

MUHANDISLIK

& IQTISODIYOT

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ijtimoiy-iqtisodiy, innovatsion texnik,
fan va ta'limga oid ilmiy-amaliy jurnal

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- 05.01.00 – Axborot texnologiyalari, boshqaruv va kompyuter grafikasi
- 05.01.01 – Muhandislik geometriyasi va kompyuter grafikasi. Audio va video texnologiyalari
- 05.01.02 – Tizimli tahlil, boshqaruv va axborotni qayta ishlash
- 05.01.03 – Informatikaning nazariy asoslari
- 05.01.04 – Hisoblash mashinalari, majmualari va kompyuter tarmoqlarining matematik va dasturiy ta'minoti
- 05.01.05 – Axborotlarni himoyalash usullari va tizimlari. Axborot xavfsizligi
- 05.01.06 – Hisoblash texnikasi va boshqaruv tizimlarining elementlari va qurilmalari
- 05.01.07 – Matematik modellashtirish
- 05.01.11 – Raqamli texnologiyalar va sun'iy intellekt
- 05.02.00 – Mashinasozlik va mashinashunoslik
- 05.02.08 – Yer usti majmualari va uchish apparatlari
- 05.03.02 – Metrologiya va metrologiya ta'minoti
- 05.04.01 – Telekommunikatsiya va kompyuter tizimlari, telekommunikatsiya tarmoqlari va qurilmalari. Axborotlarni taqsimlash
- 05.05.03 – Yorug'lik texnikasi. Maxsus yoritish texnologiyasi
- 05.05.05 – Issiqlik texnikasining nazariy asoslari
- 05.05.06 – Qayta tiklanadigan energiya turlari asosidagi energiya qurilmalari
- 05.06.01 – To'qimachilik va yengil sanoat ishlab chiqarishlari materialshunosligi
- 05.08.03 – Temir yo'l transportini ishlatish
- 05.09.01 – Qurilish konstruksiyalari, bino va inshootlar
- 05.09.04 – Suv ta'minoti. Kanalizatsiya. Suv havzalarini muhofazalovchi qurilish tizimlari
- 10.00.06 – Qiyosiy adabiyotshunoslik, chog'ishtirma tilshunoslik va tarjimashunoslik
- 10.00.04 – Yevropa, Amerika va Avstraliya xalqlari tili va adabiyoti
- 08.00.01 – Iqtisodiyot nazariyasi
- 08.00.02 – Makroiqtisodiyot
- 08.00.03 – Sanoat iqtisodiyoti
- 08.00.04 – Qishloq xo'jaligi iqtisodiyoti
- 08.00.05 – Xizmat ko'rsatish tarmoqlari iqtisodiyoti
- 08.00.06 – Ekonometrika va statistika
- 08.00.07 – Moliya, pul muomalasi va kredit
- 08.00.08 – Buxgalteriya hisobi, iqtisodiy tahlil va audit
- 08.00.09 – Jahon iqtisodiyoti
- 08.00.10 – Demografiya. Mehnat iqtisodiyoti
- 08.00.11 – Marketing
- 08.00.12 – Mintaqaviy iqtisodiyot
- 08.00.13 – Menejment
- 08.00.14 – Iqtisodiyotda axborot tizimlari va texnologiyalari
- 08.00.15 – Tadbirkorlik va kichik biznes iqtisodiyoti
- 08.00.16 – Raqamli iqtisodiyot va xalqaro raqamli integratsiya
- 08.00.17 – Turizm va mehmonxona faoliyati

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MUNDARIJA

RIVOJLANGAN MAMLAKATLAR BANKLARIDA RISK-MENEJMENTNING TASHKILYI MODELLARI.....	26
Madaminov Bekzod Allayarovich	
“HUDUDGAZTA‘MINOT” AJ DA AMALGA OSHIRILGAN LOYIHALAR SAMARASI	32
Shukurillaev Jahongir Botir o‘g‘li	
HARBIY XIZMATCHI AYOLLARNING MAXSUS KIYIM SIFATIGA QO‘YILADIGAN DASTLABKI TALABLARNI SHAKLLANTIRISH	37
Abduraxmanova N.D., Mirtolipova N.X., Nasirullayeva G.S.	
СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМЫ НЕСПЕЦИФИЧЕСКОГО ЯЗВЕННОГО КОЛИТА У ДЕТЕЙ	42
Закирова Бахора Исламовна, Каримов Достон Рустам угли	
ОЦЕНКА ВОЗДЕЙСТВИЯ ФИСКАЛЬНЫХ И КРЕДИТНЫХ ИНСТРУМЕНТОВ НА РЫНКИ ВЫСОКОЛИКВИДНОЙ ПРОДУКЦИИ И ЕСТЕСТВЕННЫХ МОНОПОЛИЙ В РЕСПУБЛИКЕ УЗБЕКИСТАН.....	48
Бекзод Умматов	
ТРАНСФОРМАЦИЯ СИСТЕМ БУХГАЛТЕРСКОГО УЧЕТА В УСЛОВИЯХ ЦИФРОВИЗАЦИИ: СРАВНИТЕЛЬНЫЙ ЭКОНОМИКО-СТАТИСТИЧЕСКИЙ АНАЛИЗ ЭФФЕКТИВНОСТИ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА.....	55
Вахидов Азизжон Саиджонович	
SUG‘URTA FAOLIYATIDAGI MOLIYAVIY RISKLAR: BAHOLASH VA MINIMALLASHTIRISH STRATEGIYALARI	58
Xalikulova Shirin Utkir qizi	
“ANDIJONDONMAHSULOT” AJ MISOLIDA XARAJATLARNING STRATEGIK BOSHQARUV HISOBİ: AMALIY TAHLIL VA TAKOMILLASHTIRISH TAVSIYALARI	62
Xayitboyeva Laylo Oybekovna	
XORIJİY MAMLAKATLARNING NORASMIY IQTISODIYOT DARAJASINI PASAYTIRISHDAGI TAJRIBASI	66
Alimardonov G‘ayratjon Nuraliyevich	
XO‘JALIK YURITUVCHI SUBYEKTLARDA BARQARORLIK HISOBOTLARI AUDITINI SHAKLLANTIRISH	72
Xolikov Ravshan Anvar o‘g‘li	
PUL - KREDIT SIYOSATINING TRANSMISSION MEXANIZMINI RIVOJLANTIRISH	76
Obidova Zilola Ikromjon qizi	
HOMILADORLIK DAVRIDA AYOLLARDA UCHRAYDIGAN GESTOZLI KATARAL GINGIVITNI KOMPLEKS DAVOLASHNI OPTIMALLASHTIRISH	81
Nomurodova Farangiz Lazizovna	
AGRAR KORXONALARDA INNOVATSION TEXNOLOGIYALARNI JORIY ETISHDA INVESTITSIYA MEXANIZMLARINING IQTISODIY SAMARADORLIGI VA RIVOJLANTIRISH YO‘NALISHLARI	87
Egamberdiyev Abdujabbor Xusanovich	
YOSHLAR TADBIRKORLIGI VA KICHIK BIZNES IQTISODIYOTINI TA‘MINLASHDA INFRATUZILMALARDAN FOYDALANISH IMKONIYATLARI	92
Mirzatov Baxtiyor Toxirovich	
KICHIK BIZNES SUBYEKTLARI FAOLIYATINI BAHOLASH METODOLOGIYASINING MAZMUNI VA TAMOIYILLARI	96
Mavrulov Ravshan Nematjonovich	



УПРАВЛЕНИЕ ИНФОРМАЦИОННЫМИ КОММУНИКАЦИЯМИ В ПРОЕКТАХ	101
Носирова Гулираъно Абдулазиз кизи	
DAVLAT BUDJETI JARAYONIDA MONITORING VA MOLIVAVIY NAZORATNI TAKOMILLASHTIRISH MASALALARI	107
Yax'yayeva Dilfuza Bagdatovna	
XIZMAT KO'RSATISH SOHASIDA KICHIK KORXONALAR RAQOBATBARDOSHLIGINI OSHIRISH MEKANIZMLARINI TAKOMILLASHTIRISH	111
Axmedov Sanjar Temur o'g'li	
RAQAMLI MOLIVA TEXNOLOGIYALARI EVOLYUTSIYASINING ISTIQBOLLI YO'NALISHLARI VA YUZAGA KELISHI MUMKIN BO'LGAN XATARLAR TAHLILI	117
Ko'chimov Jahongir Shuxrat o'g'li	
GAZ VA GAZ KONDENSATINI YIG'ISH VA TAYYORLASH TIZIMLARI UCHUN ZAMONAVIY LOYIHALASH USULLARI TAHLILI	123
Abdirazakov Akmal Ibragimovich Namozov Og'abek Maxmud o'g'li	
AGILE PROJECT MANAGEMENT IN THE DIGITAL ERA: STRATEGIES, FRAMEWORKS, AND BEST PRACTICES FOR SUCCESS	128
Utkirova Maftuna Murodjon qizi	
O'ZBEKISTON EKSPORTYOR KORXONALARINING YANGI BOZORLARGA CHIQISHIDA FAOL MARKETING VOSITALARIDAN FOYDALANISH HOLATI VA MUAMMOLARI	134
Baqoyev Sunnatillo Burxon o'g'li	
TADBIRKORLIK FAOLIYATIGA RAQAMLI TEXNOLOGIYALARNI JORIY ETISHNING ILMIIY-NAZARIY ASOSLARI	139
Salaydinov Shodiyor Nizom o'g'li	
TO'QIMACHILIK SANOATIDA INVESTITSION LOYIHALARNI BOSHQARISH METODOLOGIYASINI TAKOMILLASHTIRISHNING TASHKILIIY-IQTISODIY JIHLTLARI	144
Qurbonov Jasurbek Pozilovich	
OPTIMIZATION OF ROADSIDE AUTO CAMPING SITES (REST AREAS) ON HIGHWAYS USING ARTIFICIAL INTELLIGENCE: INFRASTRUCTURE GAPS AND CORRIDOR-BASED EVIDENCE FROM UZBEKISTAN	150
Akramov Akbarjon Akmal ugli	
QURILISH KORXONALARIDA INNOVATSION MARKETING YONDASHUVLARINING AHAMIYATI	156
Aminov Abbas Mo'minboy o'g'li	
XIZMAT KO'RSATISH SOHASIDA AHOLI ISH BILAN BANDLIGI SAMARADORLIGINI IFODALOVCHI KO'RSATKICHLAR	160
Abdusaidov Akmal Abduvaliyevich	
MINTAQADA XUSUSIY TIBBIYOT MUASSASALARIDA MARKETING STRATEGIYASI	165
Yakubov Temur G'anibekovich	
AHOLI DEMOGRAFIK JARAYONLARINI IFODALOVCHI STATISTIK KO'RSATKICHLAR TIZIMI	169
Siroj Zarina Rustambekovna	
AXBOROT MAHSULOTLARI BIZNESINING YAIM VA BANDLIKKA TA'SIRI: EKONOMETRIK TAHLIL	176
Abdullayev Abdulla Fayzulla o'g'li	
RAQAMLI IQTISODIYOT SHAROITIDA SOG'LIQNI SAQLASH TIZIMINI IQTISODIY SAMARADORLIGINI OSHIRISHNING KONSEPTUAL ASOSLARI	181
Ziyodullayev Qahramon	
ЭНЕРГОЭФФЕКТИВНОСТЬ: ПОЛЬЗА ДЛЯ ЭКОНОМИКИ И ЭКОЛОГИИ	185
Хамдамова Гавхар Абсаматовна	
O'ZBEKISTONDA EKSPORTNI RAG'BATLANTIRISHNING MOLIVAVIY VOSITALARI VA ULARNI TAKOMILLASHTIRISHNING ASOSIY YO'NALISHLARI	191
Mamatov Baxodir Quldoshovich	



KO'P QIRRALI VALLARNING SHAKLLANTIRISH METODLARI VA USULLARINI TAHLIL QILISH	197
<i>Xasanov Bobirmirzo Maxmudali o'g'li, Valixonov Dostonbek Azim o'g'li, Alibekov Rasulbek Qanotbek o'g'li</i>	
MINTAQA SANOATINING TARKIBIY TRANSFORMATSIYASI VA UNNING IQTISODIY O'SISHGA TA'SIRINI EKONOMETRIK MODELASHTIRISH	205
<i>Abdinazarov Xusan Shaymanovich</i>	
RAQAMLI TRANSFORMATSIYA SHAROITIDA SUG'URTA BOZORINING RAQOBATBARDOSHLIGINI OSHIRISH	209
<i>Nomozova Qumri Isoyevna</i>	
XALQARO STANDARTLAR TALABLARI ASOSIDA AUDITORLIK TEKSHIRUVINI TASHKIL ETISHNING ILMIY-NAZARIY ASOSLARI	216
<i>Akromov Shohrux Shuhrat o'g'li</i>	
QASHQADARYO VILOYATIDA XIZMATLAR SOHASINING RIVOJLANISHNI TARTIBGA SOLISH TIZIMI	221
<i>Achilova Firuza Kurbanovna</i>	
BANK MENEJMENTIDA INKLYUZIV MOLIYALASHTIRISHNING NAZARIY ASOSLARI, TAMOYILLARI VA STRATEGIK AHAMIYATI	225
<i>Rajabov Oybek Panjievich</i>	
MINTAQADA OLIY TA'LIM TIZIMINING ISHSIZLIK DARAJASIGA TA'SIRINI EKONOMETRIK MODELASHTIRISH	229
<i>Rustamov Jasurbek Ravshanbek o'g'li</i>	
MAISHIY XIZMATLAR SOHASIDA INNOVATSION KLASTER MODELINI JORIY ETISHNING USTUVOR YO'NALISHLARI	235
<i>Normurodova Zebo Eshmaxmatovna</i>	
RAQAMLI TEXNOLOGIYALAR ASOSIDA INVESTITSIYA FAOLIYATINI BOSHQARISH	240
<i>Xatamov Nurbek Ochildiyevich, Sharifi Abdul Fatah</i>	
MOLIYAVIY REJALASHTIRISHNING AMALDAGI MUAMMOLARI VA ULARNI YECHIMI YUZASIDAN TAKLIFLAR	245
<i>Pardayev Jamshid Muzaffarovich</i>	
TIJORAT BANKLARI LIKVIDLIK RISKLARINI BAHOLASH METODOLOGIYASINI TAKOMILLASHTIRISH MASALALARI	251
<i>Sulaymanov Samandarboy Adhambek o'g'li</i>	
O'ZBEKISTON TIJORAT BANKLARIDA RISKLARNI BOSHQARISH AMALIYOTINI TAKOMILLASHTIRISH	257
<i>Karimov Shohrux Boydulla o'g'li</i>	
"O'ZBEKISTON TEMIR YO'LLARI" AKSIYADORLIK JAMIYATINING HISOBOTLARINI XALQARO STANDARTLARGA TRANSFORMATSIYA QILISH	262
<i>Astanov Zafar Murodillayevich</i>	
QARAMA-QARSHI AYLANUVCHI IKKI ROTORLI SHAMOL TURBINASINING MATEMATIK MODEL	266
<i>Pirmatov Nurali Berdiyrovich, Bekishev Allabergen Yergashevich, Saodullayev Abror Saypullayevich, Qurbonov Najmiddin Abduxamidovich</i>	
YASHIL IQTISODIYOT SHAROITIDA KICHIK VA O'RTA BIZNESNI BARQAROR RIVOJLANTIRISHNING INSTITUTIONAL VA INVESTITSION MEXANIZMLARINI TAKOMILLASHTIRISH	272
<i>Norboyev Sarvar Azodovich</i>	
O'ZBEKISTONDA TRANSPORT SOHASIDA FAOLIYAT YURITAYOTGAN TADBIRKORLIK SUBYEKTLARINING IQTISODIY AHAMIYATI	277
<i>Jaloliddinov Anvar Jaloliddin o'g'li</i>	
ANALYSIS OF UZBEKISTAN'S MAIN ECONOMIC INDICATORS AND GDP GROWTH	283
<i>B.Beknazarov</i>	



SOTISH JARAYONIDA INNOVATSION TEXNOLOGIYALAR VA MARKETING TADQIQOTLARINING INTEGRATSIYASI	288
Abduxalilova Laylo Tohtasinovna	
ПРИМЕНЕНИЕ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В АУДИТЕ ФИНАНСОВОЙ ОТЧЕТНОСТИ: ГЛОБАЛЬНЫЙ И УЗБЕКСКИЙ КОНТЕКСТ	294
Мегноров Алмардон Абдирахмонович	
DAVLAT XARIDLARIDA INSTITUTSIONAL ISLOHOTLAR: FORENZIK NAZORAT, RAQOBAT MEKANIZMLARI VA INKLYUZIV RIVOJLANISH	298
G'ofurov Temur Baxrom o'g'li	
RISK MANAGEMENT STRATEGIES IN UNCERTAIN ECONOMIC ENVIRONMENTS: A GLOBAL COMPARATIVE STUDY	302
Nigmatova Malika	



RISK MANAGEMENT STRATEGIES IN UNCERTAIN ECONOMIC ENVIRONMENTS: A GLOBAL COMPARATIVE STUDY

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Abstract. This article examines risk management strategies in uncertain economic environments through a global comparative lens. The study combines literature synthesis, institutional analysis, the risk appetite concept, and cross-country comparison of practices. Findings indicate that strategy effectiveness depends on institutional quality, financial depth, and corporate governance maturity. The paper contributes an integrated conceptual framework for adaptive risk management across heterogeneous economic settings.

Keywords: risk management, economic uncertainty, risk appetite, institutional quality, financial market depth, corporate governance, diversification, hedging, operational resilience, stress testing, comparative analysis.

Annotatsiya. Maqolada iqtisodiy noaniqlik sharoitida risklarni boshqarish strategiyalari global taqqoslash yondashuvi asosida tahlil qilinadi. Metodologiya adabiyotlarni sintez qilish, institutsional tahlil, riskga bo'lgan ishtaha konsepsiyasi hamda turli mamlakatlar amaliyotlarini solishtirishni o'z ichiga oladi. Natijalar shuni ko'rsatadiki, strategiyalarning samaradorligi institutlar sifati, moliyaviy tizimning chuqurligi va korporativ boshqaruv darajasiga bog'liq. Moslashuvchan risk-menejment uchun integratsiyalashgan kontseptual asos taklif etiladi.

Kalit so'zlar: risklarni boshqarish, iqtisodiy noaniqlik, risk-appetit, institutsional sifat, moliyaviy bozorlar chuqurligi, korporativ boshqaruv, diversifikatsiya, xedjirlash, operatsion rezilyentlik, stress-testlash, qiyosiy tahlil.

Аннотация. Статья анализирует стратегии управления рисками в условиях экономической неопределенности на основе глобального сравнительного подхода. Методология включает синтез литературы, институциональный анализ, концепцию риск-аппетита и сопоставление практик различных стран. Результаты показывают зависимость эффективности стратегий от качества институтов, финансовой глубины и корпоративного управления. Предложена интегрированная концептуальная рамка для адаптивного риск-менеджмента.

Ключевые слова: управление рисками, экономическая неопределённость, риск-аппетит, институциональное качество, глубина финансовых рынков, корпоративное управление, диверсификация, хеджирование, операционная резильентность, стресс-тестирование, сравнительный анализ.

INTRODUCTION

The dynamics of the global economy over the past decade have complicated both the forms and sources of uncertainty: disruptions in supply chains, price volatility, sharp shifts in interest rate cycles, unexpected movements in foreign exchange markets, and operational risks associated with technological transformation increasingly force enterprises and financial institutions to make decisions within a framework of conditional probabilities. Under such conditions, risk management goes beyond its classical protective function and transforms into an instrument for value creation, ensuring sustainability, and accelerating strategic adaptation. In the academic literature, approaches emphasizing the systemic nature of risks, the variability of expectations and constraints under uncertainty, and the dependence of management systems on the institutional environment have become more prominent [1], [2].

Nevertheless, in practice, applied strategies often remain fragmented: some economies rely on hedging and market-based instruments, while others attempt to “contain” risks through liquidity buffers, conservative budgeting, or administrative restrictions. This increases the risk of neglecting contextual factors—particularly



institutional quality, financial market depth, corporate governance, and information transparency—when evaluating the outcomes of such strategies.

The research problem lies in the fact that generalizations about “best” risk management practices are often based on the experience of specific types of economies and fail to deliver expected results when transferred to different institutional and market environments. The academic gap manifests in two dimensions. First, the formation of strategy portfolios for different types of uncertainty (macroeconomic volatility, financial shocks, operational disruptions) and the mechanisms coordinating these strategies have not been sufficiently analyzed in a comparative framework. Second, the institutional conditions and real impact of corporate governance that determine the effectiveness of risk management have not been systematized at the level of a multi-country conceptual framework [3], [4].

The objective of this article is to analyze risk management strategies in uncertain economic environments from a global comparative perspective, to reveal their dependence on institutional and market contexts, and to substantiate an integrated conceptual model for adaptive risk management. To achieve this objective, three tasks are set: first, to classify strategies functionally based on the literature; second, to link dominant combinations of strategies across countries with institutional factors; and third, to propose a conceptual framework explaining the alignment between risk appetite, governance infrastructure, and control mechanisms under conditions of uncertainty.

LITERATURE REVIEW ON THE TOPIC

The findings indicate that risk management should be interpreted not as a set of universal instruments but as an adaptive architecture co-evolving with the institutional environment. Knight distinguished between risk and uncertainty, defining risk as situations where probabilities can be calculated and uncertainty as those where measurement is difficult [1]. The results of this study demonstrate that under heightened uncertainty, reliance solely on measurement is insufficient; instead, management systems must integrate scenarios, institutional constraints, and operational resilience. In practical terms, Knight’s conceptual distinction implies that instruments such as derivatives or insurance are effective only in the measurable risk segment, while in the uncertainty segment, adaptability, buffers, and governance discipline become dominant.

Damodaran links risk management to corporate value creation, arguing that hedging decisions are justified only when aligned with capital structure, tax effects, and financial distress costs [5]. Our comparative results confirm that hedging itself is neither inherently “good” nor “bad”; its impact on value is constrained by market infrastructure and governance quality. Where counterparty risk, liquidity shortages, or weak accounting practices prevail, hedging may increase complexity rather than reduce risk. Therefore, Damodaran’s value-oriented approach requires reinterpretation within an institutional context.

Enterprise risk management (ERM) frameworks promote integrated, firm-wide management of risks rather than silo-based approaches [4]. The results show that ERM provides advantages under uncertainty precisely through its logic of integration and coordination, though these advantages are not automatic. If institutional transparency is low or internal controls are merely formal, ERM may devolve into a set of documents while real decisions remain intuitive and short-term oriented. Thus, ERM effectiveness depends not on system existence but on the practical functioning of risk appetite, limit enforcement, and incentive alignment.

Russian academic literature often associates risk management with corporate stability and strategic planning, emphasizing the importance of multi-scenario approaches under uncertainty [6]. Our findings extend this perspective by demonstrating the need to integrate scenario planning and stress testing not only within financial metrics but also with operational and supply chain risks. In globally integrated environments, production disruptions or logistical delays may trigger liquidity crises faster than financial risks. Therefore, scenario approaches must extend beyond macro indicators to encompass critical operational interdependencies.

Studies by Uzbek researchers on financial stability, corporate finance, and risk mitigation instruments highlight the decisive role of institutional reforms alongside market mechanisms in transition economies [8]. The present findings reinforce this direction: while technical risk management tools are often imported, without sufficient transparency, information quality, and accountability mechanisms, these instruments fail to deliver expected results. In this sense, risk management strategy should be interpreted as governance modernization accompanying economic modernization.

Stulz argues that the core of corporate risk management lies not in eliminating risks but in consciously selecting risks aligned with a firm’s competitive advantage [3]. Our comparative configurations situate this idea within a practical context: where institutions are strong, firms can transfer undesirable risks through market instruments while accepting strategic risks at manageable levels; where institutions are weak, firms tend toward conservatism, reducing their capacity to assume even strategic risks. Thus, risk appetite is shaped not only by internal choice but also by external institutional constraints.

Overall, the discussion shows that effective strategies in uncertain economic environments do not rely on a single powerful instrument; instead, they combine portfolios of institutionally adapted instruments, governance infrastructure that supports risk culture, and scenario-based adaptive decision-making. The scientific contribution of this article lies in substantiating the configurational nature of risk management based on global comparative evidence and identifying adaptability as the central criterion of effectiveness.

RESEARCH METHODOLOGY

The research methodology is based on a conceptual and comparative design. In the first stage, international and regional academic literature on risk management was critically synthesized. This synthesis made it possible to integrate the evolution of approaches to risk identification, measurement, mitigation, and transfer, as well as perspectives that account for endogenous and exogenous sources of uncertainty [1], [5].

In the second stage, an institutional analysis was applied. In this context, “institutional quality” is interpreted as a composite of factors such as the protection of property rights, enforcement of contracts, predictability of financial regulation, and information transparency. This approach serves to analyze the conditions of trust and coordination required for the effective functioning of risk management instruments (e.g., hedging through derivatives or insurance) [2], [6].

In the third stage, following the logic of global comparative analysis, typical configurations of strategy portfolios across groups of countries were compared. The comparison is based on the principle that “the same instrument produces different outcomes in different environments”; therefore, rather than seeking a single “best practice,” the study emphasizes flexibility and coordination of strategies as key criteria. Empirically, the article does not aim to construct a new database based on statistical calculations; instead, it consolidates existing academic evidence, corporate risk management standards, and scholarly conclusions regarding governance practices observed in different countries. This methodological choice is justified by the multidimensional nature of uncertainty, which is difficult to fully capture through a single indicator; thus, conceptual integration and comparative logic are more appropriate for consistent explanation of strategies [4], [7].

To structure the results, risk management strategies are divided into four functional blocks: financial risk management through market instruments; conservative strategies based on balance sheet and liquidity; reduction of operational resilience and supply chain risks; and the formation of risk culture through corporate governance and internal control. This classification enables subsequent analysis of how each block manifests in different combinations under varying institutional conditions.

ANALYSIS AND RESULTS

The comparative analysis demonstrates that in uncertain economic environments, risk management strategies function not as isolated instruments but as interconnected portfolios, the effectiveness of which is directly constrained by institutional quality and market infrastructure.

The first result shows that in economies with deep financial markets and predictable regulation, market-based risk transfer strategies—particularly hedging of currency, interest rate, and commodity price risks—are more prevalent. Under such conditions, the primary advantage of risk management lies in the rapid transmission of price signals, the presence of developed clearing mechanisms that reduce counterparty risk, and accounting and disclosure standards that facilitate the assessment of risk positions. As a result, firms can link risk appetite to quantitative thresholds and monitor risk limits in near real time, thereby optimizing the balance between capital value and unexpected losses.

The second result indicates that in environments where financial instrument markets are limited or transaction costs are high, risk management relies more heavily on conservative balance-sheet-based strategies. These include maintaining high liquidity reserves, prudent debt management, flexible cost structures, and strengthened budgetary discipline. While such portfolios help absorb short-term shocks, they may reduce capital efficiency, constrain investment opportunities, and negatively affect long-term competitiveness. Comparatively, although conservative strategies appear rational in contexts of high institutional uncertainty, they may increase the implicit cost of risk rather than reduce it, as excessive caution leads to foregone growth opportunities.

The third result relates to strategies focused on operational resilience, showing that in sectors highly integrated into global value chains, the main sources of uncertainty are not financial but rather logistical disruptions, supplier concentration, technological breakdowns, and quality risks. In such conditions, multi-sourcing, backup capacities, safety stocks for critical components, and supplier audits become central risk mitigation instruments. The comparative analysis also highlights the importance of institutions for the effectiveness of these strategies: where standardization systems, contractual discipline, and legal enforcement



mechanisms are strong, risk-sharing agreements with suppliers operate more sustainably; where transparency is low, reducing operational risks requires greater reliance on internal controls and additional monitoring costs.

The fourth result confirms the “binding” role of corporate governance and risk culture within the strategy portfolio. Observations indicate that identical sets of instruments produce different outcomes across organizations due to differences in upward information flow, discipline in enforcing limits, risk-sensitive incentive systems, and the independence of internal audit. In systems where risk appetite is clearly defined, key risk indicators (KRIs) are integrated into managerial decision-making, and stress testing is linked to business planning, uncertainty shocks are not perceived as “unexpected disasters” but as manageable scenarios anticipated in advance. Consequently, the primary output of risk management is not a specific instrument but rather the speed and quality of decision-making and coordination.

As a final result, from a global comparative perspective, strategies can be grouped into three typical configurations: active hedging and portfolio diversification based on market instruments; conservative adaptation relying on balance sheet and liquidity; and a resilience model prioritizing operational stability. These configurations rarely appear in pure form; however, in each economic environment, one tends to dominate while others play a supporting role. Importantly, the choice of configuration is not determined solely by firm discretion but is shaped by constraints arising from financial market availability, institutional trust, regulatory stability, and the maturity of corporate governance.

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CONCLUSION AND SUGGESTIONS

The study demonstrates that risk management strategies in uncertain economic environments do not represent universal prescriptions; their effectiveness is strongly dependent on institutional quality, financial market depth, and the maturity of corporate governance. The comparative analysis substantiates that strategies operate in practice as portfolios, with varying proportions of market-based transfer, balance-sheet-oriented conservatism, and operational resilience across environments. The theoretical contribution of the article lies in proposing an integrated conceptual framework that links risk appetite, governance infrastructure, and institutional constraints. Practically, the findings suggest that organizations should reconsider risk management not as a standalone function but as a system embedded within strategy, planning, and operational management. Future research may extend this work by empirically testing the relationship between institutional indicators and risk portfolio configurations using panel data across countries and by more deeply modeling sector-specific characteristics.

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