programmes through the development of updated and new course materials (in two waves till 07/2019 and 07/2020);

3) To develop the competences and skills of teaching staff further through training courses in innovative teaching methodologies and current topics in Finance (till 07/2019);

4) To increase the alignment of the MA programmes with labour market requirements (start of the reformed programmes in 09/2019).

The work will be conducted in four phases.

This report represents the output of Phase I, named “Development of Individual Reform Strategies”. The report was based on the results of a targeted survey among local employers to identify the competences and skills required from graduates.

While an initial review of each MA programme has already been conducted during the project application, the survey results have allowed to further scrutinization of the relevance and up-to-dateness of curricula, teaching methodologies / pedagogical approaches and course contents.

Based on these results, the EU and Partner Country HEIs jointly developed this specific guideline, which contains roadmaps for the modernization of the MA programmes.

This report will guide activities during the following WPs.

² Pedagogical approaches are often placed on a spectrum from teacher-centred to learner-centred pedagogy; though these two approaches may seem contradictory, they can often complement each other in the realisation of educational goals—for example, a teacher-centred approach may be useful to introduce a new theme, while a learner-centred approach may be necessary to allow students to explore these ideas and develop a deeper understanding.

1. The Labour Market Analysis

1.1 Summary of employer's survey

According to the activities planned under the REFINE project on December 12, 2017, the project implementation team organized the Workshop "Identifying employee expectations on adapting graduate competencies to future financial developments", in which the largest employers of graduates of the study master's program at the "Financial and Banking Administration", delivered by the Academy of Economic Studies of Moldova (AESM) participated.

During the workshop, employers were given the "Questionnaire for Employers" in order to get familiar with the full content of it. They were asked to complete them electronically till January 12, 2018.

The list of companies included in the survey comprises 22 companies, which carry out activities in private and public sectors (banking, tax, insurance, audit and financial consulting sectors).

Based on this survey, which was conducted during the period of January 03-12, 2018, the labour market analyses were provided.

The survey conducted within this project is the first quantitative research on employers' requirements towards young finance specialists, focusing on assessing the Proficiency Levels for the General and the Finance-specific skills and competencies.

Previous to the results being extracted (15 January 2018, 9:13 AM), the questionnaire had been completed by 15 companies.

The overall conclusion of the survey is that **employers need specialists with a higher level of skills and competencies than the current level of our graduates** (see Figure 1).

This fact argues the need of reform for the master program.

The purpose of the survey was to determine specific areas where employees perceive a shortfall between current and needed knowledge, skills or competencies.

The generalized analysis of the employer's survey results emphasizes the following:

Most interviewees assessed their organization's requirements for General skills and competencies with high ratings ("4" and "5"), which reveals **that the entire list of skills and competencies is relevant to the labour market in the Republic Moldova.**

All these competencies have not been required in the existing master program, and came up with for the survey.

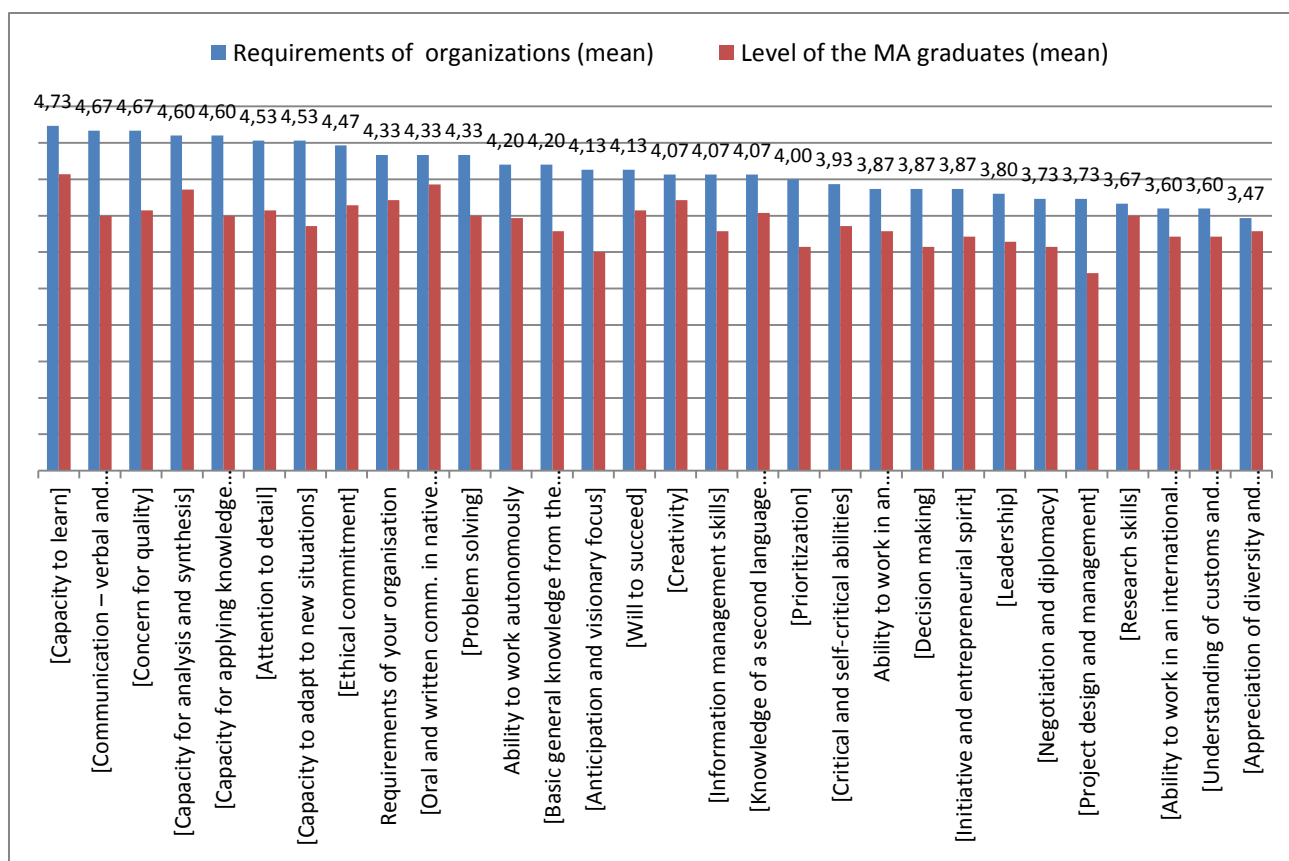


Figure 1: **General knowledge, skills or competencies: employers' requirements versus the current level of the MA graduates**

Source: *Employers' survey results.*

The analysis of the data from Figure 1, suggests that from the list of "General knowledges, skills or competences", in the employers' point of view, the most significant appreciations were given to:

- (i) [Capacity to learn], which recorded an average score of 4,73
- (ii) [Communication – verbal and written] 4,67
- (iii) [Concern for quality] 4,67
- (iv) [Capacity for analysis and synthesis] 4,60
- (v) [Capacity for applying knowledge in practice] 4,60.

According to employers, the lowermost appreciations were given to:

- (i) [Project design and management] , which recorded an average score of 3,73
- (ii) [Research skills] 3,67
- (iii) [Ability to work in an international context] 3,60
- (iv) [Understanding of customs and cultures of other countries] 3,60
- (v) [Appreciation of diversity and multiculturalism] 3,47.

At the same time, the survey results show that, during their activity in the questioning entities, our MA graduates have demonstrated the possession of high levels of the following **skills or competences**:

- (i) [Capacity to learn], which recorded an average score of 4,07

(ii)	[Oral and written comm. in native language]	3,93
(iii)	[Capacity for analysis and synthesis]	3,86
(iv)	Requirements of your organisation	3,71
(v)	[Creativity]	3,71

The following skills or competences were appreciated by employers with lowest grades:

(i)	[Prioritization]	3,07
(ii)	[Decision making]	3,07
(iii)	[Negotiation and diplomacy]	3,07
(iv)	[Anticipation and visionary focus]	3,00
(v)	[Project design and management]	2,71

The following answers were most frequently selected for the question „Please list 3 the most important GENERAL knowledge, skill or competence from the list above”: "Capacity for analysis and synthesis", "Ability to work autonomously" and "Basic general knowledge in the business field (see table 1).

Table 1: The list of 3 the most important Skills, competencies or general knowledge (according to the given list)

The first most important general skill/competence of current employees	The second most important general skill/competence of current employees	The third most important general skill/competence of current employees
Capacity for analysis and synthesis	Attention to detail	Concern for quality
Ability to work autonomously	Capacity to learn	Negotiation and diplomacy
Basic general knowledge from the field of business	Capacity for applying knowledge in practice	Critical and self-critical abilities

Source: Employers' survey results.

For instance, in general all the graduates' skills level is below the required one.

Generally, this phenomenon is known as 'the skill gap'. A skill gap is a gap between what employers want or need their employees to be able to do, and what those employees can actually do when they walk into work³.

Figure 2 shows the gaps in general knowledge, skills and competences, calculated as the current level of MA graduates minus the one required by organizations. In fact, all the gaps are negative.

Conforming to the analysis of the employers' survey, the employers consider that there are significant gaps in the following general skills and competences:

(i)	[Capacity to adapt to new situations]	-1,18
(ii)	[Communication – verbal and written]	-1,17
(iii)	[Anticipation and visionary focus]	-1,13
(iv)	[Capacity for applying knowledge in practice]	-1,10

³

<https://www.forbes.com/forbes/welcome/?toURL=https://www.forbes.com/sites/lizryan/2016/08/18/the-most-dangerous-skills-gap-of-all/&refURL=https://www.google.com/&referrer=https://www.google.com/>

(v)	[Concern for quality]	-1,10
(vi)	[Project design and management]	-1,02
(vii)	[Attention to detail]	-0,96
(viii)	[Prioritization]	-0,93
(ix)	[Basic general knowledge from the field of business]	-0,91
(x)	[Problem solving]	-0,83
(xi)	[Ethical commitment]	-0,82
(xii)	[Decision making]	-0,80
(xiii)	[Information management skills]	-0,78
(xiv)	[Capacity for analysis and synthesis]	-0,74
(xv)	Ability to work autonomously	-0,73

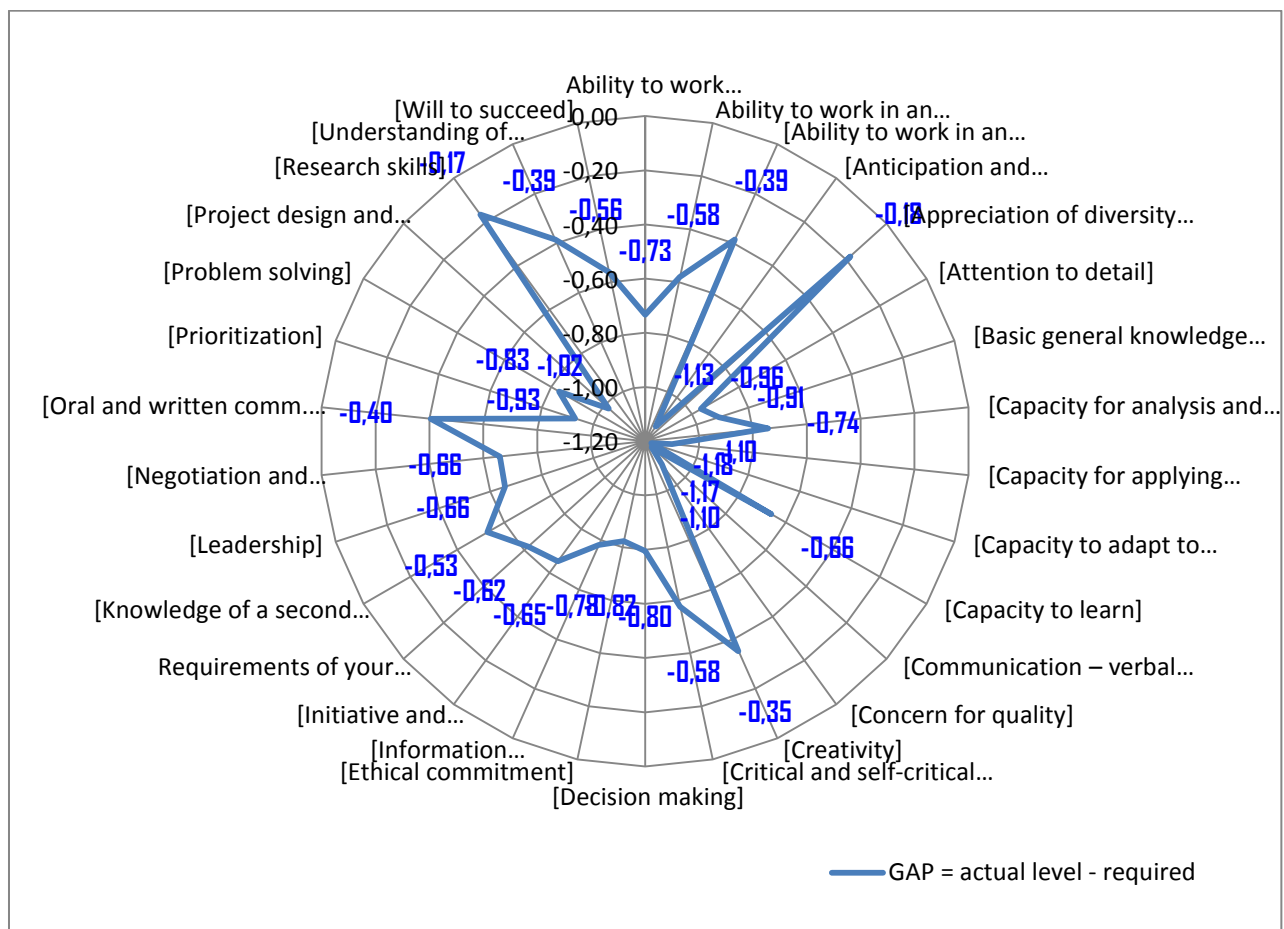


Figure 2: **Gaps in General knowledge, skills and competencies: employers' requirements versus the current level of the MA graduates**
 Source: Employers' survey results.

The smallest gaps were registered by:

(i)	[Ability to work in an international context]	-0,39
(ii)	[Understanding of customs and cultures of other countries]	-0,39
(iii)	[Creativity]	-0,35
(iv)	[Appreciation of diversity and multiculturality]	-0,18
(v)	[Research skills]	-0,17

Generally, this fact is considered to be unfavorable, as the lack of these skills is seen as a major obstacle for the activity of the companies. Summarized, these skill deficits have a negative impact on the country's economic growth.

It is difficult to explain the large gap in the skills. It would be incorrect to say that the gaps totally depend on shortcomings in the master program.

The greatest part of General skills have to be developed before the entry for the Masters-level degree program.

Surely, the master program has to focus on the development of all listed knowledge, skills and competences.

!Note: A holistic comparative approach to all the surveys together is presented in the Annex Survey_synthesys_1.

The grades attributed to all items in the list of "Finance-specific skills and competences" vary from 3 to 5, which confirms that **all the competences in the list are important and necessary for the Moldovan employers.**

In regard to the "Finance-specific skills and competencies of MA graduates", all employers have indicated that alumni level is poorer than the one required for a productive activity from the behalf of companies.

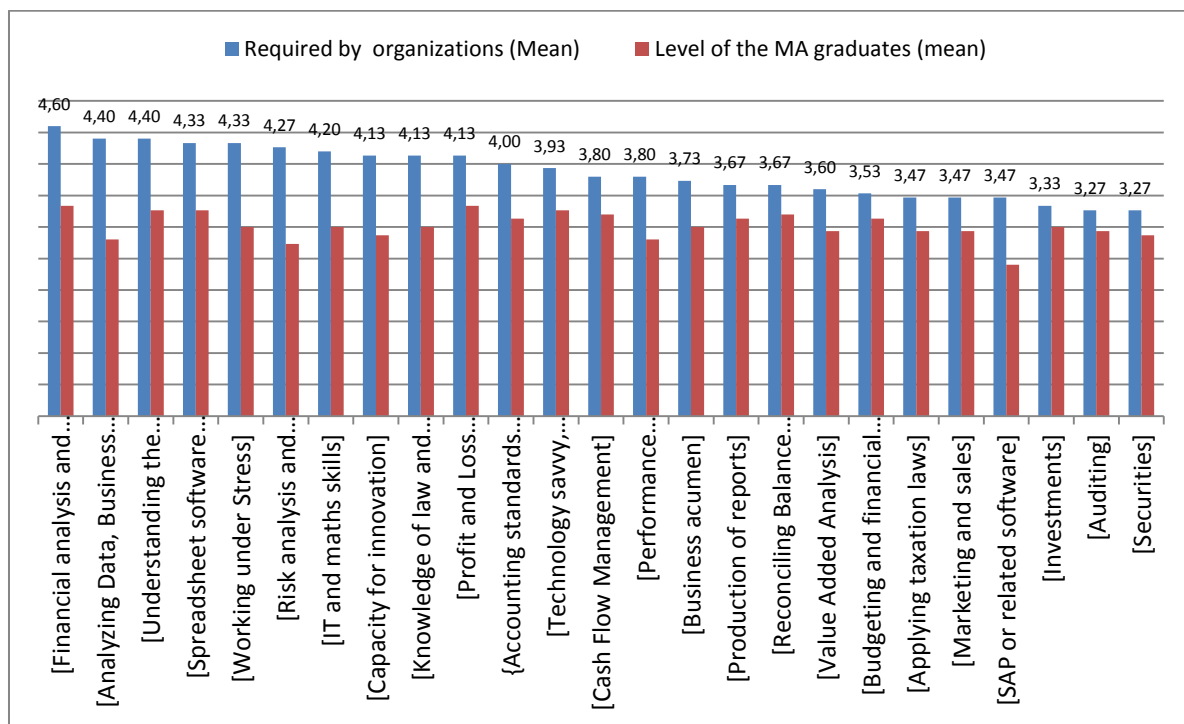


Figure 3: **The level of the Finance-specific skills and competencies: employers' requirements versus the current level of the MA graduates**

Source: Employers' survey results.

The analysis of data from Figure 3 shows that in the "FINANCE-specific knowledge, skills and competencies" list, highest ratings from the employers' point of view were obtained by:

- (i) [Financial analysis and reporting] which recorded an average score of 4,60

- (ii) [Analyzing Data, Business Analytics] 4,40
- (iii) [Understanding the banking process and services] 4,40
- (iv) [Spreadsheet software (Excel)] 4,33
- (v) [Working under Stress] 4,33

Table 2: The list of 3 the most important Finance-specific skills and competencies (according to the given list)

The first most important general skill/competence of current employees	The second most important general skill/competence of current employees	The third most important general skill/competence of current employees
Analysing Data, Business Analytics	Financial analysis and reporting	Accounting standards and techniques
Business acumen	Risk analysis and management	Spreadsheet software (Excel)
Understanding the banking process and services	Marketing and sales	Applying taxation laws

Source: Employers' survey results.

Data from the Table 2 show that employers find most important Finance-specific skills and competencies to be the following:

- Analysing Data, Business Analytics
- Business acumen
- Understanding the banking process and services
- Financial analysis and reporting
- Accounting standards and techniques.

As the Figure 4 shows that **employers assume that MA graduates don't have sufficient Finance-specific skills and competencies.**

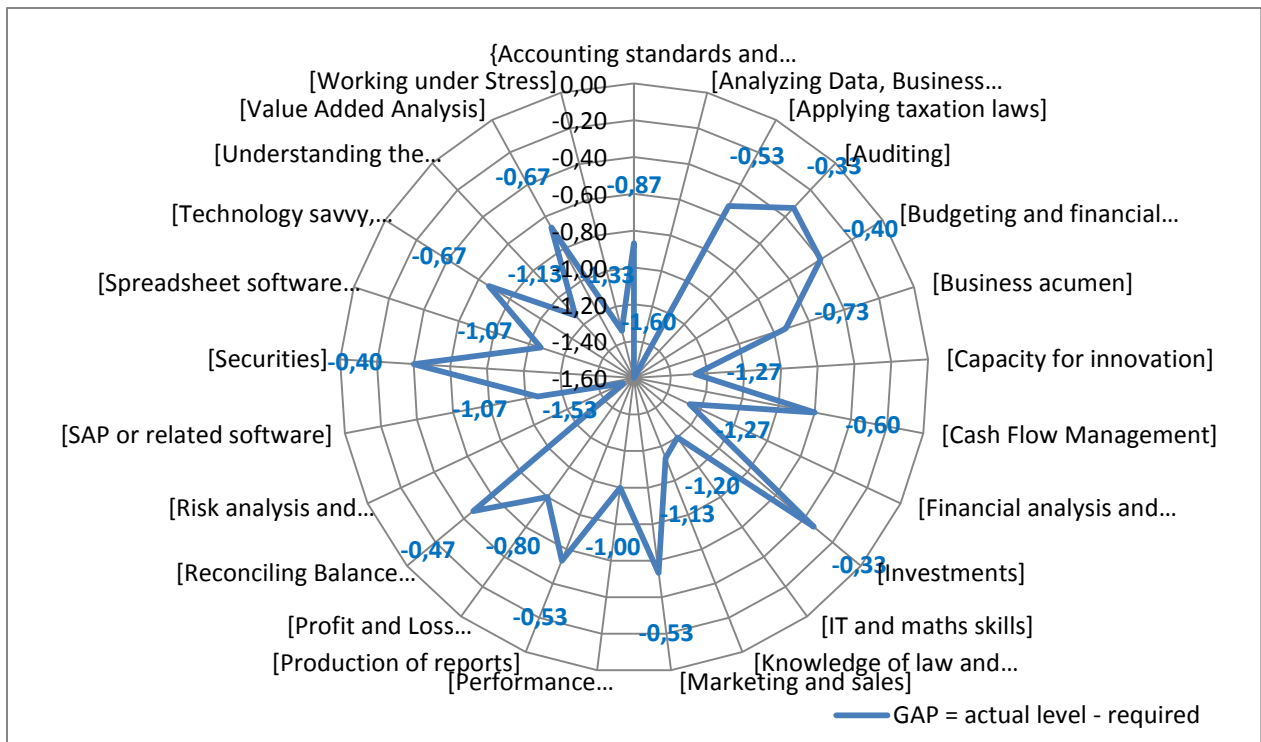


Figure 4: **Gaps in Finance-specific skills and competencies**

Source: *Employers' survey results.*

The analysis of arithmetic in Figure 4 shows that, from employers' point of view, the level of Finance-specific skills and competencies of MA graduates is below the required level.

The largest deficits were registered in:

- (i) [Analyzing Data, Business Analytics] -1,60
- (ii) [Risk analysis and management] -1,53
- (iii) [Working under Stress] -1,33
- (iv) [Capacity for innovation] -1,27
- (v) [Financial analysis and reporting] -1,27
- (vi) [IT and maths skills] -1,20
- (vii) [Knowledge of law and legal codes] -1,13
- (viii) [Understanding the banking process and services] -1,13

Solving a skill gap is a complex problem. It includes elaboration of a list of the required skills and competencies for each job role, assessment of what you have versus what you need, identification of high performers and best practices, necessary training and measurement of results.

There are several studies which examined various aspects of the technical, leadership, and soft skill gaps organizations are facing around the world and have seen how employee motivation techniques, technology, and partnerships with colleges and universities can help bridge those gaps.

To the question "What not mentioned, knowledge or competence is important for graduates of a Master's program in the field of Financial and Banking Administration?", only 5 people⁴ answered and indicated the following:

- Forecasting and forward-looking approach,
- Client communication skills,
- Negotiation techniques.

To the question "What skills and knowledge in finance / taxation / accounting / banking / insurance will be needed in 10 years for professionals and employees? (data analytics and data, risk management, soft skills, etc.) ", the following answers were provided:

- IT skills (3)
- Analysing Data (2)
- Data analyst and big data (2)
- Client communication skills
- Financial forecast and forward looking financial models
- Big data analytics
- Risk analysis and management
- Innovation
- Risk analysis and management.

To the question "What kind of applicants do you need to recruit in the finance field currently? (corporate finance, financial markets, compliance etc.), the following answers were offered:

Risk Management, Underwriter, Actuary, Financial Markets Specialist, Financial Analyst, Finance, Financial Analyst, Finance, Banking Sales, Corporate Finance, Compliance, Corporate Finance, Corporate Finance, cashier, Accounting, reporting, auditing, Financial market, banking.

To the question "What are the main competencies and skills that you expect from a new employee in the financial field? the following responses were submitted:

data analysis, forecast, financial programming, use of data bases, risk estimation and mitigation, surveillance techniques etc., ability to understand international context of a specific finance function (budget elaboration, taxation, state securities and so on), ability to estimate and propose some methods to diminish risks in public finance, ability to work with information and big data, including through use of econometric and math methods, understanding of the banking process and services, Marketing and sales, Risk analysis and management, IT skills, business acumen, problem solving, team spirit, willingness to learn, creativity.

To the question "Would you like to add anything else to this questionnaire, your opinion regarding the knowledge, skills and competences of graduates of master programs in the field of Finance/Financial Economics/Financial and Banking

⁴ Other respondents did not answer this question.

Administration/Financial Management and Business Accounting/Corporate Finance, in the region?" only the following answer was submitted:

–In my opinion, it is necessary to highlight the importance of integrity, compliance and risk management.

This survey is the first of its kind, therefore we do not have benchmarks for dynamic analysis.

1.2. Summary of main outputs from Workshop in AESM/ Moldova

During the workshop „Identifying employee expectations on adapting graduate competencies to future financial developments" the topics related to the main challenges and opportunities for the banking and financial sector of the Republic of Moldova as well as the expectations and the requirements for the competences and abilities of graduates of the Master's program Financial and Banking Administration in the context of the continuous development of IT were discussed.

Thus, the following key issues can be highlighted:

Q1.A The main challenges for banking and finance in our region

- **Economic and political stability of the country.** Ensuring the sustainable development of the national economy creates opportunities for the development of the banking system and vice versa. At the same time, the diminishing of the population's confidence in the financial institutions generated by the frauds in the domestic banking system leads to deterioration in the quality of the loan portfolio, the non-capitalization of the liquidities through insufficient credit demand from the business environment. The large number of non-performing loans and consequences of devaluation have made it difficult for the country's founding.

- **Changes in the legal framework related to the banking sector.** Such changes will lead to the restraining of the activity of banks, while at the same time improving their soundness and sustainable development. The implementation of Basel III, the IFRS, Solvency II, innovative payment instruments, and the reform of the regulatory framework, require skilled staff with professional skills on anticipation, evaluation and good risk management, competition with non-banking financial sector, new technologies, but also the need to protect consumers. Changes in the legislation in the banking and financial sector are facing lack of qualified labor force with the capacity to analyze the legislation and the normative acts that will ensure the application of this, as well as financial education of the population as a whole.

- **Automation of banks' reports, the IT challenge,** indirectly generated by the National Bank of Moldova requirements and those imposed by the Ministry of Finance through the State Treasury. In the payments sector, the main challenges are related to the access of the non-banking payment service providers to payment

systems; strengthening security of payments; access to the payment account opened with another payment service provider and secure communication between them, etc

- **Lack of communication between the banking, financial sectors and the universities.** Weak investment in staff training for the non-banking sector leads to lack of candidates for operational jobs. The need to develop analytical skills, such as management of information system products, risk assessment and mitigation, econometrics, development of communication skills and sales techniques, formation of opinions and conclusions on economic phenomena, based on the knowledge gained in the Bachelor's and Master's studies represent employers' requirements towards the skills and abilities of the graduates.

- **Another challenge is the free movement of labor (emigration).** A lot of graduates prefer to leave the country for a better job and remuneration. The wage package will remain one of the key motivational elements, but not the only one. Career in financial and banking is demanding and requires dedication and investment of time and effort. The direct consequence of the political and economic crisis, the wave of restructuring in recent years has significantly increased the number of active job seekers. Financial professionals have struck the harsh reality that has shown that no job is totally safe, regardless of the field and hierarchical level.

Q1.B The main opportunities for banking and finance in our region

- **Among main opportunities for strengthening and increasing the efficiency of the banking and financial sector are:** foreign investors entering the banking market, implementing innovative business processes, the economic growth followed by an increase in the demand for credit as a result of the diminishing number of banks, and development of information technologies.

- **Development of the economic and financial analysis skills, ex.** knowledge of bank accountancy, IFRS-9, identification and risk' analysis, forecasting and analysis, project management, strategic planning, sales of financial services. These are key issues and opportunities to be capitalized.

- **Recognition of employee merit, involvement in various projects, and flexibility in the workplace** are factors that, in the medium and long term, contribute significantly to employee retention, creating and strengthening an efficient working environment. On top of this competitive salary and financial benefits, job stability, career opportunities, organization image, training and professional development programs are also among opportunities for the bank sector development. The increase in the number of candidates is determined both by restructuring and by activating passive candidates on the market. At the same time, a special emphasis will be placed on skills related to new technologies, econometric modeling, knowledge of the legislative and institutional framework related to the field.

Q2.A. Do you expect a strong impact of Financial Technologies on banking and finance in your region?

- **The impact of FinTech** can already be felt in Moldova on the banking and financial sector by the fact that the given companies compete with licensed banks that promote the development of the mentioned sector. There is an already higher percentage compared to previous years in terms of payments. Now, almost 70% of the population is making online payments and this percentage will increase. FinTech provides alternative and convenient ways to pay and fund management, promoting non-cash payments and thus eliminating the shadow economy. The impact of FinTech on the banking and financial sector is already present, especially in the sphere of provision of services, but it is also to be implemented in the sphere of traditional activities such as lending.

Q2.B. In which areas do you anticipate the strongest effects?

- **FinTech's innovations have multiple implications** for the payment industry, and all that is payment systems and tools, remote service, etc. In the field of payment service provision, the EU legal framework brings new players into its regulatory area, requiring customers to open accounts for these new payment service providers, and FinTech companies wishing to offer these new payment services will have to authorize or register with the supervision authority (NBM) and comply with the rules established by the domestic legal framework (transposed within the EU legal framework and to be adjusted after the latest EU-Payment Service Directive 2 (PSD2). PSD 2 is generally a positive response to FinTech's payment challenges, bringing a significant change in the bank's business model and opening up banks' gates to other innovative payment service providers. The intention is to encourage FinTech companies to market improved consumer products and services and give customers more control.

The effects of FinTech will be felt both at the managerial level (planning, risk management, scenario approach, forecasting) and operational (service banking, online banking, mobile banking), such as cashier, operator, etc. will gradually lose ground by replacing it with smart devices and information technologies.

Q2.C. Do you expect a big change in a need for more technology focused graduates in the near future?

- **Technology graduates are required in all areas, including in the financial and banking sphere.** However, it is important to combine it with the necessary economic knowledge. The strong impact of FinTech on the financial and banking sector will surely dominate the need of employers' expectations to recruit well-trained graduates in technology. Also, the relations of the economic subjects with the regulatory bodies, their digitization through the automation of the banking services, denotes the fact that the digitization has great proportions, and the employer has to

face these challenges by employing professional persons, being always ready to know more.

Market entry of new types of providers and provision of payment services through innovative technologies involves a number of challenges that need to be addressed requiring specialists / graduates trained in the banking and payment area, interested in making work more efficient by digitization, thinking emerging from the patterns of classic payment procedures and tools, as well as specialists who understand software developments and combine technologies with the financial environment.

The most important skill for a modern employee would be critical thinking, which would make people more flexible and quicker learners. As Moldovan central bank and financial authorities are trying to keep up with all the updates in the technologies used to provide banking and financial services, it is certainly expected in the near future to focus on the financial technological development to become essential for graduates. Graduates must have skills that will ensure the basic perception of processes in the financial and banking sector in order to ensure the development of IT solutions.

Q3.A. How should the universities react to Fin Tech development?

- **Self-assertion of the universities in relation to FinTech's development** is a vital element for the training of professional staff and in line with new trends. On going dialogue with employers would greatly facilitate the guidance of universities to develop curricula tailored to new realities. The universities should have a great interest in the development of Financial Technologies. Universities that increase their funds through funding, can only educate students who will achieve great success in the future of the country. Taking into account the development of information technologies and their involvement in the banking and financial sectors, universities should review their curricula, including teaching methods, so that specialized disciplines are not replaced but supplemented and updated with some innovations in the field of IT. It is important that the themes chosen by students in writing bachelor and master theses are up to date and useful for potential employers.

Q3.B. Should it be involved in the education of economists replacing a part of curricula for technologies?

- There should be an interaction between universities and IT professionals. Universities need to respond to market needs, including the development of Fin Tech, which is why more emphasis is needed on information technology disciplines without affecting the core economic substance. Thus, it is recommended to maintain financial-banking disciplines in combination with IT issues.

Q3.C. Alternatively, is it better to have separate technology and data service specialists?

- **New financial technologies imply, in the first place, new challenges in terms of risk management, including information security.** Thus, it is considered appropriate to train specialists in the financial-banking field with knowledge IT. The future economists will be required additional studies of information technologies based on economic and financial theory studies previously, in such a way that they can understand how their economic knowledge is related to the use of IT. In the context of FinTech, the separation of IT specialists from those in the field of information technologies would minimize their qualification and efficiency. However, it is recommended to focus on developing skills related to strategic planning, analysis, budgeting, time management, project management, critical thinking, etc., and knowledge base software at an advanced level is required as a prerequisite of an employer.

Q4. The predictions expect three in five jobs to disappear due to a high risk of automation (bank tellers, accountants and other lower-wage occupations). Which finance jobs will be mainly affected in your opinion?

- **Automation is a threat for many of the jobs.** The new trends will affect some employees' attributions ex. through automation of payments and transfers, especially within the banking sector. The most affected position will be the cash office operator, exchange unit operator, on a short run, while on a long run for the accountants due to the distribution of their tasks to financial managers to the detriment of innovative software for financial planning and reporting. At the same time, the organizations will maintain these or similar positions, not quantitatively, to emphasize on the interaction with the clients through modern communication methods, which will, to a certain extent, represent the image of the organization. Thus, more professionals are needed to manage the risks associated with financial technologies as well as data protection specialists in the context of implementing new financial technologies.

Q5. Are the needs of the business sector rather clear for the next 15 years? Are companies ready to cooperate with higher educational institutions in the preparation of future driven curricula and to tailor students' skills?

- Trends in the development of the long-term financial and banking sector points to the need to be in line with information technology innovations and international standards. Companies support cooperation with higher education institutions and participation in the development of future education plans for the training of professional staff adapted to labor market requirements. From this cooperation will benefit both parties, firstly by increasing the interest of students for education institutions in line with new trends, and by employers, due to the transparency and quality of the proposed curricula. Internships and volunteer programs are welcome, perceived as tools to provide real opportunities for the training of students. The role of the employers is to advise the universities about their expectations for knowldges

and skills of the future graduates. Based on this advice, universities will be able to make necessary changes and improvements of the curricula.

1.3 The main recommendation based on the labour market analyses

Summarising, the three main findings from LM analysis are:

1. Expectations are bigger than reality;
2. Unknown long run future expectations;
3. Developing skills to realize tasks that cannot be automated.

The main conclusions and recommendations based on the labour market analyses are listed below:

- the workshop was as a platform for discussion between employers and employers and there is recommended that such events become a permanent practice;

- in rapidly changing job markets, higher education systems should provide graduates with relevant skills and competences;

- to ensure that higher education qualifications match labour market needs;

- universities should also prepare students for the world of work, and enable them to lead independent lives as confident, engaged citizens;

- the study programs should be designed in such way realizing that graduate aims is not only about finding employment after graduation, but also about being able to adapt to future labour market needs and adjust to career changes;

- to address the vertical skill mismatch (the situation in which an employee has qualification either above or below the skill level necessary to carry out the job);

- the high degree of employability can serve as a measure of the effectiveness of the master program;

- Companies support cooperation with higher education institutions and participation in the development of future education plans on training professional staff adjusted to labour market requirements. From this cooperation will benefit both parties, firsts by increasing the interest of students for education in line with new trends, and by employers, due to the transparency and quality of the proposed curricula.

- The main recommendation related to **knowledge** is: more focus on banking related finance because most of students end up working there. Or more focus on corporate finance because small companies need more qualified finance students. Also, the program should focus on risk management, financial stability, fintech;

- The main recommendation related to **Skills** is: improving analytical and research skills;

- New financial technologies imply, in the first place, new challenges in terms of risk management, including information security. Thus, it is considered appropriate to train specialists in the financial-banking field with knowledge IT.

- Taking into account the development of information technologies and their involvement in the banking and financial sectors, universities should review their curricula, including teaching methods, so that **specialized disciplines are not replaced but supplemented and updated with some innovations in the field of IT.**

2. The Master Programme in Finance Analyses

2.1 The main results from students, academic and alumni surveys

According to the REFINE project, between 12th of December 2017 – 14th of January 2018, students, academics, Alumni and employers were questioned on the basis of specifically elaborated questionnaires within the project by foreign experts and adapted to each target group among those listed.

The sample frame consists of students that are enrolled in the MA program for their first and second academic years in 2017-2018. In the survey participated 19 students, 19 academics and 22 alumni.

For the Alumni, the sample frame comprises employed and unemployed recent graduates of the MA program, i.e. students that graduated a higher education institution in 2016 - 2017. Graduates were informed about the aim of the survey.

The online survey link was sent by the participating HEIs directly to their alumni contact lists. Graduates were asked to complete the survey, and to pass it on to colleagues from their group.

The representative character of the survey response can be assessed as agreeable.

The main results of the students' surveys

Students' attitude towards the survey was positive. They are pleased with the curriculum content and with the framing of the study process. During the meeting, students said they wanted more practical subjects to be included in the courses. As for future oriented MA Programs, students suggested that it is important to include an IT course.

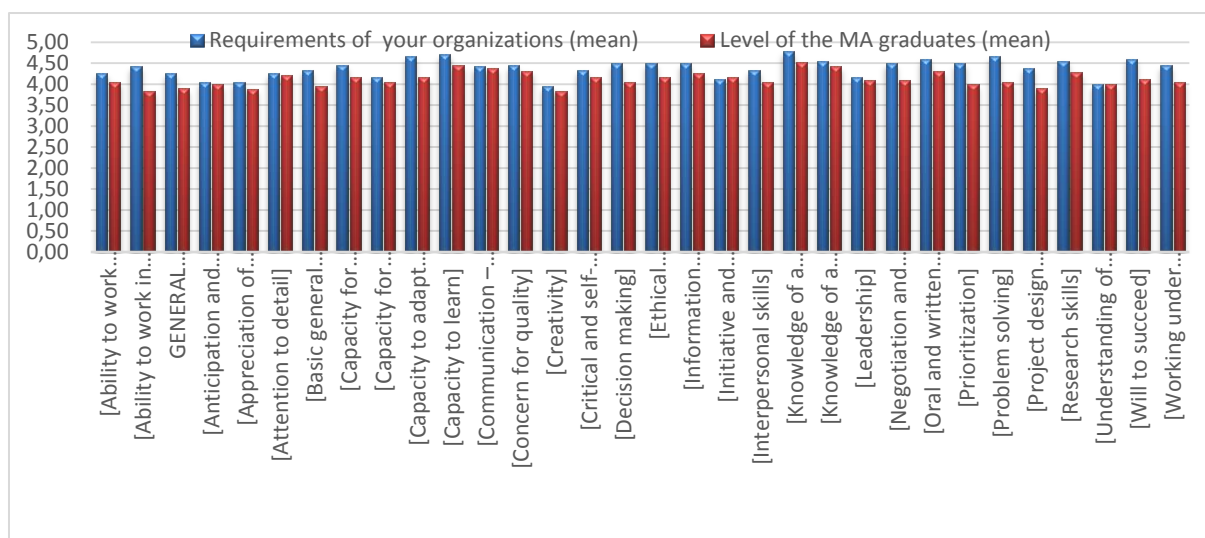


Figure 5: The level of the General knowledge, skills and competencies: employers' requirements versus the current level of the MA graduates

Source: Students' survey results.

Most of the students assessed requirements for General skills and competencies at very high and high ratings ("4" and "5"), which reveals the students' consideration that **the entire list of knowledge, skills and competencies are relevant to the Moldovan labour market.**

The analysis of data from Figure 5 shows that the highest ratings from the behalf of students were obtained by:

- (i) Knowledge of a second language (English), 4,53
- (ii) Knowledge of a third language (e.g. Russian, German, French, Spanish), 4,42
- (iii) Communication – verbal and written, 4,39
- (iv) Concern for quality, 4,33
- (v) Research skills, 4,28
- (vi) Attention to detail, 4,22.

To the question "Please list 3 most important from the list above", students offered the following answers (Table 4).

Table 4: The list of 3 most important General knowledge, skill or competence (according to the given list)

The first most important general skill/competence of current employees	The second most important general skill/competence of current employees	The third most important general skill/competence of current employees
Basic general knowledge from the field of business	Capacity for analysis and synthesis	Capacity for applying knowledge in practice
Capacity for applying knowledge in practice	Capacity for applying knowledge in practice	Capacity to learn
Capacity to learn	Capacity to learn	Concern for quality

Source: Students' survey results.

According to the analysis of students' survey, the students also consider there are gaps in the General skills and competencies.

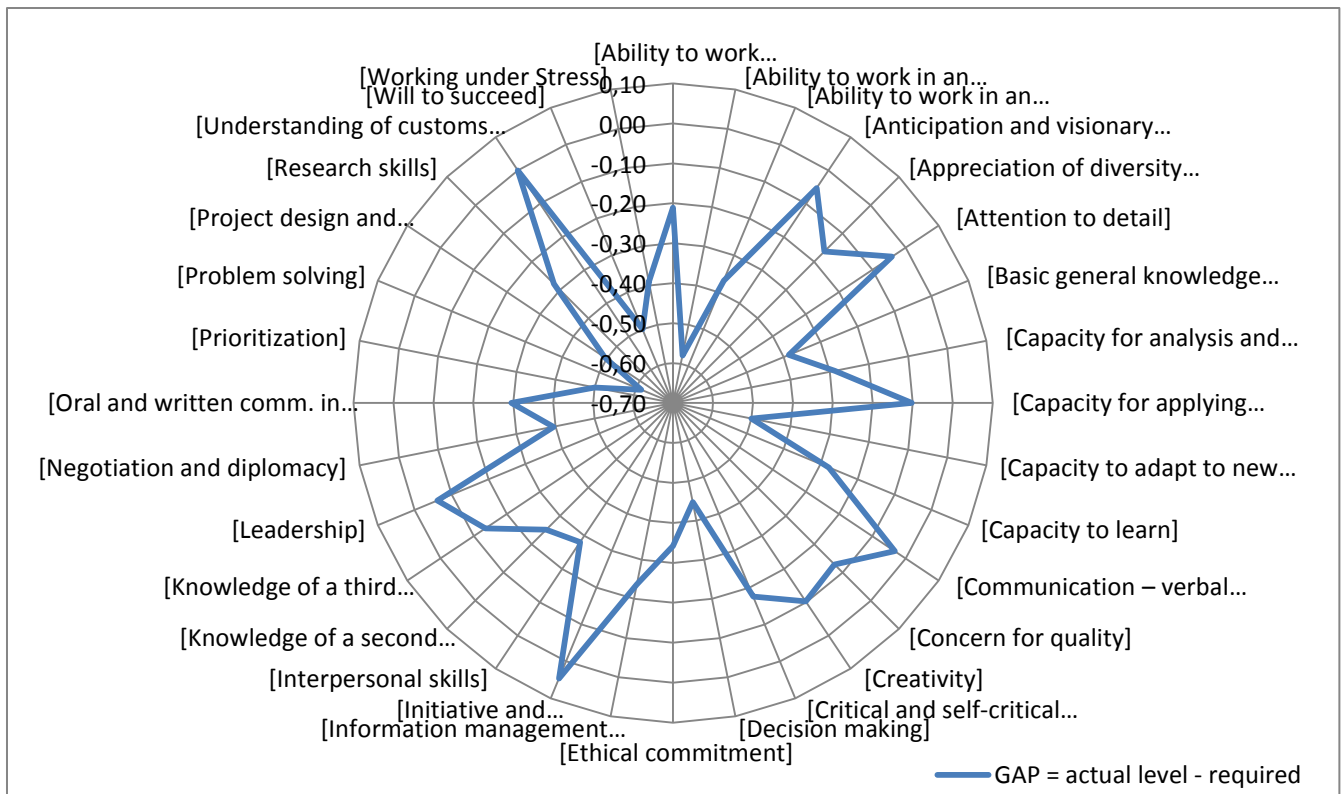


Figure 6: **Gaps in General knowledge, skills and competencies: employers' requirements versus the current level of the MA graduates**

Source: Students' survey results.

The estimated sizes of the gaps are:

- | | | |
|--------|--|-------|
| (i) | [Problem solving] | -0,61 |
| (ii) | [Ability to work in an interdisciplinary team] | -0,58 |
| (iii) | [Capacity to adapt to new situations] | -0,50 |
| (iv) | [Prioritization] | -0,50 |
| (v) | [Will to succeed] | -0,50 |
| (vi) | [Project design and management] | -0,49 |
| (vii) | [Decision making] | -0,45 |
| (viii) | [Negotiation and diplomacy] | -0,39 |
| (ix) | [Working under Stress] | -0,39 |
| (x) | [Basic general knowledge from the field of business] | -0,39 |
| (xi) | [Ability to work in an international context] | -0,37 |
| (xii) | [Ethical commitment] | -0,34 |
| (xiii) | [Oral and written comm. in native language] | -0,30 |

As for the Finance-specific skills or competencies, the Figure 7 shows that students assume the MA graduates don't have sufficient Finance-specific skills and competencies.

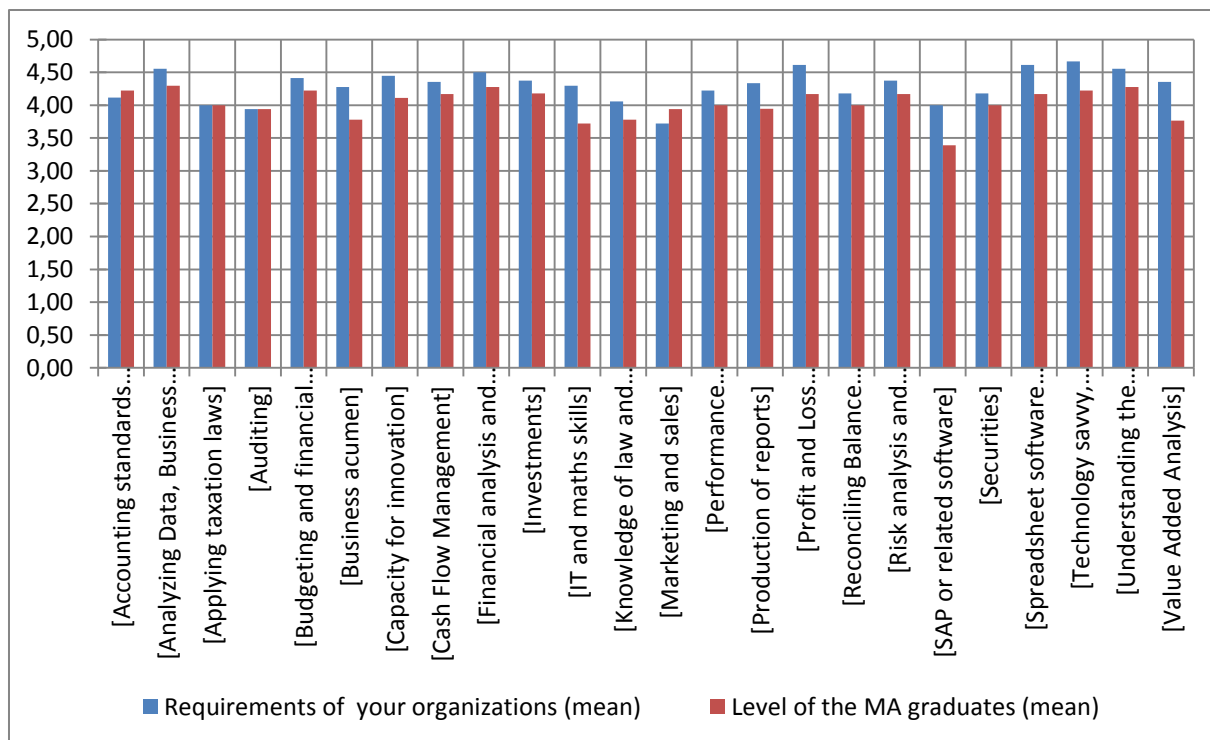


Figure 7: The level of the Finance-specific skills or competencies: employers' requirements versus the current level of the MA graduates

Source: Students' survey results.

The analysis of data from Figure 7 shows that the highest ratings from the behalf of students were obtained by:

- (i) [Technology savvy, flexibility and adaptability] 4,67
- (ii) [Profit and Loss understanding] 4,61
- (iii) [Spreadsheet software (Excel)] 4,61
- (iv) [Analyzing Data, Business Analytics] 4,56
- (v) [Understanding the banking process and services] 4,56
- (vi) [Financial analysis and reporting] 4,50
- (vii) [Capacity for innovation] 4,44
- (viii) [Budgeting and financial planning] 4,41

To the question "Please list 3 of the most important from the list above" students offered the following answers (Table 5).

Table 5: The list of 3 most important Finance-specific skills and competencies (according to the given list)

The first most important general skill/competence of current employees	The second most important general skill/competence of current employees	The third most important general skill/competence of current employees
Financial analysis and reporting	Budgeting and financial planning	Financial analysis and reporting
Understanding the banking process and services	Risk analysis and management	Capacity for innovation
Analyzing Data, Business	Analyzing Data, Business Analytics & Applying taxation laws & Financial analysis and reporting	Spreadsheet software (Excel)

Source: Students' survey results.

Data from Table 5 shows that students find the most important Finance-specific skills and competencies to be:

- (i) Financial analysis and reporting
- (ii) Understanding the banking process and services
- (iii) Analyzing Data, Business

According to students' opinion, the following Finance-specific knowledge, skills or competencies have a lot of room for improvement:

- (i) [SAP or related software] -0,61
- (ii) [Value Added Analysis] -0,59
- (iii) [IT and maths skills] -0,57
- (iv) [Business acumen] -0,50
- (v) [Technology savvy, flexibility and adaptability] -0,44
- (vi) [Profit and Loss understanding] -0,44
- (vii) [Spreadsheet software (Excel)] -0,44
- (viii) [Production of reports] -0,39
- (ix) [Capacity for innovation] -0,33
- (x) [Knowledge of law and legal codes] -0,28

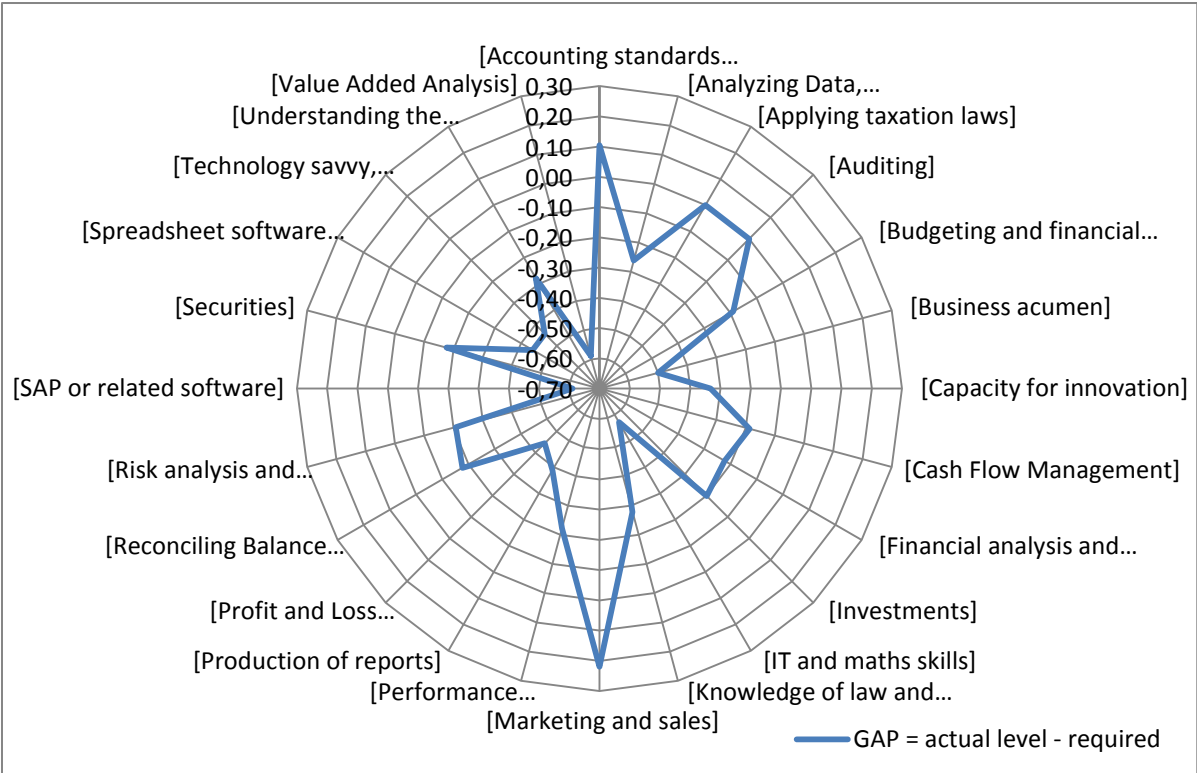


Figure 8: **Gaps in Finance-specific knowledge, skills and competencies: employers' requirements versus the current level of the MA graduates**
 Source: Students' survey results.

Students suggested many answers to the question "Other finance-specific skills: importance at the workplace versus current level". Most of them coincide with the given list of the finance-specific skills and competencies.

In addition to the list of the finance-specific skills and competencies proposed in the questionnaire, students have mentioned the following skills:

- Accounting qualification,
- Software development and its application,
- Technological expertise,
- Automatization of processes,
- Artificial intelligence application,
- Effective time management,
- Investing and development of own capital,
- Right decision making in situations of risk,
- Crypto currencies analysis,
- Work-life balance.

An interesting fact is that students did not answer to the question „Future finance-specific skills and knowledge: importance at the workplace versus current level”. This proves that they may not know anything about future changes in financial field.

To the question “Which not mentioned knowledge or competence is important for graduates of a Master's program in the field of Financial and Banking Administration?” were indicated the following skills:

- Alternative economic systems,
- The history of the development of the actual system,
- Latest technologies put to practice (AI, robotics) in our field of studies,
- To adapt to global changes and employee requirements.

To the question "What skills and knowledge in finance / taxation / accounting / banking / insurance will be needed in 10 years for professionals and employees? (data analysis, risk management, soft skills, etc.)" the following answers were provided:

Technological expertise, Software development and its application, Analysis of market, Taxation, Information management skills, Accounting, Interpersonal skills, Accounting qualification, Law knowledge, Risk management, Responsibility, Visionary skills, Data analysis, Interpersonal communication, Automatization of processes, Analysis of the risk, Financial statements analysis, Technology savvy, Business knowledge, Ability to communicate, Business forecasting, IT tools.

To the question “Would you like to add anything else to this questionnaire, your opinion regarding the knowledge, skills and competences of graduates of master programs in the field of Financial and Banking Administration in the region?” the following answers were collected:

- The disciplines taught in the program are rather well balanced and have a solid potential to provide a good knowledge base to the students, however, the materials used and the teaching could be improved a lot.

- The questionnaire is a good idea; I would like to thank those that came with this idea. And I wish you success and a positive perspective as its results will help you improve the knowledge acquisition process. One more thought I forgot to mention: Remote work and learning.

- All answers above describe precisely my opinion regarding knowledge, skills and competences of graduating the Financial and Banking Administration master's program.

- In my opinion, work - life balance should be a "must" for employees, in order to achieve success in their career, they also need fulfilment when it comes to their personal lives - free time out of work for a good health of the body and mind.

Results of the Academics survey

Teachers' attitude towards the survey and the project was welcoming and positive. Teachers consider curriculum content to be successful, but recognition that improvements are needed within the syllabus. During the teachers meeting, they stated they constantly update the courses and develop new practical subjects. As for future oriented MA Programs, teachers suggest that it is important to develop skills that can not be automated.

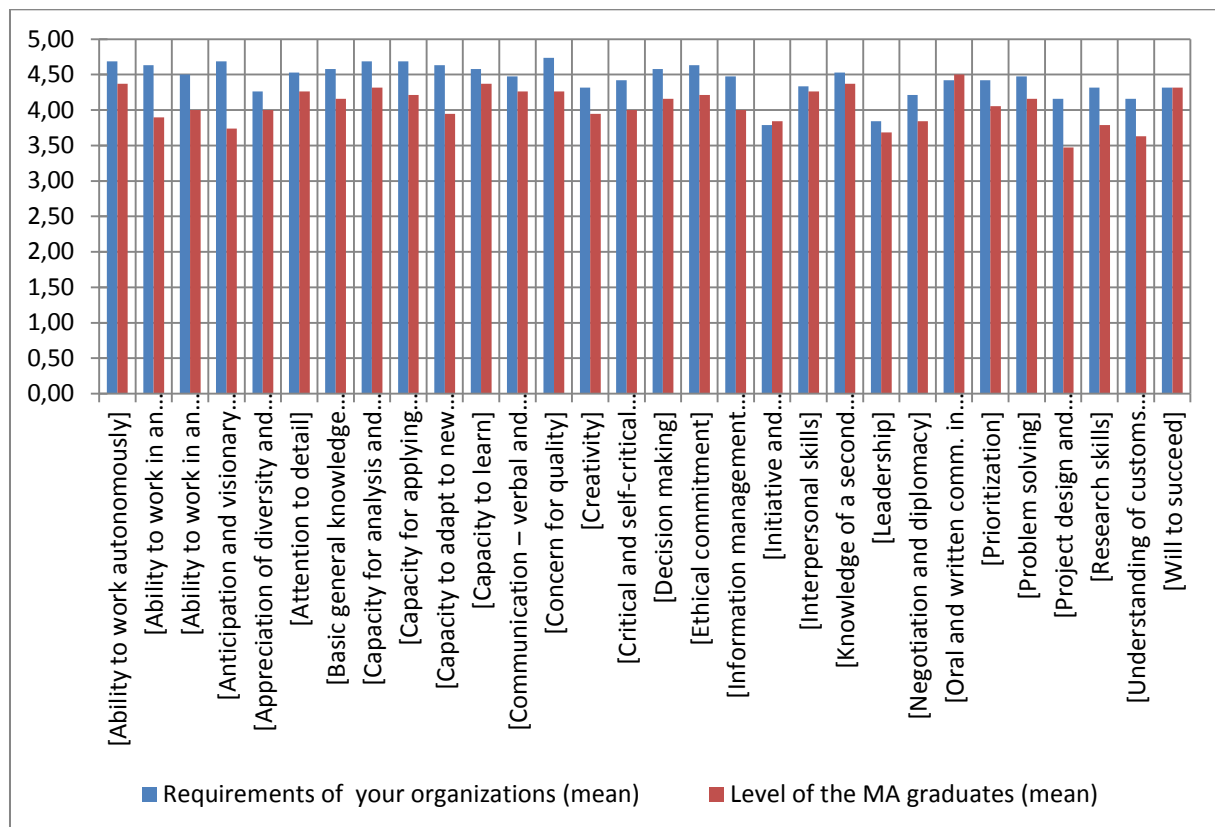


Figure 9: **The level of the General knowledge, skills or competencies: employers' requirements versus the current level of the MA graduates**

Source: Academics' survey results.

Most academics assessed requirements for General skills and competencies with very high and high ratings, which reveals the academics' consideration that **the entire list of knowledge, skills and competencies are relevant to the Moldovan labour market.**

The highest ratings, according to the academics, are deserved by:

- (i) [Concern for quality] 4,74
- (ii) [Ability to work autonomously] 4,68
- (iii) [Anticipation and visionary focus] 4,68

(iv) [Capacity for analysis and synthesis]	4,68
(v) [Capacity for applying knowledge in practice]	4,68
(vi) [Ability to work in an interdisciplinary team]	4,63
(vii) [Capacity to adapt to new situations]	4,63
(viii) [Ethical commitment]	4,63
(ix) [Basic general knowledge from the field of business]	4,58
(x) [Capacity to learn]	4,58
(xi) [Decision making]	4,58
(xii) [Attention to detail]	4,53
(xiii) [Knowledge of a second language (English)]	4,53
(xiv) [Ability to work in an international context]	4,50

To the question “Please list 3 most important from the list above” university teachers were offered the following answers (Table 6).

Table 6: The list of 3 most important General knowledge, skills or competencies (according to the given list)

The first most important general skill/competence of current employees	The second most important general skill/competence of current employees	The third most important general skill/competence of current employees
Capacity for applying knowledge in practice	Capacity to learn	Capacity for analysis and synthesis & Decision making
Ability to work autonomously & Capacity for analysis and synthesis & Communication – verbal and written	Capacity for applying knowledge in practice	Critical and self-critical abilities & Research skills
Ability to work in an international context & Attention to detail & Basic general knowledge from the field of business	Capacity to adapt to new situations & Capacity for analysis and synthesis	Will to succeed Ability to work autonomously Ability to work in an interdisciplinary team

Source: Academics’ survey results.

University teachers have mentioned in the list of 3 most important General knowledge, skills or competencies the following:

- (i) Capacity for applying knowledge in practice
- (ii) Ability to work autonomously & Capacity for analysis and synthesis & Communication – verbal and written
- (iii) Ability to work in an international context & Attention to detail & Basic general knowledge from the field of business.

According to the analysis of Academics’ survey, the *Teachers* consider that there are gaps in the following general skills and competences (see Figure 10):

(i) [Anticipation and visionary focus]	-0,95
(ii) [Ability to work in an interdisciplinary team]	-0,74
(iii) [Capacity to adapt to new situations]	-0,68
(iv) [Project design and management]	-0,68

(v)	[Research skills]	-0,53
(vi)	[Understanding of customs and cultures of other countries]	-0,53
(vii)	[Ability to work in an international context]	-0,50
(viii)	[Capacity for applying knowledge in practice]	-0,47
(ix)	[Information management skills]	-0,47
(x)	[Concern for quality]	-0,47
(xi)	[Critical and self-critical abilities]	-0,42
(xii)	[Ethical commitment]	-0,42
(xiii)	[Basic general knowledge from the field of business]	-0,42
(xiv)	[Decision making]	-0,42
(xv)	[Prioritization]	-0,37
(xvi)	[Creativity]	-0,37
(xvii)	[Capacity for analysis and synthesis]	-0,37
(xviii)	[Negotiation and diplomacy]	-0,37.

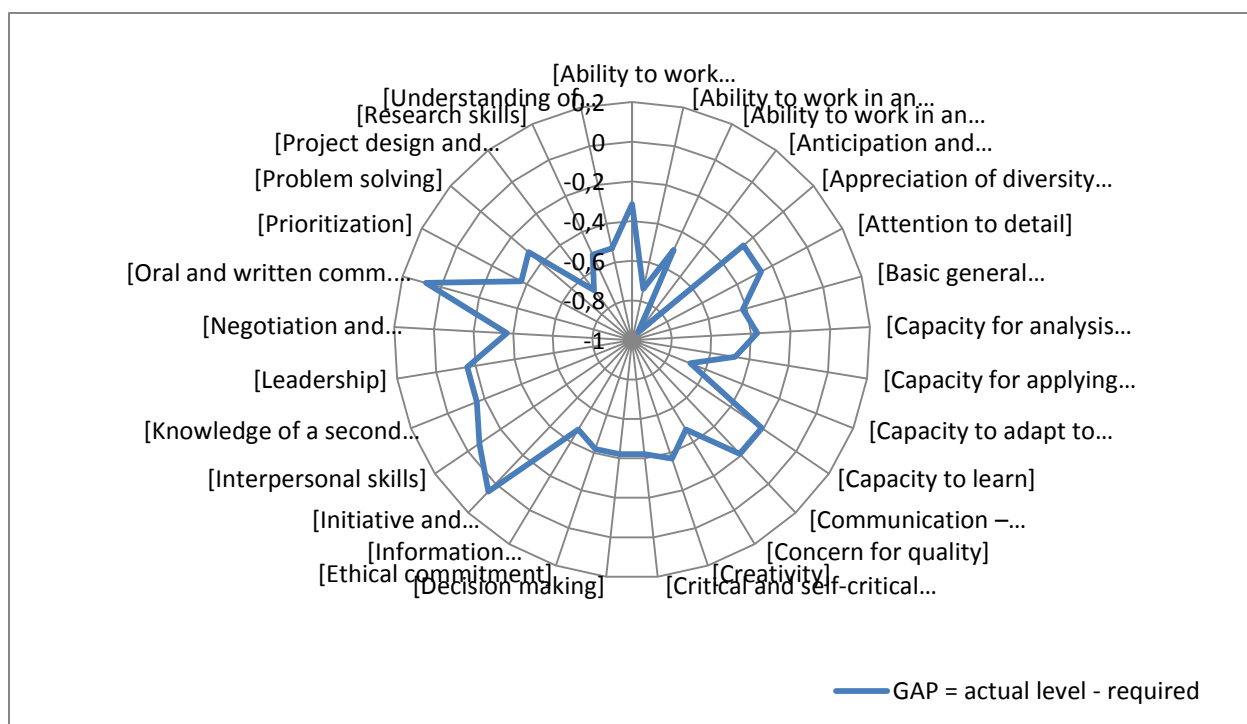


Figure 10: **Gaps in General knowledge, skills and competencies: employers' requirements versus the current level of the MA graduates**

Source: Academics' survey results.

The survey results show that **university teachers consider the current level of Finance-specific skills and competencies of MA graduates to be lower than the required level.**

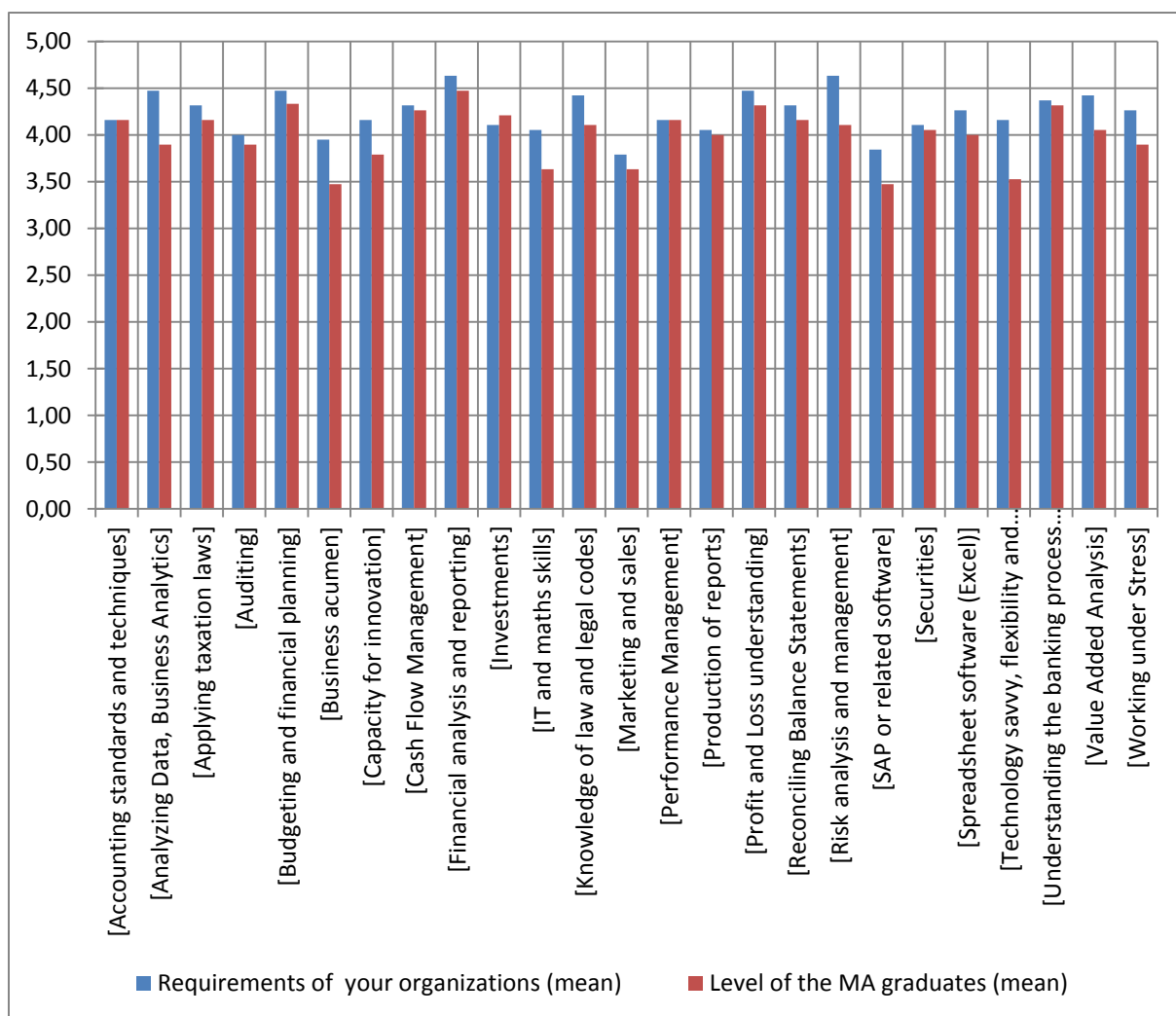


Figure 11: **The level of the Finance-specific skills or competencies: employers' requirements versus the current level of the MA graduates**

Source: Academics' survey results.

The highest ratings, from the academics' point of view, were obtained by:

- | | |
|---|------|
| (i) [Financial analysis and reporting] | 4,63 |
| (ii) [Risk analysis and management] | 4,63 |
| (iii) [Analyzing Data, Business Analytics] | 4,47 |
| (iv) [Budgeting and financial planning] | 4,47 |
| (v) [Profit and Loss understanding] | 4,47 |
| (vi) [Knowledge of law and legal codes] | 4,42 |
| (vii) [Value Added Analysis] | 4,42 |
| (viii) [Understanding the banking process and services] | 4,37 |
| (ix) [Applying taxation laws] | 4,32 |
| (x) [Cash Flow Management] | 4,32 |
| (xi) [Reconciling Balance Statements] | 4,32 |

To the question "Please list 3 most important from the list above" university teachers offered the following answers (Table 7).

Table 7: The list of 3 most important Finance-specific skills and competencies (according to the given list)

The first most important general skill/competence of current employees	The second most important general skill/competence of current employees	The third most important general skill/competence of current employees
Analyzing Data, Business Analytics	Knowledge of law and legal codes	Risk analysis and management
Financial analysis and reporting	Budgeting and financial planning Capacity for innovation	Working under Stress
Budgeting and financial planning	Investments Understanding the banking process and services	Understanding the banking process and services

Source: Academics' survey results.

Academics consider the most important Finance-specific skills and competencies to be:

- Analyzing Data, Business Analytics
- Financial analysis and reporting
- Budgeting and financial planning.

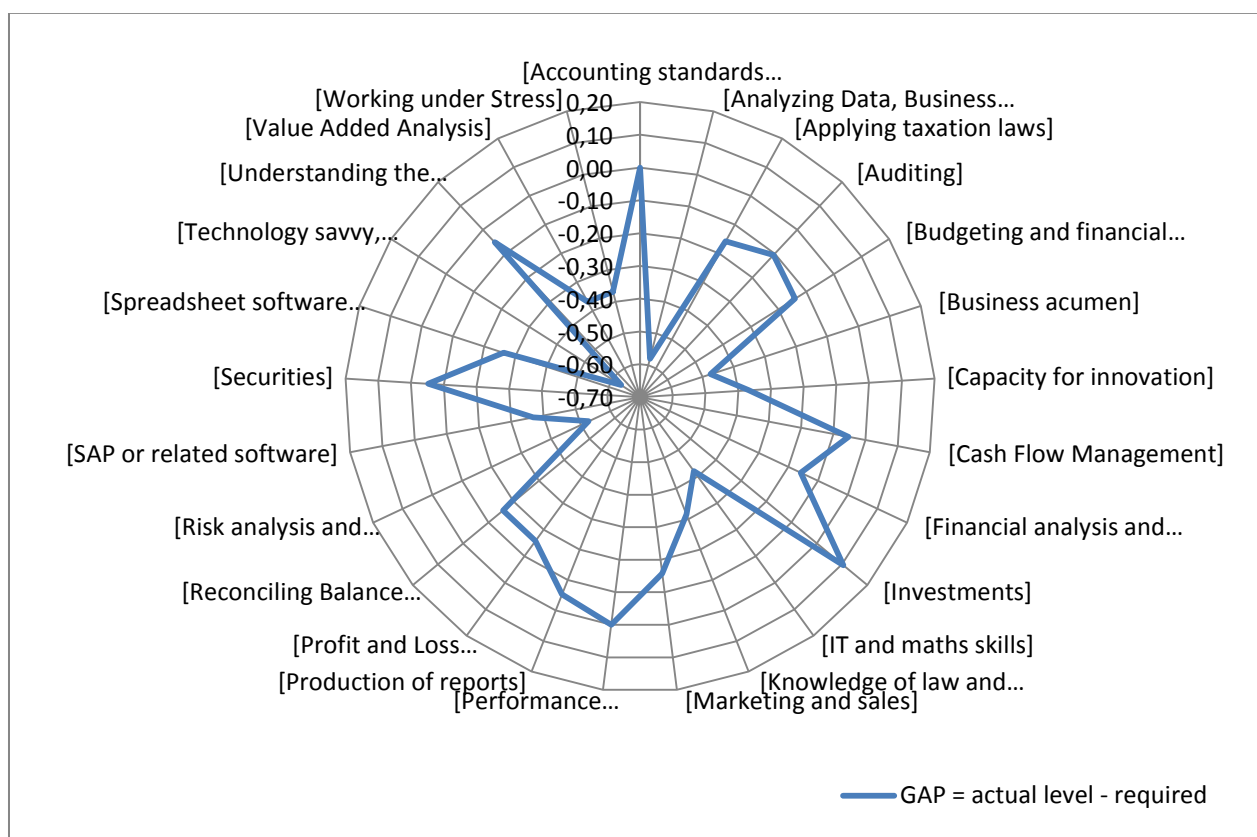


Figure 12: Gaps in Finance-specific knowledge, skills and competencies: employers' requirements versus the current level of the MA graduates

Source: Academics' survey results.

According to the survey results, the academics consider that there are gaps in the all general skills and competencies:

(i)	[Accounting standards and techniques]	-0,63
(ii)	[Analyzing Data, Business Analytics]	-0,58
(iii)	[Applying taxation laws]	-0,53
(iv)	[Auditing]	-0,47
(v)	[Budgeting and financial planning]	-0,42
(vi)	[Business acumen]	-0,37
(vii)	[Capacity for innovation]	-0,37
(viii)	[Cash Flow Management]	-0,32
(ix)	[Financial analysis and reporting]	-0,26
(x)	[Investments]	-0,16
(xi)	[IT and maths skills]	-0,16

To the question "What not mentioned, knowledge or competence is important for graduates of a Master's program in the field of Financial and Banking Administration?", only 2 persons responded, who indicated the following:

- Self-motivation;
- Portfolio Management;
- Strength of Character.

Non-banking Financial Institutions Activities in the Financial Market (Financial Market Activity of Insurance Companies and Pension Funds, Investment Funds Activity in the Financial Market).

To the question "What skills and knowledge in finance / taxation / accounting / banking / insurance will be needed in 10 years for professionals and employees? (data analytics and data, risk management, soft skills, etc.)" the following answers were provided:

- Data analytics (5)
- IT skills (3)
- Data analytics and big data
- Creativity
- IT Systems
- Leveraged finance
- Risk Analysis and Management
- Risk management
- Software skills
- Technical skills
- Understanding the banking and financial process and services
- Financial Engineering and Financial Modeling.

To the question "Other finance-specific skills: importance at the workplace versus current level" the teachers offered the following additional skills and competencies to those on the lists proposed in the questionnaire:

- Accounting,

- Software development and its application,
- Technological expertise,
- Artificial intelligence application,
- Effective time management.

The academics did not answer to the question „Future finance-specific skills and knowledge: importance at the workplace versus current level”.

To the question “Would you like to add anything else to this questionnaire, your opinion regarding the knowledge, skills and competences of graduates of master programs in the field of Finance/Financial Economics/Financial and Banking Administration/Financial Management and Business Accounting/Corporate Finance, in the region?” only the following answer was obtained:

"Knowledge of technical competences is very important, but I would suggest to pay attention to the Behavioural competences as well. I would classify the skills according to their importance for the employment as follows: 1. Communication Skills; 2. Evolutionary Skills; 3. Self-motivation; 4. Teamwork; 5. Technical Skills; 6. Strength of Character; 7. Interpersonal skills; 8. Planning and Organization; 9. Problem-solving skills; 10. Leadership skills.

The expectations of students and labor market in the area of Finance change over time and are influenced by various external and internal drivers that affect organizational circumstances and requirements concerning knowledge, competences and skills etc.

More real practice is needed in the learning process, so we need closer cooperation with enterprises.

The students have to obtain the habits to study the textbooks during the program and to apply the innovations after the program.

Results of the Alumni survey

The alumni attitude towards the survey was positive and they showed their willingness to contribute to the improvement of the program. Alumni are generally grateful for the quality of the studies received and for the good curriculum content. As for future oriented MA Programs, Alumni suggest that it is important to develop skills related to the use of new technologies.

Most alumni assessed requirements for General skills and competencies with very high and high ratings (“4” and “5”), which reveals that they consider that **the entire list of knowledge, skills and competencies are relevant for the labour market in the Republic Moldova.**

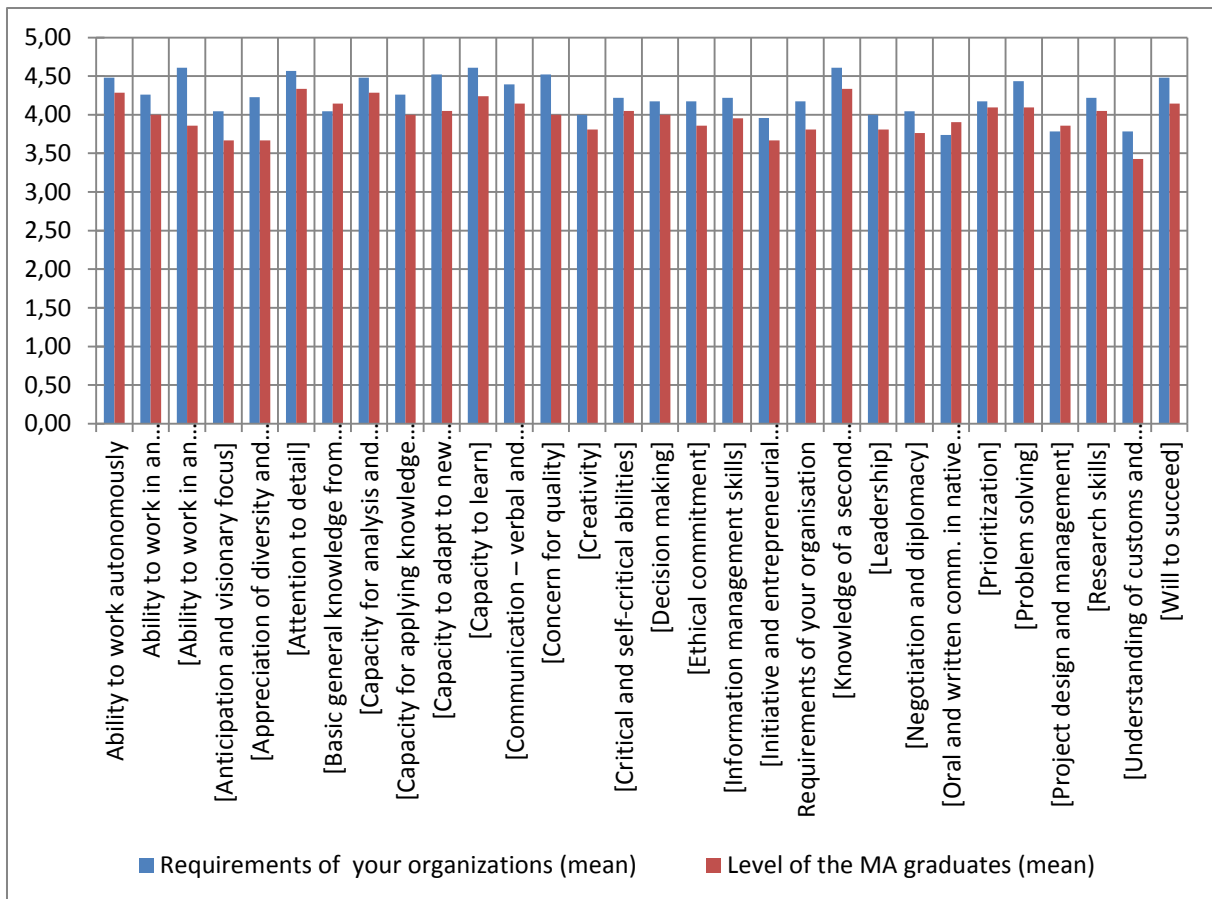


Figure 13: The level of the General knowledge, skills or competencies: employers' requirements versus the current level of the MA graduates

Source: Alumni survey results.

(i)	[Ability to work in an international context]	4,61
(ii)	[Capacity to learn]	4,61
(iii)	[Knowledge of a second language (English)]	4,61
(iv)	[Attention to detail]	4,57
(v)	[Capacity to adapt to new situations]	4,52
(vi)	[Concern for quality]	4,52
(vii)	Ability to work autonomously	4,48
(viii)	[Capacity for analysis and synthesis]	4,48
(ix)	[Will to succeed]	4,48

To the question "Please list 3 most important from the list above" alumni offered the following answers (Table 8).

According to the survey, alumni also consider that there are major gaps in general knowledge, skills and competences of MA graduates.

Table 8: The list of 3 most important General knowledge, skill or competence (according to the given list)

The first most important general skill/competence of current employees	The second most important general skill/competence of current employees	The third most important general skill/competence of current employees
Capacity for applying knowledge in practice	Capacity for analysis and synthesis	Capacity to learn
Ability to work autonomously Ability to work in an interdisciplinary team Capacity for analysis and synthesis	Capacity for applying knowledge in practice Capacity to adapt to new situations	Capacity to adapt to new situations
Concern for quality Project design and management	Capacity to learn Decision making	Ethical commitment

Source: Alumni survey results.

Figure 14 shows the gaps in general knowledge, skills and competences, calculated as current level of MA graduates minus requirements.

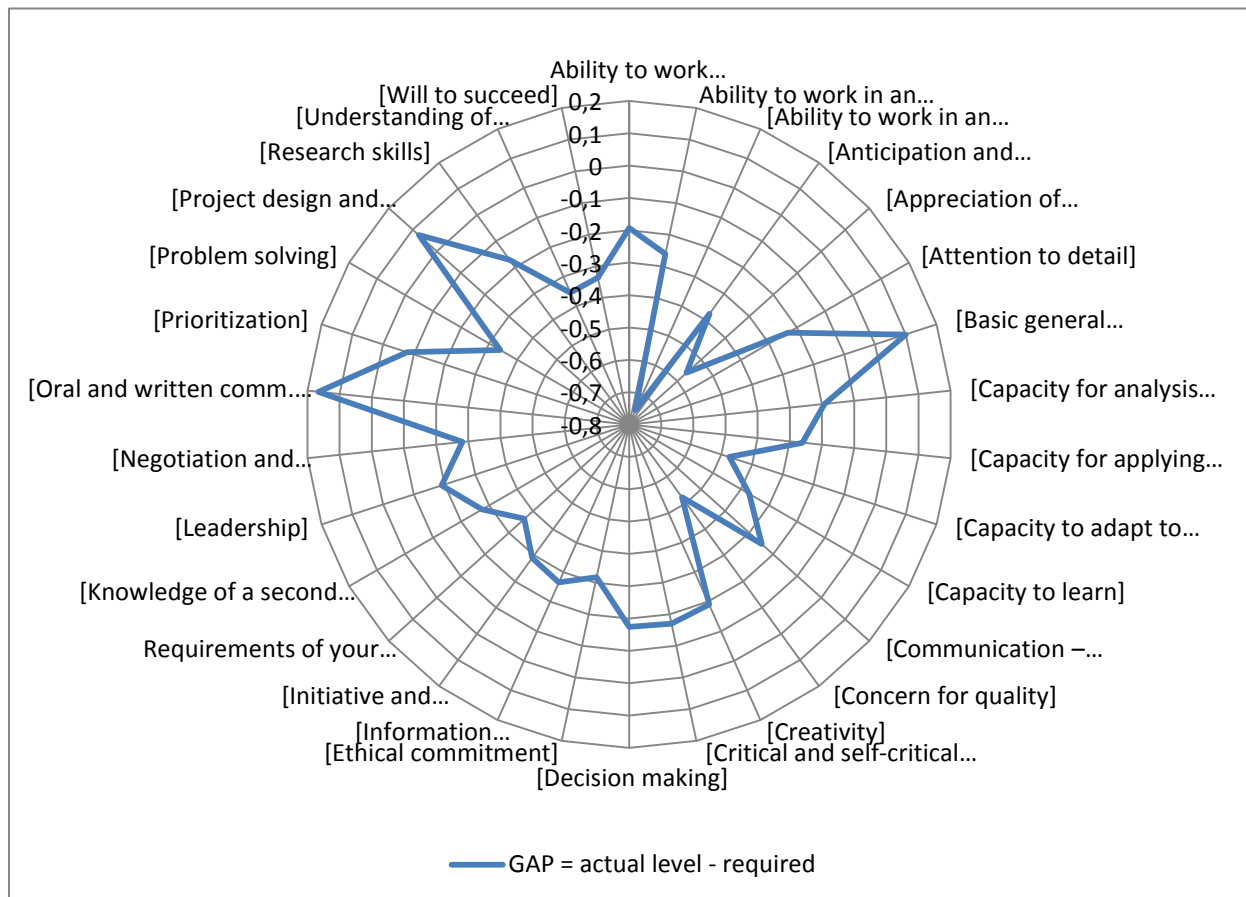


Figure 14: Gaps in General knowledge, skills and competencies: employers' requirements versus the current level of the MA graduates

Source: Alumni survey results.

So, the alumni consider the following gaps in the list of general skills and competences:

(i)	[Ability to work in an international context]	-0,75
(ii)	[Appreciation of diversity and multiculturality]	-0,56
(iii)	[Concern for quality]	-0,52
(iv)	[Capacity to adapt to new situations]	-0,47
(v)	[Anticipation and visionary focus]	-0,38
(vi)	[Capacity to learn]	-0,37
(vii)	Requirements of your organisation	-0,36
(viii)	[Understanding of customs and cultures of other countries]	-0,35
(ix)	[Problem solving]	-0,34
(x)	[Will to succeed]	-0,34

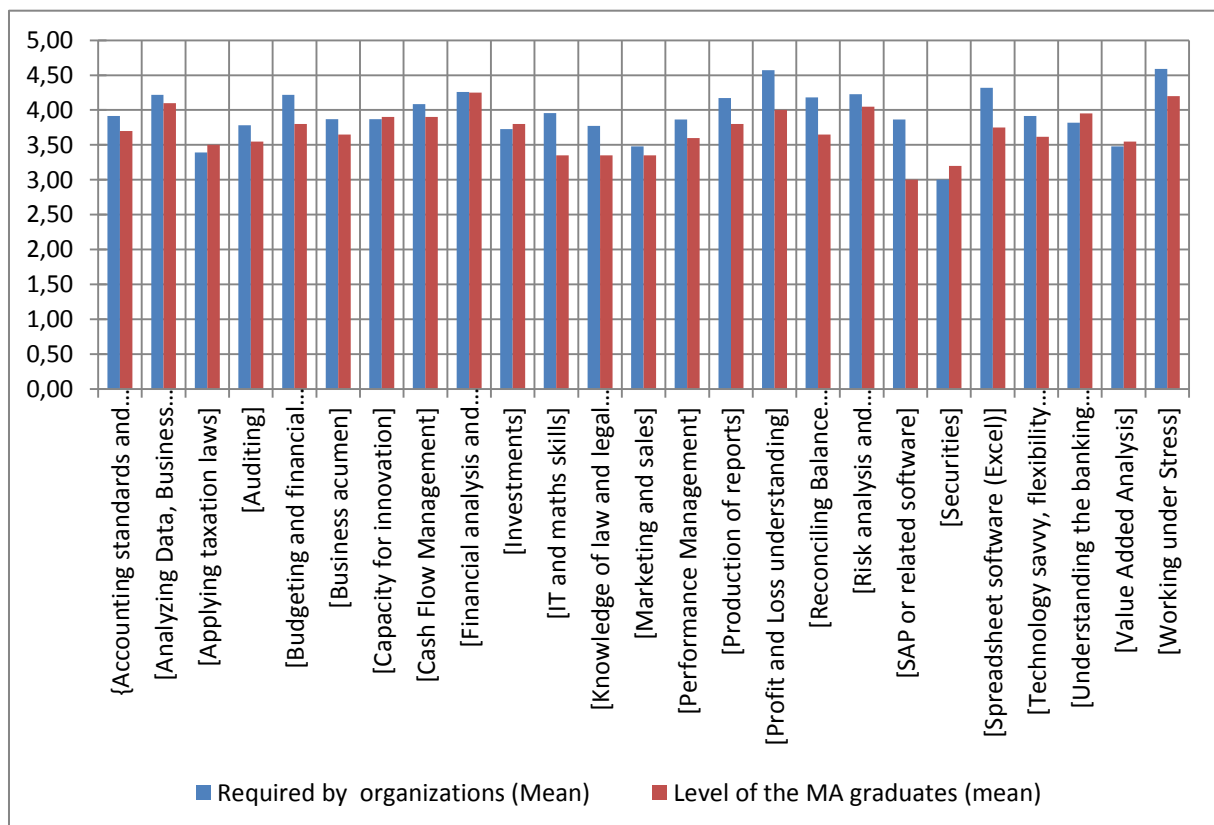


Figure 15: **The level of the Finance-specific knowledge, skills or competences: employers' requirements versus the current level of the MA graduates**

Source: Alumni survey results.

(i)	[Working under Stress]	4,59
(ii)	[Profit and Loss understanding]	4,57
(iii)	[Spreadsheet software (Excel)]	4,32
(iv)	[Financial analysis and reporting]	4,26
(v)	[Risk analysis and management]	4,23
(vi)	[Analyzing Data, Business Analytics]	4,22
(vii)	[Budgeting and financial planning]	4,22
(viii)	[Reconciling Balance Statements]	4,18
(ix)	[Production of reports]	4,17

The grades attributed to all items in the list of “Finance-specific skills and competences” vary from 3 to 5, which confirms that the Alumni consider that all the competences in the list are important and necessary.

As the Figure 15 shows **Alumni assume that MA graduates don’t have enough Finance-specific skills and competencies.**

According to alumni estimations, there are GAPS (negative and positive) between the level of skills required by employers and the level held by MA graduates (figure 16).

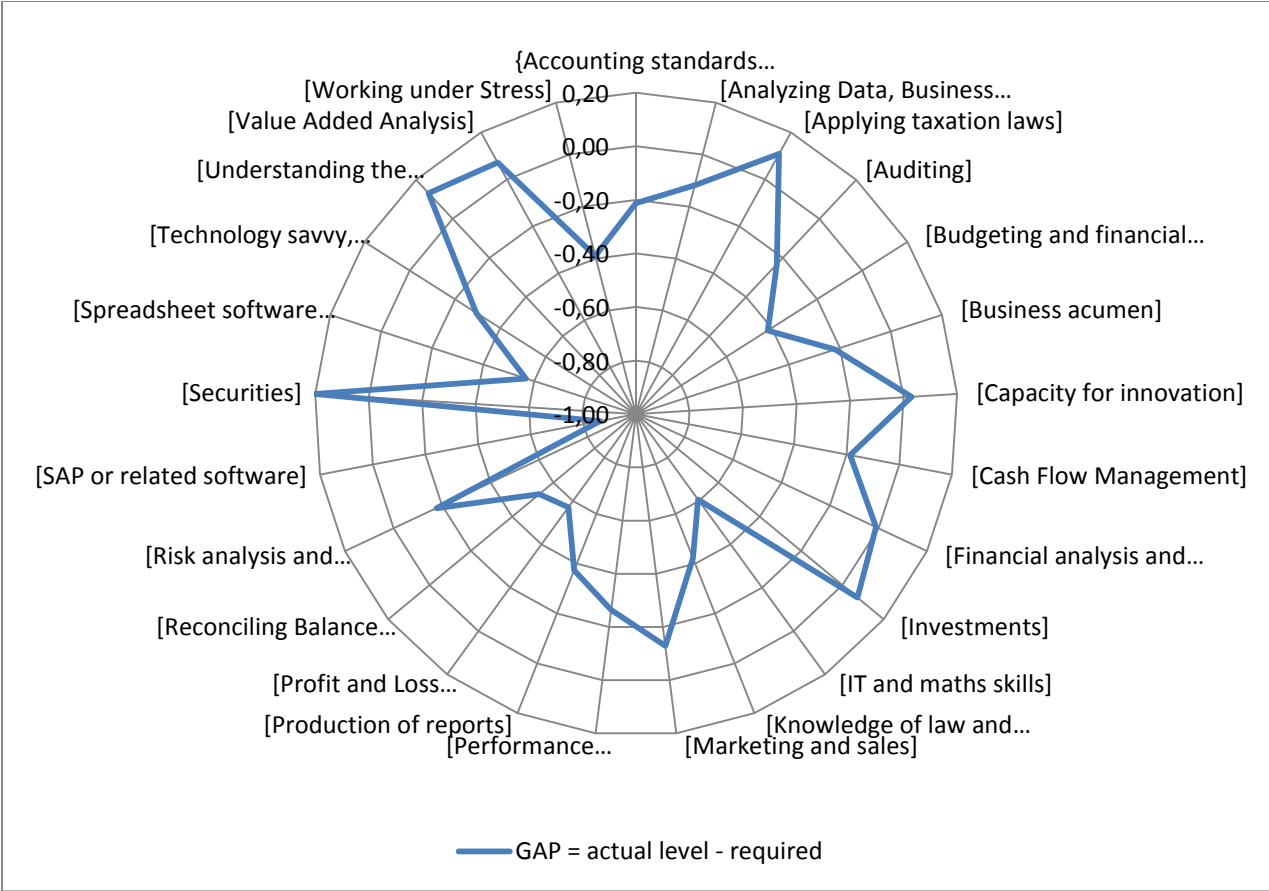


Figure 16: **Gaps in Finance-specific knowledge, skills and competencies: employers’ requirements versus the current level of the MA graduates**
 Source: Alumni survey results.

So, the alumni consider that there are some gaps in the following Finance-specific knowledge, skills and competencies:

- (i) [SAP or related software] -0,86
- (ii) [IT and maths skills] -0,61
- (iii) [Profit and Loss understanding] -0,57
- (iv) [Spreadsheet software (Excel)] -0,57
- (v) [Reconciling Balance Statements] -0,53
- (vi) [Knowledge of law and legal codes] -0,42
- (vii) [Budgeting and financial planning] -0,42

- (viii) [Working under Stress] -0,39
- (ix) [Production of reports] -0,37
- (x) [Technology savvy, flexibility and adaptability] -0,29

To the question “Please list 3 most important from the list above”, alumni offered the following answers (Table 9).

Table 9: The list of 3 most important Finance-specific skills and competencies (according to the given list)

The first most important general skill/competence of current employees	The second most important general skill/competence of current employees	The third most important general skill/competence of current employees
Working under Stress Financial analysis and reporting	IT and maths skills	Financial analysis and reporting
Analysing Data, Business Analytics	Analysing Data, Business Analytics Financial analysis and reporting	Spreadsheet software (Excel) Technology savvy, flexibility and adaptability
Accounting standards and techniques Risk analysis and management	Applying taxation laws Risk analysis and management	Investments Working under Stress

Source: Alumni survey results.

Data from Table 9 show that employers find the most important **Finance-specific skills and competencies to be**: Working under Stress, Financial analysis and reporting, Analysing Data, Business Analytics, Accounting standards and techniques, Risk analysis and management.

To the question “What not mentioned, knowledge or competence is important for graduates of a Master’s program in the field of Financial and Banking Administration?”, only 2 persons responded, stating the following:

- Ability to multi-task,
- Analyzing and prognosis of investment,
- Leadership skills,
- Introducing lectures of critical thinking and critical management,
- Psychological understanding of human behaviour,
- Creativity.

To the question “What skills and knowledge in finance / taxation / accounting / banking / insurance will be needed in 10 years for professionals and employees? (data analytics and data, risk management, soft skills, etc.)” the following answers were provided:

- Risk analysis and management (4)
- Data analyst and big data (4)
- IT skills (3)
- Analytical skills
- Analytical thinking

- Financial analysis
- Fintech
- Stress resistance.

To the question “Would you like to add anything else to this questionnaire, your opinion regarding the knowledge, skills and competences of graduates of master programs in the field of Finance/Financial Economics/Financial and Banking Administration/Financial Management and Business Accounting/Corporate Finance, in the region?” only the subsequent answers were obtained:

The courses currently are on a high level. However, anytime there is space for improvement.

To complete the study program with non-bank payment institutions.

As per my opinion, the master program in the field of Financial and Banking Administration is the most useful for the students. Besides the fact that this a study program in English – the language that should be well-known for each student/employee, it develops in students the capacity to work, to learn and to research in an autonomous way. For me, the master degree was an important step in my career, as it prepared me to work hard and to rely on my own capacities and powers only. I learned to prioritize my tasks and to work under stress. As about my English level, I feel more confident now.

Even though the MA program was supposed to be in English, several teachers chose to do it in Romanian. I think it would be important to enforce the language of teaching in order to improve the students’ level of English.

In my personal opinion, there is a huge gap between knowledge received in university and skills requested by employers.

There is the lack of skilled specialists in the risk management field.

Please put in more theory when encountering real-life situations to make students realize situations not only in theory, but also to see image in reality! Give more information about how to make prognosis, how to analyse.

We consider opinions of the employers and alumni to be the most valuable and reflecting the current labor market needs.

Thus, the most important General Knowledge, Skills and Competencies and which require special attention in the Master's program have to be: Ability to work autonomously, Capacity for analysis of knowledge and synthesis.

Employers require high levels of Capacity to Learn, Concern for Quality, Communication - verbal and written.

The highest Gaps in General knowledge, skills and competencies were recorded for: Capacity to adapt to new situations, Anticipation and visionary focus, Ability to work in an interdisciplinary team.

Among the Finance-specific skills and competencies, the highest appreciation were given to: Financial analysis and reporting, Analyzing Data, Business Analytics, Working under Stress.

The most important Finance-specific skills and competencies are: Analysing Data, Business Analytics, Financial analysis and reporting.

The highest Gaps in Finance-specific skills and competencies were recorded to: SAP or related software, Analyzing Data, Business Analytics , IT and maths skills.

According to the workshop on Review of Existing MA Programmes and Guidelines for Reform of Masters programme in Finance in Armenia and Moldova, which was held in Košice, Slovakia, March 13-14, 2018, the three main findings from surveys (Academic, Students, ALUMNI) are:

1. To improve capacity for applying knowledge in practice (ALUMNI),
2. To develop capacity in team work,
3. To develop capacity to work under stress and conflict resolution.

After several discussions within the same workshop, the experts have decided that the common findings from surveys (Academic, Students, ALUMNI) for 3 Moldovan institutions are:

1. To improve capacity for applying knowledge in practice (ALUMNI),
2. Introduction IT technology in financial sphere based on mathematical modeling and financial calculations,
3. International influence – need of knowledge of international language (for example English).

Thus, a list of activities have to be carried out under the program reform (see the detailed description in the third chapter).

2.2 SWOT analyses of existing MA programmes

SWOT analyses is based on:

- Students survey
- Academic survey
- Employers survey
- Alumni survey

The Master's program "Financial and Banking Administration" with English teaching was authorized by the Ministry of Education of the Republic of Moldova in 2012 with a duration of 2 years and 120 ECTS. The necessity of setting up this specialization was due to the lack of specialists in this vast field of study with an in-depth knowledge of English, but also of the expected demand on the labor market.

In the period 2012 - 2016 to this program they have done their studies app. 118 students.

Summing up all aspects of the Master's program "Financial and Banking Administration" we can formulate the following:

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • The study program has a clearly defined mission, correlated with the requirements of the labor market. • A permanent review of the plan and of the analytical programs is made in order to adjust them to the labor market trends. • The program provides a theoretical training in the financial and banking field. • The theory is well structured and students have clear ideas about the rules and regulations that are imposed on the financial and banking sector. • The teaching staff is well trained, most of the teachers have been trained at the Romanian universities, and some of them are notorious personalities, specialists within the institutions and organizations from the financial and banking industry in Moldova. • The teaching staff use modern teaching tools. • The disciplines included in the curriculum are in accordance with national standards and are compatible with the National Qualifications Framework • Human contact with well prepared professors. • In a large number of disciplines, students should study according to the international practices, analyse various case studies or elaborate projects, working in teams. • The teaching language is English, which allows training based on international textbooks. • Students have access to bibliographic sources and international databases: EBSCO, Open Knowledge Repository, etc. • Students and teachers have the appropriate infrastructure for learning. • Participation in mobility programs. • Partnerships with important financial institutions and largest companies. 	<ul style="list-style-type: none"> • Although the level of theoretical training is highly appreciated by employers, many of them mention superabsorption and little applicability • Internship that is done by students is not enough to create the expected competencies, given the existence of the confidentiality clause in most of financial institutions. • Lack of interaction between financial, banking and IT skills. • The weak motivation of the teaching staff, including insufficient remuneration, generates a lack of interest in self-development by teachers and the fluctuation of teachers' staff • Psychological instability, stress response, lack of communication skills create adaptability problems for new graduates • Poor use of the MOODLE e-learning platform to provide complete and relevant information on the topics studied • Insufficient collaboration with research institutes and other universities for participation in grants / research programs, as well as reduced student involvement in research • Lack of interest for self-development by some students

OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Frequent meetings with representatives of various financial institutions and companies, relevant to studied subjects; • Professionals attracted for teaching, but also the direct connection with the business environment, allow the study of success stories from the first source • Graduates have excellent opportunities to learn about best practices while working in collaboration with international organizations. • Graduates have very large expectations, many of them want to reach a managerial position in the first year of employment • Development of tutorials that will show the application of the acquired knowledge in the studied courses. • Opening of employers for the organization of internships for teachers within the financial-banking institutions for completing the courses with applicative materials • Developing team work skills. • Participation in mobility programs. 	<ul style="list-style-type: none"> • Continuous global development of the banking and financial sector requires continuous improvement of the curriculum. • Free online courses with international and European universities reduce the number of masters required. • The dynamics of regulatory and practical changes in the Moldovan financial and banking activity generates situations of lack of correlation between the content of the courses and the needs of the institutions in the field in trained specialists. • The intermittent / occasional link, unlegated with employers, has a negative impact on the quality of training of specialists adapted to the requirements of the financial-banking industry • The digitization of banking services requires a high degree of adaptability of the curriculum and syllabus. • The free movement of the labor force (emigration) causes insufficient human resources, so the training effort of the specialist is not valued by the institutions in the financial and banking system of the Republic of Moldova.

3. Reform strategies for the MA Programme in Finance⁵

3.1 Desired learning outcomes on programme level

Revision of the program learning outcomes

For the successful reform of the program, it is necessary to revise the list of learning outcomes and their improvement, taking into account:

- I. good practices in the field, i.e. alignment to learning outcomes of similar programs delivered by the best universities in the world and region;
- II. alignment to employers' expectations identified by provided surveys, focusing on covering the gap between General and Finance-specific skills and competences required by employers, and those owned by graduates of the FBA program (the level of the MA graduates);
- III. recent changes in national and European legislative requirements, and in European educational policies;
- IV. recent developments in the financial field and the increased role of technologies and digitization in all areas of activity and in human existence;
- V. recommendations of the specialists within the field and the recent research findings on this issue;
- VI. improvement of practical skills of specialists/graduates.

To add into the General skills and competencies list on programme level (according to chapters 1 and 2):

- Capacity to learn;
- Concern for quality ;
- Communication – verbal and written;
- Capacity for applying knowledge in practice Knowledge of a second and third language;
- Research skills Ability to work in an international context;
- Ability to work autonomously Anticipation and visionary focus;
- Capacity to adapt to new situations;
- Capacity for analysis and synthesis;
- Basic general knowledge from the field of business;
- Communication – verbal and written;
- Attention to detail;
- Project design and management.

To add into the Finance-specific skills and competencies list on programme level (according to chapters 1 and 2):

⁵ Experts fully agree with this part of the guideline.

- Analysing Data;
- Business Analytics;
- Financial analysis and reporting;
- Understanding the banking process and services;
- Accounting standards and techniques;
- Understanding the banking process and services;
- Risk analysis and management;
- Budgeting and financial planning;
- Financial analysis and reporting;
- Working under Stress ;
- Spreadsheet software (Excel);
- SAP or related software;
- IT and maths skills ;
- Capacity for innovation;
- Financial analysis and reporting ;
- IT and maths skills ;
- Applying taxation laws.

NOTE: The exact formulation of learning outcomes will be achieved within WP2, based on the learning outcomes included in the current curriculum.

3.2 Suggestions for curriculum reforms

(min. 5)

As a result of identifying the gap between General & Finance-Specific Skills and Competencies required by the employers and those of MA graduates identified during the provided surveys (and described in the first and second chapters), we suggest replacing several disciplines in the curriculum of the master program "Financial and Banking Administration " with the following:

- 1: Introduction to the curriculum the course „**Financial econometrics and forecasting**”
- 2: Introduction into the curriculum the course ”**Financial analysis and forecasting informatic tools**”
- 3: Introduction to the curriculum the course “**Leadership and self development**”
- 4: Introduction to the curriculum the course „**Economic security and preventing financial fraud**”
- 5: Introduction to the curriculum the course „**Financial risk management**”
- 6: Introduction to the curriculum the course „**Financial-banking informatic systems**”

As to answer the question concerning corruption, the best thing we can do about corruption is learn and talk about it, tackle it, and take people, especially young people – i.e. students, to task against committing it.

Corruption, especially ways to combat corruption, will be studied more deeply during the course „Economic security and preventing financial fraud”.

For the reason that corruption usually occurs in situations where there are weaknesses in operational arrangements and a failure to make proper use of the control inherent in well-designed and managed systems, and the *financial sector is one of the most exposed to the corruption risk*, the corruption and corruption risk subjects are being discussed during several courses:

- Financial management;
- Budgetary and fiscal strategies;
- Risk management;
- Banking regulation and prudential supervision;
- Internal audit and internal control in banks;
- Fiscal planning and management.

Therefore the graduate students of the master program possess both developed correct attitudes towards the corruption phenomenon, as well as abilities to manage the risk of corruption.

3.3 Suggestions for course content reforms

(min. 5)

1: Revision of the course learning outcomes targeted in each syllabus

For the successful implementation of the program reform, it is necessary to review the list of learning outcomes and the improvement for all the specialized courses included in the program taking into account:

- good practices in the field, i.e. alignment to learning outcomes of similar courses delivered by the best universities in the world and region;
- alignment to employers' expectations identified by provided surveys;
- recent developments in the financial field and increasing the role of technologies in all areas of human activity and in human existence;
- the recommendations of the specialists within the field, the recent results of the researches dedicated to the field of the course.

2: In response to the observation received from employers regarding the excessive theoretization of courses, we will strive to **"Increase the practical content of the courses"**.

Among the measures to achieve this goal will be: completing the curriculum template with the section "Description of the content for the practical course, containing problem topics, case studies, and even elaboration of problems which have to be solved.

! We specify that the project staff recommends the publication of the problems in each discipline, however being aware that the objective of publishing the problems for each course in the curriculum is difficult to achieve; it presumes very large efforts and requires a longer period of realization), etc.

3: Elaboration a methodology of Students' Individual Work .

The purpose of the suggestion is to capitalize the individual study hours included in the curriculum and in each syllabus.

As a measure to achieve this goal, we suggest that the core part of the methodology to be developed and published in the form of an internal guide or regulation. The methodology will clarify several aspects:

- Starting with the conceptual specification: what are the individual work activities;
- what general and specific skills and competences can be developed through the individual study;
- general description of the forms of activity / organization of the individual study, so as to give to each professor some models / forms of activity, as a landmark, from which to choose, moreover, the methodology has to stipulate that teachers have the academic freedom to use any other innovative methods;
- norming the time for carrying out the individual study tasks, including the description of how to estimate the time needed to accomplish the proposed tasks;
- the format in which the results of the individual study are presented,
- ways of supporting the results of the individual study;
- the weight of the mark for individual study in the final grade;
- etc.

4: Studying current issues in the discipline domain

We suggest introduction into the content of each course a theme titled "Current Topics/Issues in the Course Area", which will be dedicated for studying the latest issues / topics discussed at national level, regional and international, from the course area. For the theme, we suggest to be booked 1-2 hours. The subjects of this topic will be updated at the beginning of each academic year and even changes will be allowed after the course's curriculum approval (completed before the beginning of the academic year), i.e. during the semester.

5: Exclusion of focusing on certain topics which are studied within more than one course

In order to achieve this goal should be done a profound analysis of the content of the topics suspected to repeat the same subjects (included in different courses / syllabus) and a profound compulsory analysis of the phenomenon / problem approach.

In general, the project staff accepts the idea of studying the same subject (but in total per curriculum, a limited number of topics that are repeated) in two different

courses, but in such cases, both teachers will be asked to discuss the perspectives and some key points and moreover: pursuing a synergistic effect, with all the benefits that come from it.

6: Improvement of the content of the bibliography used and recommended for study during the courses.

3.4 Suggestions for reforms of teaching methodologies/pedagogical approaches

(min. 5)

1: Encouragement the use of innovative interactive teaching and evaluation methods like: E-learning / Moodle / blended learning, Open learning, PBL, etc.

As an effective measure to achieve this suggestion, we aim to include an objective dedicated to this measure "Enhance the use of innovative interactive methods (including e-learning) within the Master's program" Financial and Banking Administration "in the list of" Qualitative objectives of the Finance Faculty (OBC") for the following academic years, with the establishment of measurable, properly established indicators and approved at all hierarchical levels: a measurable planned indicator per professor, a measurable indicator per department, and a measurable indicator per university.

2: Taking into account the specificity of the organization of the educational system and the fact that the professors involved in the master programs are professionals with specialized professional training and that the legislative norms do not require them to hold long-term pedagogical studies but especially in the context of the recent social changes marked by the rapid technological progress that impacts students' behaviour enrolled in the program, their way of thinking and perception of information, we suggest **to be organized trainings for teachers involved in teaching process of the FBA master program on traditional and interactive teaching / pedagogical approaches** on concrete themes (teaching methods), e.g. "The Advantages of Applying the X Teaching Method during the Practical Hours to the speciality courses of financial profession" and so on.

As an effective measure to achieve this recommendation, we suggest developing an annual training schedule, announcing training topics, lesson schedules, and disseminating the information to all teachers at the beginning of each academic year.

We believe that to increase the effectiveness of this measure, the following requirements must be respected:

- courses should focus strictly on a concrete teaching method / pedagogical approach;

- one course must last approximately 2 hours (maximum 4 hours);

- the course must be organized in a timetable that is suitable for all teachers, aiming the maximum inclusion of teachers implied in the FBA program;
- Frequency of the courses: 1 course per semester.

3: Encouragement of use of Digital assessment tools, that can enable quick feedback on student progress and curriculum adjustment to student needs.

This objective includes at the first step - training teachers involved in the educational activity within the program evaluated in the course "Digital Skills Development".

As a follow-up to the suggestion, the project staff should contact the AESM administration with the request to have a "Digital Skills Development" course with a reasonable duration for good assimilation

Here we specify that the objective is based on the fact that the AESM has a functional framework for professional development of the teachers and the course could be included in the list of annual trainings offered by the AESM's Education, Curriculum Development and Quality Management Service to all professors within AESM.

4: Encouragement of working in teams.

In order to achieve this goal, we suggest to develop a specific methodology that specifies compatible forms of team working for use in teaching / learning activities for master's studies in finance and mandatory methods for Assessing Group Work.

The methodology will contain all the specific elements that will clarify questions related to the implementation of the suggestion (similar to the methodology described in p.3 of subchapter 3.3 of this reform guide).

5: Encouragement the development of higher-level study skills using an experiential learning framework or work-based learning

As measures to achieve this suggestion, it is advisable to promote among students a campaign to raise awareness of the benefits and potential of experimental learning.

Another campaign to raise awareness of the benefits of engaging as providers of experiential learning is to be done among business and public companies, but with the emphasis on long-term interests of business and public authorities from offering students the opportunity for experimental learning.

3.5 Suggestions for reforms to enhance the labour market relevance

(min 5.)

1: Continuously institutionalization of collaboration with employers to update curriculum and course content

As an effective measure to make the suggestion feasible, we are proposing the creation of the "Financial Advisory Council".

The respective council will have the objective: to consult constantly interested parties in designing and continuously improving the studying program and the contents of the university courses.

The quality of "Council members" will serve as a motivation for more active involvement of business / public authorities in supporting the university / faculty through various methods, consultants, internships for teachers and students and possibly even sponsorships. As members will be invited representatives of:

- public sector institutions;
- business entities and
- professional associations within the field (that have relations with a large number of institutions and entities, which they can involve in consultation, questionnaires on various topics),
- students, etc.

The members of the Council will also be invited as members of: licensing commissions, jury at symposiums and scientific conferences, etc.

Council members will have the right to request the consultancy, expertise of the teaching staff within the university, but also to request thematic studies by teachers and students in the field in which they work, which will contribute to the simultaneous realization of more objectives listed in Reform Guide.

2: Resolution of the real problems of the business environment and public authorities within the courses

As a measure to achieve the goal, we propose introducing as a mandatory requirement for each course: to include a case study developed by a teacher together with company representatives, based on the current (even simplified) problems faced by the company / authority and with the use of data provided by the company, oriented on solving a real actual problem in the economic environment.

The effects of this measure will be manifested in: increasing the degree of professional satisfaction of the student, establishing relationships between student and future employers, etc.

3: In order to highlight the practical relevance of the disciplines, we propose the drafting of an internal normative framework regarding **the involvement of successful specialists / graduates in teaching themes / subjects from the specialized courses** to the AFB program, resulting from the specialization field and the field of interest of that specialist.

As a measure to achieve the stated objective, we propose the drafting of an internal normative framework, describing how to involve successful specialists /

graduates in the process of teaching the subjects of the specialized courses within AESM, their involvement in organizing and spending practical lessons and in the guiding process of individual studies.

However, within the courses have to be set timeframes (minimum and maximum) for subjects and activities, which can be done in partnership with professor-specialists from the business environment. To include in the curriculum of the subject the concrete information about the educational activities done by the valuable specialists invited during the course so that the students will know about their necessity and advantages.

4: To include **representatives of business entities and public authorities as evaluators** / members of examination boards in the process of internship reports defence and at exams.

5: **To increase the Internationalisation of the program** as the MA graduates want to go abroad as well as to work in Moldavia for international companies. So, the program have to train for London, Russia, Asia.

The program focus more on banking, and the corporate finance, SME finance, public finance are included in the curriculum in order to to support and complete the knowledge about the role of banks in the financial industry and the perception of the financial sector as a whole.

6: In today's fast-evolving workplace, finance professionals must demonstrate everything from razor-sharp analytical ability and stellar interpersonal skills to a sharp understanding of industry-standard software.

So, the program have **to be oriented to technology**, and focus on ICT, as well as on **interpersonal skills**.

Whether graduates aspire to a management position in the finance department of a company, or seek to climb the ladder in the financial sector, they need an understanding of how quantitative methods, analytics and financial technology, so the master program have to look how to rewrite the traditional financial disciplines.

7: Providing objective feedback for employees, former graduates of the program, on their own development opportunities.