



**Politechnika Śląska**  
**Wydział Organizacji i Zarządzania**

**PRACA DOKTORSKA**

Determinanty skuteczności zarządzania ryzykiem  
w portfolio projektów

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**SUMMARY OF DOCTORAL DISSERTATION**  
**"DETERMINANTS OF THE EFFECTIVENESS OF RISK**  
**MANAGEMENT IN A PROJECT PORTFOLIO"**

The main goal of the doctoral dissertation was to identify the determinants of the effectiveness of risk management in the project portfolio in FinTech enterprises. To achieve the main and specific goals, empirical research was carried out in enterprises that have knowledge and many years of experience in managing international project portfolios. Additionally, to achieve comparability of results, the thematic scope of the portfolios was limited to the area of services and FinTech products.

In the first stage of the dissertation, a literature review was carried out, focusing on project management, project portfolio and risk in projects and project portfolio, which allowed to identify a research gap and formulate the overarching research problem, i.e. *what factors (at the level of individual dimensions) influence the effectiveness of management risk in the project portfolio?* In the next stage, a research concept and a research model were developed, covering the dimensions of project portfolio management and their relationships with risk management. The third stage of the research included the selection and clarification of research methods and tools, including the definition of explicit and hidden variables for the *Partial Least Squares – Structural Equation Modeling* (PLS-SEM) model and the creation of a survey questionnaire. The fourth stage was to conduct survey research and statistical and econometric analysis of the obtained results, which constituted the basis for defining the directions for improving risk management tools and methods in the project portfolio and defining recommendations for improving the effectiveness of risk management in the project portfolio.

The content of the dissertation includes six chapters, an introduction and a summary. The first chapter of the work presents the origins and development of project management concepts, the difference between a project, program and portfolio, as well as approaches to project portfolio management.

The second chapter focused on risk management as part of project portfolio management. The objectives and stages of the risk management process as well as the methods and tools supporting this process in the portfolio were defined. Moreover, the chapter defines the dimensions of project portfolio management in the context of portfolio risk management and identified determinants of portfolio risk management that may contribute to increasing the effectiveness of management at the portfolio level.

The third chapter was devoted to the research methodology, including justification of the research problem, objectives of the work and research questions. It also presents the research model and information about the research procedure, along with an explanation of the methods used to analyze the survey results. Additionally, this part contains information about the characteristics and selection of the research sample.

The fourth chapter contains research results on risk management methods in the project portfolio and an assessment of their effectiveness. Additionally, an analysis of the relationship between knowledge of methods and respondents' experience in project and portfolio management, the number of project portfolios and the average number of projects in the portfolio was also presented.

The fifth chapter includes the results of survey research on the assessment of the impact of the identified dimensions and determinants on the effectiveness of risk management in the project portfolio. This part also includes an analysis of the correlation of the dimensions of portfolio management and portfolio risk management with the effectiveness of risk management in the project portfolio.

The sixth chapter, devoted to the PLS-SEM model, begins with the assumptions that constitute the basis for building the model. The following section presents the structure of the model with a description and assesses the quality of the model. The developed model indicates the determinants that have the greatest impact on the effectiveness of risk management in the project portfolio. Moreover, based on the research results, practical recommendations were also developed for risk management methods in the project portfolio and determinants of the effectiveness of risk management in the project portfolio.