REVIEW
of the official reviewer for dissertation work
Sadvakassova Kamilla Gabitkyzy on the topic "Financing of aviation companies: theory, methodology and practice" submitted for the degree of Doctor of Philosophy (PhD) in the educational program "8D04110 - Finance".

№	Criteria	Compliance with the criteria (underline one of the answer options)	Justification of the official reviewer's position (comments should be highlighted in italics)
1.	The topic of the dissertation (as of the date of its approval) corresponds to the directions of scientific development and/or state programs	1.1 Compliance with priority areas of scientific development or state programs:	The study is devoted to the development of the aviation industry in Kazakhstan, considering modern trends and state support. It is related to the strategy "Kazakhstan - 2050", sustainable development goals and innovative financial instruments for airlines, which contributes to the stable development of the country's transport infrastructure and corresponds to *priority scientific areas*. The topic of the study corresponds to modern trends in the development of scientific knowledge and is related to state programs to support the aviation industry.
		1) the dissertation was completed within the framework of a project or target program financed from the state budget (indicate the name and number of the project or program);	
		2) the dissertation was completed within the framework of another state program (indicate the name of the program);	
		3) the dissertation corresponds to the priority direction of scientific development approved by the Higher Scientific and Technical Commission under the Government of the Republic of Kazakhstan (indicate the direction).	
2.	Importance for Science	The work *makes*/does not make a significant contribution to science, and its importance *is*/is not well explained.	The study *makes* a significant contribution to science, highlighting the importance of effective airline financing for the development of the aviation industry and the economy of Kazakhstan. It analyzes global practices, examines government support programs, and proposes strategies to improve the competitiveness and sustainability of the country's transport infrastructure.
3.	The principle of independence	Level of independence:	The study is *highly independent* and provides in-depth insight into airline financing, including government
		1) *high*;	

		2) medium; 3) low; 4) there is no independence.	support, private investment and international mechanisms. It analyses the effectiveness of various models and their impact on the sustainability and competitiveness of the industry, drawing on current data and global experience.
4.	The principle of internal unity	4.1 Justification of the relevance of the dissertation: 1) *justified*; 2) partially justified; 3) not justified.	The study is *relevant* because effective financing of airlines is important for their competitiveness, modernization and safety. In the context of economic challenges and global crises, the development of new financial strategies and support mechanisms, including government measures and international experience, is of particular importance for the sustainable development of the aviation industry in Kazakhstan.
		4.2 The content of the dissertation reflects the topic of the dissertation: 1) *reflects*; 2) partially reflects; 3) does not reflect.	The content of the dissertation is *fully consistent* with the topic, covering in detail the issues of airline financing. The work presents an analysis of modern mechanisms, sources of financing - including government support, private investment and international funds. Theoretical and practical aspects, the effectiveness of models and their impact on the development of the industry, as well as the experience of other countries and its adaptation to Kazakhstan are considered. Risks are also analyzed and ways to minimize them are proposed, as well as recommendations for improving financial strategies for sustainable growth and competitiveness of airlines.
		4.3. The goal and objectives correspond to the topic of the dissertation: 1) *correspond*; 2) partially correspond; 3) do not correspond.	The purpose and objectives of the study *fully correspond* to the topic of the dissertation, providing a comprehensive analysis and development of effective methods of financing airlines. The main goal is to determine the optimal financial mechanisms that contribute to the sustainable development of air carriers, increasing their competitiveness and adaptation to changing economic conditions. The formulation of the tasks fully reflects the relevance of the topic, and their solution contributes to the

			achievement of the main goal and the disclosure of key aspects of airline financing.
		4.4 All sections and statements of the dissertation are logically interconnected: 1) *are completely interconnected*; 2) partial connected; 3) there is no connection.	All sections of the dissertation are *logically connected and structured* in accordance with the stated topic, ensuring consistent disclosure of issues of airline financing. The introduction defines the relevance, purpose, objectives, object and subject of the study, and emphasizes its scientific and practical significance. The first section is devoted to the theoretical foundations, models and factors affecting the financial stability of airlines. The second analyzes sources of financing, including government support, private investment and international experience, which helps to adapt best practices to the conditions of Kazakhstan. The third section considers the risks and problems of financing, offering recommendations for their minimization and increasing the effectiveness of strategies. The conclusion summarizes and formulates findings confirming the logical relationship of all parts of the study.
		4.5 The new solutions (principles, methods) proposed by the author are substantiated and evaluated in comparison with known solutions: 1) *there is a critical analysis*; 2) partial analysis; 3) the analysis does not represent personal opinions, but quotes from other authors; 4) no analysis.	The author proposes *new solutions* in the field of airline financing based on a critical analysis of existing approaches. The work examines the main global models and mechanisms of financing, their advantages and disadvantages, as well as the possibility of their adaptation to the conditions of Kazakhstan. A comparative analysis of traditional and innovative instruments, such as subsidies, loans, leasing and venture investments, is carried out, with a proposal for improved methods to increase the financial sustainability of the industry. Efficiency assessment is based on economic analysis and modeling, which allows for quantitative confirmation of the advantages of new strategies. As a result, the dissertation contains well-founded recommendations supported by critical and comparative analysis.

5.	The principle of scientific novelty	5.1 Are the scientific results and statements new?	The scientific results and statements of the dissertation are *completely new* and reflect the author's approach to solving current issues of airline financing. The work develops and substantiates innovative strategies for attracting financial resources aimed at increasing the sustainability and competitiveness of the industry. The proposed methods are adapted to modern economic conditions and features of the aviation sector of Kazakhstan. These statements are based on a deep analysis of world practice and are adapted to the national economy, which confirms their originality and practical value. The results obtained can be used both in the scientific community and in the practice of airlines, financial institutions and government agencies.
		1) *completely new*;	
		2) partially new (25-75% are new);	
		3) not new (less than 25% are new).	
		5.2 Are the findings of the dissertation new?	The conclusions of the dissertation are *partly new* and are based on a comprehensive analysis of the problems and prospects of airline financing. They reflect the author's contribution to the development of science and include innovative approaches to the formation of sustainable financial strategies for air carriers.
		1) completely new;	
		2) *partially new (25-75% are new);*	
		3) not new (less than 25% are new).	
		5.3 Technical, technological, economic or managerial decisions are new and justified:	The technological, economic and managerial solutions proposed in the dissertation are *completely new* and well-founded. They are based on a deep analysis of existing financing methods, adaptation of world experience and development of improved strategies considering industry specifics. These solutions represent an improvement of existing models and methods considering modern economic trends and industry specifics, having practical significance for the development of airline financing mechanisms.
		1) *completely new*;	
		2) partially new (25-75% are new);	
		3) not new (less than 25% are new).	

6.	Validity of the main conclusions	All key findings are *based*/not based on sound scientific evidence or are reasonably well supported (for qualitative research and arts and humanities majors).	All the main conclusions of the dissertation are *based* on solid scientific evidence and carefully substantiated in accordance with the chosen methodology. The work uses both quantitative and qualitative methods of analysis, which provides a comprehensive approach to studying the issues of airline financing. In the case of using qualitative methods, the conclusions are based on a deep analysis of expert opinions, industry reports, regulatory documents and industry development strategies, which increases their reliability. Thus, all the main statements have a solid scientific basis and are confirmed either by calculations or reasoned analysis, corresponding to the standards of research in the field of economics, management and financing of the aviation industry.
7.	The main statements submitted for defense	The following questions must be answered for each statement separately:	1 **statement:** Theoretical and methodological aspects of financing aviation companies were substantiated based on a study of the specific characteristics of airline financing and the methodology for forming financing sources. An author interpretation of the concept of airline financing was proposed, revealing the unique features of managing financial resources in airlines.
		7.1 Is the statement proven?	7.1 Is the statement proven??
		1) *proven*;	1) *proven*;
		2) rather proven;	7.2 Is it trivial?
		3) rather not proven;	2) *no*;
		4) not proven;	7.3 Is it new?
		5) in the current formulation it is impossible to verify the proof of the statement.	1) *yes*;
		7.2 Is it trivial?	7.4 Level of application:
		1) yes;	2) *medium*;
		2) *no*;	7.5 Is it proven in the article?
		3) in the current formulation it is impossible to verify the triviality of the statement.	1) *yes*;
		7.3 Is it new?	
		1) *yes*;	
		2) no;	

		3) in the current formulation it is impossible to verify the novelty of the statement. 7.4 Level of application: 1) narrow; 2) *medium*; 3) wide; 4) in the current wording it is impossible to verify the level of application of the statement. 7.5 Is it proven in the article? 1) *yes*; 2) no; 3) in the current wording it is impossible to verify the validity of the statement in the article.	2 **statement:** As a result of research foreign practice in aviation industry using quantitative and qualitative methods, an analysis of the financial performance of airlines was conducted. This identified the internal and external financing sources and aspects that determine the assessment of financial multiplies for the Air Astana group. 7.1 Is the statement proven?? 1) *proven*; 7.2 Is it trivial? 2) *no*; 7.3 Is it new? 1) *yes*; 7.4 Level of application: 3) *wide*; 7.5 Is it proven in the article? 1) *yes.* 3 **statement:** The specifics of airline financing for the Air Astana group were evaluated, including SWOT analysis and further strategy of the company. 7.1 Is the statement proven?? 1) *proven*; 7.2 Is it trivial? 2) *no*; 7.3 Is it new? 1) *yes*; 7.4 Level of application: 3) *wide*;

			7.5 Is it proven in the article? 1) *yes.* **4 statement:** A methodology for using alternative options for financing aviation companies was developed. Additionally, a conceptual roadmap for the Air Astana group was proposed. 7.1 Is the statement proven?? 1) *proven*; 7.2 Is it trivial? 2) *no*; 7.3 Is it new? 1) *yes*; 7.4 Level of application: 2) *medium*; 7.5 Is it proven in the article? 1) *yes.* **5 statement:** A business plan was developed to create an additional source of income for the airline. This plan supports digitalization and technological transformation within the Air Astana group. 7.1 Is the statement proven?? 1) *proven*; 7.2 Is it trivial? 2) *no*; 7.3 Is it new? 1) *yes*; 7.4 Level of application: 3) *wide*;

			7.5 Is it proven in the article? 1) *yes*.
8.	The principle of reliability. Reliability of sources and information provided	8.1 The choice of methodology is justified or the methodology is described in sufficient detail:	The choice of methodology in the dissertation is *substantiated and described* in detail, which ensures the scientific validity of the results obtained. The work uses modern methods of analysis, allowing for a comprehensive study of the issues of airline financing and the proposal of effective solutions.
		1) *yes*;	
		2) no.	
		8.2 The results of the dissertation work were obtained using modern methods of scientific research and methods of processing and interpreting data using computer technologies:	The results of the dissertation *were obtained* using modern methods of scientific research and advanced methods of processing and interpreting data using computer technologies, which confirms their reliability and practical value.
		1) *yes*;	
		2) no.	
		8.3 Theoretical conclusions, models, identified relationships and patterns are proven and confirmed by experimental research (for areas of training in pedagogical sciences, the results are proven on the basis of a pedagogical experiment):	The theoretical conclusions, developed models, identified relationships and patterns in the study of airline financing are *confirmed* by the conducted analysis and experimental study. As part of the work, a comprehensive assessment of existing financing methods was carried out, including an analysis of statistical data, financial statements of leading airlines and modeling of various scenarios for raising capital.
		1) *yes*;	
		2) no.	
		8.4 Important claims are *supported*/partially supported/not supported by references to relevant and reliable scientific literature.	In the dissertation, all important statements are *supported* by references to relevant and authoritative scientific sources, which confirms their validity and scientific reliability. Thanks to this, the work is based on an extensive scientific base, and all the main statements are confirmed by modern and reliable sources, which increases confidence in the results obtained.

		8.5 The reference sources used are *sufficient*/not sufficient for a literature review.	The literature sources used are *sufficient* to conduct a comprehensive review of the topic of airline financing, providing an in-depth analysis of the issue. Their quantity and quality allow for a complete understanding of the problem and confirm the scientific validity of the study.
9	The principle of practical value	9.1 The dissertation has theoretical significance:	The dissertation has important *theoretical significance*, as it contributes to the development of scientific concepts in the field of airline financing, offering new methods of analysis, forecasting and strategic management of financial flows in the aviation industry.
		1) *yes*;	
		2) no.	
		9.2 The dissertation has practical significance and there is a high probability of applying the obtained results in practice:	The results of the study have significant *practical value*, and the likelihood of their implementation in the activities of airlines and regulatory authorities is very high.
		1) *yes*;	
		2) no.	
		9.3 The following are new suggestions for practice:	The practical recommendations developed in the dissertation are *partly new*, since they are based on modern methods of analyzing airline financing, take into account current industry challenges and offer innovative approaches to managing financial flows.
		1) completely new;	
		2) *partially new (25-75% are new)*;	
		3) not new (less than 25% are new).	
10.	Quality of writing and design	Quality of academic writing:	The quality of academic writing in the dissertation is *high*, manifested in clarity of presentation, logical sequence of arguments and strict adherence to scientific style.
		1) *high*;	
		2) medium;	
		3) below average;	
		4) low.	
11.	Comments on the dissertation	The relevance, completeness of the study, its scientific novelty and practical value, the following points should be noted: the author mentions global airlines, but a more systematic review of successful financing and investment strategies in the aviation industry could strengthen the practical value of the recommendations; the work provides general considerations on reputational and social effects associated with financing. It would be appropriate to expand the quantitative analysis in relation to specific financial strategies and models, especially	

		in the context of modernization of aviation infrastructure and the introduction of innovative financial instruments. These comments do not reduce the high theoretical and practical significance of the study.
12.	The scientific level of the doctoral student's articles on the research topic (in the case of defending a dissertation in the form of a series of articles, official reviewers comment on the scientific level of each doctoral student's article on the research topic)	The published articles correspond to the profile "Finance", contain the key results of the dissertation. The level of publications and the citation index confirm the scientific relevance.
13.	Decision of the official reviewer (in accordance with paragraph 28 of these Model Regulations)	The dissertation work of Sadvakassova Kamilla Gabitkyzy on the topic "Financing of aviation companies: theory, methodology and practice" fully meets the requirements of Chapter 2 of the "Rules for awarding degrees" and has high theoretical and practical value, and its author deserves to be awarded the academic degree of Doctor of Philosophy (PhD) in the educational program "8D04110 - Finance".

Official reviewer:
Candidate of Economic Sciences, Associate Professor,
Head of the Department of Accounting and Finance,
Almaty Technological University

Ruzieva Elvira Abdulmitovna

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Қазақстан Республикасы Алматы қаласы АҚ Алматы технологиялық университеті Халықаралық академиялық қадағалық және басқарудың қызметтік Управление по международным отношениям и академической мобильности