

---

## **Risk Management: Comprehensive Analysis of Key Approaches on Academic Literature and Professional Certifications**

---

D.A. Milenkova<sup>1</sup>

**Abstract:**

*A global universities' competition is complemented by the competition between professional associations (ACCA, ICAEW, CFA, CIMA) and educational providers (BBP, Kaplan, ATC, Emily Woolf). The article summarizes the results of a comprehensive reading of the textbooks and exam preparation materials issued by key universities, associations and providers in order to estimate their quality and completeness.*

*Financial risk management topics are being focused because of the critical importance of those for finance professionals. Students and young professionals are to find the research results valuable, as those could contribute to effective education track.*

*The findings are also useful for the university teachers, supporting their better choice of study materials and more competitive programs.*

**Keywords:** *Professional certification, ACCA, CFA, CIMA, portfolio investment risks, project appraisal risks, interest rate risk, currency risk, fiscal risk, generic textbook.*

**JEL Classification Codes:** *G11, G12, G15, G32, H30.*

---

<sup>1</sup>Ph.D., Candidate, Department of Public Finance, Financial University under the Government of the Russian Federation, [anureev@bk.ru](mailto:anureev@bk.ru)

## **1. Introduction**

The research demonstrates that the difference among the professional certifications and academic sources is mostly represented by the synonymous terms and visible variability among verbal formulations. The results present typical structure of risk-management issues, classify theoretical concepts, highlights frequent intersections and rare unique points. Numerical tasks and essay-kind cases are also classified into eminently small number of types, that contradicts wide popularity of econometrics in risk management and large number of practical issues the real world generates. The article includes unique rating of the analyzed sources by the extent of the risk management topics revelation, as well as the rating of risk management theoretical concepts and numerical exercises by those popularities among the sources.

## **2. Problem set and the research focus**

Growing competitiveness of the labor market for finance and accounting induces increase in knowledge criteria applied to professionals seeking for the position. While thirty years ago a degree in economics was as a sufficient confirmation of professional skills, now a job applicant has to possess a larger educational portfolio. Professional certification has become a popular tool of fair skills confirmation worldwide, would technically replace the university degree value for the employer. This stipulates the need for the universities to include the certification programs in the study plans.

The creation of an effective and balanced study plan meeting both university regulation and certifying institution requirements is a tough task. Top employers expect conventional professional knowledge from job candidates, which contradicts intellectual property rights and competition among educators. The educators have to rewrite the same concepts, the number of financial management materials all over the world is enormous. Plagiarism avoidance has become a big issue for the authors, because currently the evidence of the plagiarism is excessively checked (e.g. dissernet.org community). This results in the overload of the conceptually identical materials with different verbal and stylistic representation.

The research aims are to gather the conventional knowledge, to indicate the best literature source and construct widely applicable study plan. The first research aims the concise conventional theoretical materials for risk management topics, extracted from the thousands of pages of formally different textbooks. Searching the similarities among the materials makes it possible to find the best explanations of conventional concepts and to rank the sources. Finally, the research was targeted to make an effective cross-analysis of the bulk of congenial materials and to move towards the potential ideal financial management tutorial. The ideal tutorial will consist of all main theoretical, numerical and case concepts mentioned both in professional and academic literature.

### 3. Comprehensive reading as the research methodology

The core focus in the research is made on the professional certification study and exam materials such as ACCA (The Association of Chartered Certified Accountants), CFA (Chartered Financial Analysts), CIMA (Chartered Institute of Management Accountants) and ACA (the certification of The Institute of Chartered Accountants in England and Wales (ICAEW)). The set of analyzed sources includes official study texts, supplementary materials like Course notes, Essential texts and Revision kits, mock exams and past papers, program syllabus and solution manuals. Combination of different sources issued by different publishing houses and in different years provides the explicit and comprehensive basis for the potential program. Additional information was extracted from the supplementary sources and it was also favorable for the quality of the research. Mock exams and past papers create a relevant basis for the practical issues concerning the program, introducing the sample tasks included in the certifications.

As growing competition between professionals and academic education exists, the certification materials in the research are complemented by university textbooks. Academic sources include the fundamental textbooks on financial management and corporate finance such as *"Corporate finance"* by Ross *et al.* (2010), *"Financial Management"* by Shokhin (2010), *"Financial Management: Managing Capital and Investments"* by Teplova (2003) and *"Corporate Finance"* by Nikitushkina *et al.* (2016). Inclusion of such type of sources into the analysis, as well as the usage of both American and Russian sources, provides the higher quality of the research output and makes the research more overwhelming in the educational terms.

The materials were meticulously researched and compared to each other. The study texts research included not only basic structure analysis, but deep plunging into the text body, which provide the perception of the verbal and stylistic aspects of the materials. First, the text of one of the certification was taken as the base. Then, after highlighting the conceptual skeleton of the first text, other materials were studied successively and during this process the similarities and dissimilarities among the texts were revealed and marked. The result of the analysis of such a kind was expressed as a compilation of ten or fifteen full-size study materials into intensive and concise text constituting 8-10% of each initial research source.

The comprehensive reading summary is presented in three parts: theoretical concepts, simple numerical examples and complicated essay-kind case-based tasks, as the structure of the typical certification examination is built. Thus, the first part presents the generalizations of theoretical base made as intensive combination of all the concepts mentioned in the resources analyzed. The challenge here was to extract the main vector from each of the task and make them unified, notwithstanding the different forms and verbal introduction used by the sources. After having this done, the practical tasks were easy to compare and classify into types, which refers to the second part of the research, dedicated to numerical tasks.

Essay-questions, represented by the business cases requiring the answer in a form of small essay were analyzed by the various steps. First, the input data consisting of complex and detailed question texts was reconstructed to the structured brief task. Then the skeleton of the task was revealed, transforming the initial case into ultimate list of facts, figures and questions. In this form it became possible to be analyzed and engaged in the comparative analysis and only. Essay-questions also were classified according to the knowledge they require to be used. These findings are presented in the third part of the article.

Thus, the object of the research is constituted by the significant number of academic and professional sources dedicated to the financial management. To make the article easier for the perception, only main findings and conclusions were included in it. One of the most valuable parts of the article is the concept-source matrixes at the end of each part. The matrixes present the allocation of risk management theoretical and practical aspects among the sources and provide visual results of the research on which the article is based. Mentioned methodology allows the author to create the ultimate rating of materials according to the fullness of the risk management section representation, which is introduced in the end of the article.

#### **4. Comparison of the theoretical concepts**

The bulk of materials dedicated to the risk management is large, while the structure of the section varies among the sources. Naturally, this creates the information overload for the readers of all the professional levels. Thus, classifying the unclassified materials was necessary for the research presented in the article.

As it was mentioned, concepts and aspects introduced in the various sources considerably intersect. The "+" sign in concept-source matrixes below represents the presence of the concept in the source, the "++" and "+++" signs represent the extent to which the concept is revealed in the source in case of diversified depth of presentation. The "-" sign posits that the concept is neglected by the source. Dark-grey facets of the table highlight the unique concepts presented in the sources. As concept-source matrixes show, the number of unique theoretical units is small.

The concepts dedicated to the risks of portfolio management that are highlighted by the sources are strongly interrelated and similar in most cases. For example, beta concept and CAPM model, being universal for the topic, are presented in all the sources. Specifics of Ross are that the descriptions are extensive and quite simplified, giving the basics of the topic and providing the most significant concepts. CFA textbooks shed the light on the narrower topics and possess some unique formulas. ACCA concentrates on CAPM and Beta concepts (providing the distinction between Asset Beta, Equity Beta and Debt Beta, for instance (ACCA F9, 2013). CIMA mostly emphasizes other concepts than the portfolio investment risks, but provides the information concerning risk-attitude that is not mentioned in other sources (maximin, maximax and minimax regret criteria model (CIMA P1, 2009).

**Table 1.** Concept-source matrix for section 1: portfolio risk management (constructed by the author)

Source \ Concept	Ross	CFA	ACCA	CIMA	ACA	Teplova	Nikitushkina	Shokhin
Historical data for asset classes returns	+	+	-	-	-	-	-	-
Expected return, Variance, Covariance	+	+	-	-	-	+	+	+
CML and efficient frontier	+	++	-	-	-	+	+	-
Classification of investors risk tolerance	+	+++	-	+	-	-	+	-
Classification of investors behavior in mathematical context	-	-	-	+	-	-	+	-
Beta	++	+	+++	-	-	+	++	-
Alpha	+	-	+	-	-	-	+	-
CAPM	+	+	+++	-	+	-	++	-
Sharpe ratio, M-squared, Teynor measure, Jensens Alpha	-	+++	-	-	-	-	-	-
Indifference curves	+	++	-	-	-	+	-	++
Extended non-standard methods of risk estimation	-	-	-	-	-	-	-	++

All of the analyzed Russian textbooks introduce full illustration of the topic, lacking for the historical background presentation. A textbook by Nikitushkina provides advanced explanations of basic concepts by reflection of their mathematical aspects. A textbook by Shokhin introduces more sophisticated mathematical tools and presents the information in more professional and scientific way, which can be considered to be the specific feature for the most of Russian academic literature. The textbook by Teplova, in contrast, stylistically is closer to the foreign sources.

The risks a portfolio investor is exposed to do not provide the full spectrum of risks existing in the economy. Obviously, discussion of the risk management should be continued with the risk that an enterprise faces during its investing activities. Some of the concepts of project appraisal risks can be evidently classified into the "crucial group" according to the frequency of their usage in professional and academic materials: the concepts that are inevitably mentioned in all the sources are simulation and sensitivity analysis. Scenario analysis, being a form of the latter is also described in all of the sources except for ACCA materials.

However, ACCA is the source that provides the most extensive issue on the topic of project appraisal. CIMA provides quite ramified and deep theoretical blocks (for example, introduces diagrammatic approach to sensitivity analysis (CIMA P1,



Simulation	+	+	+	+	+	+	-	-
Statistical methods: expected value, standard deviation	-	-	+	++	+	-	-	-
Reduction of risks	-	-	+++	-	-	-	-	-
Risk-adjusted discount rates	-	-	+	+	-	+	-	-
Value at risk	-	+	+	-	-	-	-	-
The certainty-equivalent approach	-	-	+	-	-	-	-	-
Real Options	+	++	-	-	+	+	-	-
Decision Tree	+	-	-	++	-	++	-	-
Business and Financial risks	-	+	+	-	-	-	-	-
DFL, DOL, DTL	-	+	+/-	-	-	+	-	-

The currency risk and interest rate risk constitute the category of concepts that is at most evenly allocated through the sources. ACCA introduces this topic both on fundamental and professional levels, explicitly describing all the concepts and definitions on both of them. CIMA dedicates the part of the program to this kinds of risk and it is quite consistent with the material presented in ACCA. CFA includes all the information concerning the currency risk into materials of the III Level, providing the sophisticated mathematic tools coherent with the advanced-level label. Interest rate risk is presented in CFA only as a concept that is necessary to be used for the explanations concerning derivatives and fixed-rate investments.

University textbooks also specify this section. Ross defines the currency and interest rate risk, but does not provide any further information concerning classification or risk-management. Russian textbooks on financial management do not contemplate currency risk and interest rate risk. Textbooks by Teplova (2000) and Shokhin (2010) mention these risks as concepts but do not include them as a separate section in the study program. The trends of explanations are the same in all the three sections: Ross is oriented on the exemplifying the material to provide its understanding, ACCA and CIMA provide detailed descriptions on the concepts, while texts of CFA program are based on the principles of brevity and intensiveness.

**Table 3.** Concept-source matrix for section 3: Currency and Interest rate risk (constructed by the author)

Source	Concept							
	Ross	CFA	ACCA	CIMA	ACA	Teplova	Nikitushkina	Shokhin
Translation, Transaction and Economic risks	+	+	++	+	+	-	-	-
Leading, Lagging, Matching, Netting	-	-	+	+	+	-	-	-
Forward contracts	-	+	+	-	+	-	-	-
Money market hedge	-	+	+	-	+	-	-	-
Currency futures	-	+	+	-	+	-	-	-

Currency options	-	+	+	-	+	-	-	-
Currency swaps	-	+	+	-	+	-	-	-
FOREX swaps	-	+	+	-	+	-	-	-
Interest rate risk	+	+	+	+	+	-	-	-
Forward rate agreements	-	-	+	+	+	-	-	-
Interest rate options	-	+	+	++	+	-	-	-
Interest rate futures	-	-	+	-	+	-	-	-
Interest rate swaps	-	+	+	+	+	-	-	-
Attitudes to risk (not specified)	-	-	-	+	-	-	-	-

### 5. Comparison of the numerical tasks

Each of the certification programs includes the set of problems of one- or two-step solution that requires only the understanding of the basics. Such tasks provide the link between tests on theory and sophisticated advanced cases, helps the candidate to understand how the conceptual understanding of the topic can be applied. In average, there were 4 types of practical problems for each section distinguished and usually maximum 1-2 types were unique. Table 4 below reflects the generalized topics introduced in the materials.

As in the previous part, the material does not differ significantly. Tables 5-7 demonstrate the ultimate list of tools for the solutions in the analyzed sources and conform the high degree of similarities between the sources. For example, in case of portfolio management risks section, the ability to deal with the Ross's problems kit stipulates the ability to solve the problems from CFA Level I and some tasks from level II. The problems are much alike. For instance, problems on usage of standard deviation as a tool are all stated the analogical way: the data for returns is given, the calculation of mentioned indicators is required. Such tasks are similarly presented in Ross (2010), CFA (2013), and a textbook by Teplova (2000).

**Table 4.** *The key concepts of practical sections of the researched material (constructed by the author)*

<b>Portfolio risks</b>	<b>Project appraisal and risk</b>	<b>Currency &amp; Interest rate risk</b>
1. Expected return and standard risk measures.	1. Sensitivity analysis	1. Short questions on the currency risk
2. CAPM and Beta calculation	2. Scenario analysis	2. Exchange rates and effects of their changes
3. Factor models	3. Decision trees	3. Currency risk hedging techniques
4. CML Slope calculation as a tool of solution	4. Real options	4. Interest rate risk nature
5. Unique problems	5. Unique concepts	5. Interest rate hedging



**Table 5.** Matrix of concepts of practical tasks on portfolio risk management (constructed by the author)

CFA Levels 1 & 2	ROSS (Basic and Intermediate level)	ACCA F9
Standard deviation	Standard deviation	
Expected return	Expected return	
CAPM	CAPM	CAPM
BETA	BETA	BETA
Slope CML	Slope CML	
Risk Utility function	Reward-to-risk ratio	Leveraged Beta

Beta and CAPM are mostly identical among the sources (Ross, Westerfield and Jaffe, 2010), (CFA, 2013), (ACCA, 2014), while deviation and expected risks measures tools are not. Further two sections of the research provide a little bit more “diversity” of the content. Sensitivity analysis, project appraisal and risk section are presented in most of the sources: Ross, Westerfield and Jaffe, 2010; CFA, 2009; CIMA P1, 2012,. By the way, for example, instead of including the term "sensitivity", ACCA requires to find "percentage changes in <...> that would change the worthwhileness in opposite direction" (ACCA F9, 2012), which is conceptually the same. Tasks on real options are also popular and included in most of materials (CFA, 2012; Ross, Westerfield and Jaffe, 2010; CIMA P1, 2012b). Overall, most questions and problems dedicated to the risks of project appraisal require the explanations and deep understanding, rather than computational skills. This highlights the importance of the stress on the theoretical issues during the educational process: the potential respondent/student has to be capable of fluent and proper application of the risk analysis, providing the understanding of the suitable applicability of it in different situations.

**Table 6.** Matrix of concepts of practical tasks on project appraisal risk management (constructed by the author)

CFA	ROSS	ACCA	CIMA	Teplova
Sensitivity analysis	Sensitivity analysis	Sensitivity analysis	Sensitivity analysis	
	Scenario analysis			Scenario analysis
Decision tree	Decision tree		Decision tree	Decision tree
Real options	Real options		Real options	
		Certainty-equivalent approach		
	Break-even analysis			

Overall, the problems on project appraisal risks are not frequently included in the real exam papers: during this research, the dozens of mock exams and past papers in ACCA, CFA and CIMA were examined. Project appraisal usually presented in the questions requiring the direct method of the project estimation (connected with the methods of calculation of its profitability, not riskiness - NPV, IRR, ARR etc.). Thus, the topic on risks of investment appraisal should be contemplated as supporting one. Nevertheless, the abovementioned consideration does not suggest that this facet of risk management is less significant than others.

**Table 7.** *Matrix of concepts of practical tasks on currency and interest rate risk (constructed by the author)*

ACCA	CFA	CIMA	ROSS
Impact of changes in the exchange rates			
operations with exchange rate ratios			
forward rates, spot rates			
forward market hedge, money market hedge			
Interest rate risk nature		-	
Interest rate swaps, options, forward rate agreements		-	
leading and lagging	-	-	-

Management of currency risk and interest rate risk section allows making conclusions concerning the differences among the materials as well. Table 8 shows that while the currency risk was illustrated by the problems in all the analyzed sources, interest rate risk is presented in a more limited form and amended by Ross. Inside the each of the risk category the concepts do not vary significantly.

### **6. Advanced case-oriented problems**

Though the obvious difference in the approaches to the advanced problems creates the impression of their dissimilarity, the concepts introduced in the sources are strongly interrelated or coincide. The theoretical base required by CFA is needed for the computations in Ross, while ACCA requires the advanced knowledge that will favor the dealing with the two other sources. In broad terms, sources require the same formulas and concepts, which is consistent with the consideration about the similarity of the analyzed professional and academic material.

The set of essay-questions in the project appraisal and risk section is limited as well as the set of basic level questions is. Most of the questions are dedicated to the stand-alone risk assessment methods and very alike by the solution tools that are required to be used (ACCA, 2010; Ross *et al.*, 2010; CFA, 2014). Some cases do

include requirements on theoretical base concerning kinds of risk that company faces (sales risk, business risk, political risks) (CFA, 2012; ACCA P4, 2015; CIMA P3, 2014), but usually the questions on this issues constitute only the part of the tasks and a case by its concept is correspondent with another facet of risk management/financial management.

**Table 8.** Matrix of concepts used in case tasks on portfolio risk management (constructed by the author)

CFA	ROSS	ACCA
Time horizon and liquidity		
Minimum-variance portfolio	Minimum variance portfolio	
Efficient frontier		
SML	SML	
Beta and CAPM	Beta and CAPM	Beta and CAPM
Sharpe ratio	Sharpe ratio	
APT		
Asset allocation	Diversification benefits	
	Systematic & unsystematic risks	Systematic & unsystematic risks

The differences in the presentation of the concept are also visible. While ACCA is a leader in providing the academic materials on the topic of investment appraisal, CIMA and ROSS materials contains more problems on this issue. A textbook by Teplova, as well as Ross's one, demonstrates a good balance between the sufficient scale of theoretical concepts and rational set of computational problems (Table 9).

**Table 9.** Matrix of concepts used in cases on project appraisal risks (constructed by the author)

CFA	ROSS	ACCA	CIMA
		Risk and uncertainty	
Sensitivity analysis	Sensitivity analysis	Sensitivity analysis	Sensitivity analysis
Scenario analysis	Scenario analysis		
	Break-even analysis		
Political risks	Political risks	Political risks	Political risks
Business risks, sales risks, operating risks		Cultural risks	Business risks, sales risks, operating risks

Problems on the management of currency risk and interest rate risk can be logically divided into two large sections: the first half of the cases are dedicated to the currency risk, second deals with interest rate risk. Consistently with the article's thesis, problems on currency risk are much alike, requiring to "explain the nature of

international trade risk and propose hedging strategies" (Ross, Westerfield and Jaffe, 2010), "explain and apply exchange rate risk hedging methods" (ACCA F9, 2014), and "discuss currency risk nature for the company, propose a reasonable decision concerning exchange rate risk hedging" (CIMA P3, 2014; CFA, 2013). Table 10 conforms that the tools and concepts included in the analyzed programs do not vary significantly

**Table 10.** *Concepts used in cases on currency and interest rate risk management (constructed by the author)*

ACCA	CFA	CIMA	ROSS
Nature of exchange rate risk			
Money market hedge, Forward market hedge			
Leading, lagging, matching			
Types of economic exposure			
Basis risk			
FRA, Interest rate futures and options			
		Interest rate swaps	
	Minimum variance hedge ratio		

To conclude, the case-questions presented in Ross, ACCA, CFA and CIMA are almost identical though have different structure and wording. All the problems need fluent orientation in the theoretical concepts and intuitive understanding of their implications in the real business-cases.

### 7. Generalization of the analysis

The research results highlight that the professional certificate programs and top universities textbooks are at most similar by the conceptual content. ACCA, CFA, Ross and CIMA present the material in approximately equal amount with insignificant differences. CFA demonstrates the evenly allocated number of concepts, Ross amends the exchange rate risks topic and presents currency risk in a very short form. ACCA does not set a great weight to the portfolio risk management, nevertheless, ACCA provides the most explicit and detailed materials. CIMA materials are closer to other listed sources, but CIMA highlights more narrow and extraordinary concepts, making a bigger stress on the mathematical aspects.

Table 11 represents the concepts disclosed in the sources by their number and percentage of total. It conforms that ACCA is the leader among the sources by the concept revelation (in two of the three sections it includes the maximum concepts). CFA concepts cover almost equal proportions of maximum topics through the sections. CIMA materials are wide too and also contain few unique concepts in two

of the three sections (not taken insignificant small concepts). In other sources unique points are referred only in one of the sections or not posited at all.

**Table 11.** *The extent of the concepts revelation by the sources per section (constructed by the author)*

Source	Number of concepts revealed			Percentage from the maximum number of concepts per section		
	Portfolio risks	Project appraisal and risk	Currency & Interest rate risk			
Ross	8	6	2	100%	60%	15%
CFA	8	7	10	100%	70%	77%
ACCA	3	10	13	38%	100%	100%
CIMA	2	7	8	25%	70%	62%
ACA	1	6	13	13%	60%	100%
Teplova	6	7	0	75%	70%	0%
Nikitus hkina	4	0	0	50%	0%	0%
Shokhin	4	0	0	50%	0%	0%

Nevertheless, the materials differ stylistically and by the manner of the presentation. For instance, CFA materials provide less examples and more practical tasks. ACCA and CIMA include a large number of examples in the study texts. Ross mostly uses the exemplifying as a major tool of the explanations. Presentation of the materials in the Russian sources differs by the complicated academic language and approach to the mathematical formulations. American study materials (and most of other materials in English language) are oriented on the international student perception and their goal is to make the material clear to a non-native speaker.

#### **Acknowledgement:**

This research idea was created and steps guided by Sergey Vladimirovitch Anureev, Financial University under the Government of the Russian Federation, Professor at Department of Public Finance, Doctor of Economic Science [anureev@bk.ru](mailto:anureev@bk.ru)

Generalized risk management tools listed below were tested during research project Methodological Basis for Identification and Appraisal of Budgetary Risks, executed by Department of Public Finance.

#### **References:**

- ACA. 2013. Financial management study guide, Sep 13- Dec 14
- ACA. 2014. Syllabus and technical knowledge grid for exams
- ACCA F9. 2008. Session 7, ATC International
- ACCA F9. 2012. Session 7, ATC International
- ACCA F9. 2012. Session 7, ATC International
- ACCA F9. 2013. Study text, Emile Woolf Publishing Limited
- ACCA F9. 2014. Essential Text, Kaplan Publishing UK

- ACCA F9. 2014. Revision Mock Questions, December  
ACCA F9. 2015. Financial Management, Study Text, BPP  
ACCA P4. 2010. Study Text, Emile Woolf Publishing  
ACCA P4. 2014. Essential Text, Kaplan Publishing UK  
ACCA P4. 2015. Advanced Financial Management, Study Text, BPP  
ACCA P4. 2015. Past Exam Paper, June  
ACCA. 2010. Paper F9 - Financial Management Kit, BPP  
ACCA. 2014. Lecturer resource pack - questions, Kaplan Publishing  
CFA. 2007. Managing Investment Portfolios, Workbook  
CFA. 2012. Corporate finance, Wiley  
CFA. 2012. Corporate Finance, Wiley  
CFA. 2013. Level 1 Book 4, Kaplan Schweser  
CFA. 2013. Level 3 Book 4, Kaplan  
CFA. 2014. Level 1 Book 5, Study Note, Kaplan  
CFA. 2014. Level 2 Mock Exam AM Question  
CFA. 2014. Level 2, Book 5, Kaplan Publishing UK  
CFA. 2014. Level I and II, Study Guide for 2015 CFA Exam: Complete Set, Wiley  
CIMA P1. 2013b. study texts BPP  
CIMA P1. 2009. Learning system  
CIMA P1. 2013a. Performance Operations Study Text, BPP Learning media  
CIMA P3. 2009. Official Learning System Performance Strategy, 6 Edition  
CIMA P3. 2014. Past Paper. May  
CIMA P3. 2014. Past Paper. March  
Nikitushkina, I.V., Studnikov, S.S., Makarov, S.G. 2016. Corporate Finance, Moscow.  
Ross, Westerfield, J. 2010. Corporate finance. McGraw Hill, 9<sup>th</sup> ed.  
Shokhin, E.I. 2010. Financial Management, Moscow, FBK Press.  
Teplova, T.V. 2000. Financial Management: management of capital and investments,  
Moscow, High School of Economics