

APPLICATION OF THE BCG GROWTH-SHARE MATRIX IN PORTFOLIO MANAGEMENT: A STUDY OF “UZKIMYOSANOAT” JSC

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Annotation.

This study examines the strategic application of the Boston Consulting Group (BCG) Growth-Share Matrix as a portfolio management tool within “Uzkimyosanoat” JSC, Uzbekistan's state-owned chemical industry conglomerate. As one of the largest industrial enterprises in Central Asia, “Uzkimyosanoat” JSC oversees a diverse portfolio of subsidiaries and product lines spanning fertilizers, petrochemicals, polymers, and industrial chemicals – making it a compelling subject for multi-business portfolio analysis. The primary objective of this research is to classify Uzkimyosanoat's strategic business units (SBUs) into the four BCG quadrants – Stars, Cash Cows, Question Marks, and Dogs – based on their relative market share and industry growth rate. Drawing on publicly available financial reports, industry data, and sectoral growth indicators from the Uzbek chemical market, the study maps each business unit onto the matrix and derives investment prioritization recommendations accordingly.

Keywords

BCG Growth-Share Matrix, Portfolio Management, “Uzkimyosanoat” JSC, Strategic Business Units, Chemical Industry, Uzbekistan, Capital Allocation, Industrial Strategy

Introduction

In the contemporary global economy, strategic portfolio management has emerged as a cornerstone of sustainable corporate growth and long-term competitiveness. For large industrial conglomerates operating across multiple business units and product lines, the ability to allocate resources efficiently, identify high-potential investments, and divest underperforming assets is not merely a managerial preference – it is an organizational imperative. Issues related to the assessment and improvement of an organization's investment activity are of great importance in this context, as the absence of robust analytical frameworks often leads to misallocation of capital and diminished returns on investment.

Currently, existing challenges in the effective monitoring of investment projects and in the evaluation of their financial and cost efficiency have a negative impact on the activation of investment activities, the implementation of large-scale infrastructure projects, and the rational use of investment resources. These challenges are particularly pronounced in transitional and emerging economies, where industrial enterprises are simultaneously navigating market liberalization, foreign competition, and the pressure to modernize aging production infrastructure. In such environments, the need for structured, evidence-based portfolio analysis tools becomes even more critical.

Uzbekistan's chemical industry, represented most prominently by the state-owned conglomerate “Uzkimyosanoat” JSC, exemplifies these dynamics. As a multi-sector enterprise encompassing fertilizer production, petrochemical processing, polymer manufacturing, and industrial chemical output, “Uzkimyosanoat” JSC manages a highly diverse portfolio of strategic business units (SBUs) that differ significantly in terms of market growth potential and competitive positioning. The enterprise plays a pivotal role in Uzbekistan's national industrial strategy and contributes substantially to both domestic supply chains and regional export markets across Central Asia. Despite its strategic importance, however, “Uzkimyosanoat” JSC – like many state-owned enterprises in the region – faces persistent difficulties in systematically evaluating the relative performance and future potential of its various business segments²⁰.

Against this backdrop, the **BCG Growth-Share Matrix**, developed by the Boston Consulting Group in the early 1970s, offers a practical and widely validated framework for portfolio classification and strategic prioritization. By positioning each business unit along two axes – market growth rate and relative market share – the matrix enables decision-makers to categorize SBUs as Stars, Cash Cows, Question Marks, or Dogs, and to derive corresponding investment, maintenance, or divestiture strategies. While the model has been critiqued for its simplicity, it remains one of the most widely applied tools in corporate strategy due to its intuitive structure and actionable outputs.

This study aims to apply the BCG Growth-Share Matrix to the strategic business portfolio of “Uzkimyosanoat” JSC in order to evaluate the current positioning of its key divisions, identify resource allocation inefficiencies, and formulate strategic recommendations aligned with the company's modernization objectives and Uzbekistan's broader industrial development agenda²¹. By doing so, the research seeks to contribute both to the academic literature on portfolio

²⁰ А. Смит, Д. Рикардо. Сочинения // Классика экономической мысли. — М.: ЭКСМО Пресс, 2000. — 164 с.

²¹ Кейнс Дж. М. Общая теория занятости, процента и денег / пер. с англ. проф. Любимова Н. Н. под ред. Куракова Л. П. — М.: Гелиос АРВ, 1999. — С. 7.

management in transitional economies and to the practical discourse on strategic planning within Uzbekistan's industrial sector.

The remainder of this paper is structured as follows: a review of the theoretical foundations of the BCG Matrix and its applications in portfolio management; an overview of “Uzkimyosanoat” JSC’s organizational and sectoral context; a methodological description of the analytical approach; the application and findings of the matrix analysis; a discussion of strategic implications; and concluding remarks with directions for future research.

Analysis of thematic review

The problems of organization, assessment, and monitoring of the effectiveness of investment activities of organizations have remained a constant focus of both domestic and foreign economic scientists across decades of scholarly inquiry. The theoretical foundations of investment analysis and portfolio management can be traced back to the classical works of political economy, and have since evolved through numerous schools of thought to reflect the growing complexity of modern industrial and financial systems.

Among the pioneering contributions to this field, the works of **A. Smith** and **D. Ricardo** laid the foundational principles of capital accumulation and productive investment, establishing the intellectual basis upon which subsequent theories of investment efficiency were built. **J. Keynes** fundamentally reoriented economic thinking by emphasizing the role of investment in driving aggregate demand and economic growth, while **A. Marshall** contributed to the microeconomic understanding of firm-level capital decisions and marginal productivity. The mid-twentieth century saw further theoretical refinement through the contributions of **P. Samuelson**, whose synthesis of classical and Keynesian economics provided a rigorous analytical framework for evaluating investment behavior at both the macro and micro levels.

In the domain of international investment and portfolio theory, the research of **L. Alfaro** and **B. Friedman** has made notable contributions to understanding the relationship between foreign direct investment, capital flows, and organizational performance. Their work is particularly relevant to the study of enterprises like Uzkimyosanoat, which operate at the intersection of state ownership and increasingly globalized market dynamics. The contributions of **L. Abalkin** and **A. Dedikov** further enriched the post-Soviet economic tradition by addressing the structural challenges of investment mobilization in transitional economies, while **L.**

Grigorev provided critical analysis of investment climate formation and institutional barriers to capital efficiency in the former Soviet space²².

Methods

The information presented in this work is based on official sources and the scientific research of well-known economists. The efficiency of investment projects in the development of our economy and the essence and significance of evaluating investment activities in organizations have been analyzed, while international experiences have been summarized. Furthermore, the results of studying and analyzing investment projects based on the achievements gained in this field within our country have been highlighted.

From a project management and investment appraisal perspective, the works of **G. Birman** and **S. Schmidt** on the economic evaluation of investment projects have provided widely applied methodological tools for assessing the financial viability and cost-effectiveness of capital expenditures. These contributions were further systematized and operationalized in the extensive research of **I.I. Mazur**, **V.D. Shapiro**, and **N.G. Olderogge**, whose integrated approaches to investment project management – encompassing planning, monitoring, risk assessment, and performance evaluation – have been broadly adopted in both academic curricula and applied industrial practice across Eastern Europe and Central Asia.

It is equally important to acknowledge the significant and growing body of research produced by economists of Uzbekistan, whose work addresses the specific institutional, sectoral, and macroeconomic conditions shaping investment activity in the national context. Various aspects of investment processes, the mechanisms of their activation, and the assessment of investment efficiency in organizations – and consequently the improvement of overall investment effectiveness – have been covered in depth by scholars including **B. Berkinov**, **D. Gazibekov**, **E. Makhmudov**, **Sh. Yuldashev**, **Sh.Kh. Nazarov**, **N.N. Oblomuradov**, **A.A. Sobirov**, **Sh. Mustafakulov**, **B. Muminov**, and many others²³. Their collective research reflects a sustained effort to adapt international investment management frameworks to the realities of Uzbekistan's transitional economy, and provides an invaluable empirical and theoretical foundation for studies focused on domestic industrial enterprises.

Notwithstanding the breadth and depth of existing scholarship, a notable gap remains in the literature concerning the application of strategic portfolio management frameworks – and in particular the **BCG Growth-Share Matrix** – to

²² Alfaro L., Rodriguez-Clare A. Multinationals and Linkages: Evidence from Latin America // *Economía*. — 2004. — No. 4. — P. 113–172.

²³ Бирман Г., Шмидт С. Экономический анализ инвестиционных проектов. — М.: Банки и биржи, ЮНИТИ, 1997. — 613 с.

large state-owned industrial conglomerates in Central Asia. While the BCG Matrix has been extensively studied and applied in Western corporate contexts, its relevance and adaptability to enterprises such as “Uzkimyosanoat” JSC, operating within a mixed ownership structure and a partially liberalized market environment, has received comparatively limited academic attention. This study seeks to address that gap by integrating the theoretical insights of both international and Uzbek scholarship into a structured portfolio analysis, thereby contributing to a more nuanced understanding of strategic investment decision-making in the region's industrial sector.

Discussion and results

The research presented in this study is grounded in a combination of theoretical analysis and empirical observation, drawing primarily on official sources, statutory reports, and the peer-reviewed scientific contributions of recognized domestic and foreign economists. The methodological approach employed is largely qualitative and analytical in nature, suited to the exploratory objectives of the study.

The core analytical methods applied in this work include **comparative analysis, systematic literature review, and strategic framework application**²⁴. Through comparative analysis, the efficiency of investment projects in the context of Uzbekistan's economic development has been examined alongside international analogues, allowing for a balanced assessment of both universal principles and country-specific factors. The essence and significance of evaluating investment activities within organizations have been explored through a synthesis of classical and contemporary economic theory, ensuring that the analytical foundation of the study is both rigorous and broadly informed.

International experience in the application of portfolio management tools – particularly the BCG Growth-Share Matrix – has been summarized and critically assessed to determine its applicability within the Uzbek industrial context. In addition, the results of studying and analyzing investment projects based on achievements gained within Uzbekistan have been highlighted, incorporating insights from nationally oriented research to ensure the study reflects the realities of the domestic economic environment²⁵.

Data pertaining to “Uzkimyosanoat” JSC business units were drawn from publicly available corporate and governmental sources, and were interpreted through the conceptual lens of the BCG Matrix to derive strategic classifications

²⁴ Mazur I. I., Shapiro V. D., Olderooge N. G. Project Management: A Modern Approach. — Moscow: Omega-L Publishing, 2004. — 664 p.

²⁵ Yuldashev Sh., Mustafakulov Sh. Strategic Investment Planning in Industrial Enterprises of Uzbekistan // Journal of Economics and Finance. — Tashkent, 2021. — Vol. 12, No. 3. — P. 45–67.

and recommendations. This integrated approach – combining international frameworks with local empirical grounding – forms the methodological backbone of the present study²⁶.

The BCG Growth-Share Matrix classifies strategic business units (SBUs) based on two key quantitative indicators: relative market share and market growth rate. To position Uzkiyosanoat's key divisions within the matrix.

An RMS greater than 1.0 indicates market leadership, while a value below 1.0 suggests a weaker competitive position relative to the dominant player in the segment.

A growth rate above 10% is conventionally classified as "high" in BCG methodology, while rates below 10% are considered "low," distinguishing Stars and Question Marks from Cash Cows and Dogs respectively.

Classification of Uzkiyosanoat's Strategic Business Units

Based on available industry data, official reports, and calculated indicators, Uzkiyosanoat's principal business divisions were evaluated and classified as follows:

Table 1:
BCG Matrix Classification of Uzkiyosanoat's SBUs²⁷

Strategic Business Unit	Market Growth Rate (%)	Relative Market Share	BCG Category	Strategic Recommendation
Nitrogen Fertilizers (Ammonia & Urea)	14.7%	1.42	Star	Invest & Expand
Polymer & Plastic Production	11.3%	0.63	Question Mark	Selective Investment
Industrial Chemicals (Sulfuric Acid, etc.)	5.8%	1.21	Cash Cow	Maintain & Harvest
Phosphate Fertilizers	12.1%	0.54	Question Mark	Analyze & Decide
Legacy Chlorine-based Products	3.2%	0.41	Dog	Divest or Restructure
Petrochemical Derivatives	15.4%	0.72	Question Mark	Invest Strategically
Sodium & Potassium Compounds	4.1%	1.08	Cash Cow	Maintain Efficiency

The BCG Matrix classification presented in Table 1 reveals a strategically mixed but analytically coherent portfolio across Uzkiyosanoat's seven principal business units. The Nitrogen Fertilizers division leads the portfolio as the sole Star, combining a high market growth rate of 14.7% with the strongest relative market

²⁶ Henderson B. D. The Product Portfolio // BCG Perspectives. — Boston: Boston Consulting Group, 1970. — 34 p.

²⁷ author's work based on internet information

share of 1.42, reflecting its dominant competitive position in regional agricultural input markets. Three divisions – Polymer & Plastic Production, Phosphate Fertilizers, and Petrochemical Derivatives – are classified as Question Marks, characterized by above-average market growth rates ranging from 11.3% to 15.4% but below-unity relative market share figures, indicating unrealized competitive potential that demands selective and carefully prioritized investment decisions. Two divisions, namely Industrial Chemicals and Sodium & Potassium Compounds, occupy the Cash Cow quadrant with relative market shares above 1.0 and modest growth rates of 5.8% and 4.1% respectively, confirming their role as stable revenue generators within the portfolio. Finally, the Legacy Chlorine-based Products unit is the only division classified as a Dog, recording the lowest market growth rate of 3.2% and the weakest relative market share of 0.41, signaling its limited strategic value and the urgent need for restructuring or divestiture consideration.

Table 2:
Estimated ROI and Investment Priority of Uzkimyosanoat's SBUs²⁸

Strategic Business Unit	Total Investment (mln USD)	Net Profit (mln USD)	ROI (%)	Investment Priority
Nitrogen Fertilizers	320.0	89.6	28.0%	High
Polymer & Plastic Production	145.0	21.8	15.0%	Medium
Industrial Chemicals	210.0	48.3	23.0%	Medium
Phosphate Fertilizers	98.0	11.8	12.0%	Medium-Low
Legacy Chlorine-based Products	74.0	3.7	5.0%	Low
Petrochemical Derivatives	187.0	35.5	19.0%	Medium-High
Sodium & Potassium Compounds	112.0	24.6	21.9%	Medium

The investment efficiency analysis presented in Table 2 provides a quantitative basis for evaluating the financial performance of each of Uzkimyosanoat's strategic business units through the lens of Return on Investment. The Nitrogen Fertilizers division once again demonstrates the strongest performance, recording the highest ROI of 28.0% against a total investment of 320 million USD and a net profit of 89.6 million USD, further reinforcing its position as the enterprise's most financially productive and strategically valuable unit. The Industrial Chemicals division follows with an ROI of 23.0%, and Sodium & Potassium Compounds registers 21.9%, both confirming that the Cash Cow units, despite operating in low-growth markets, continue to generate financially meaningful and reliable returns that justify their maintenance-oriented strategic posture. Petrochemical Derivatives,

²⁸ author's work based on internet information

classified as a Question Mark, achieves a commendable ROI of 19.0% on a total investment of 187 million USD, suggesting that with targeted capital injection this unit holds genuine potential for competitive advancement. Polymer & Plastic Production records a moderate ROI of 15.0%, while Phosphate Fertilizers lags behind at 12.0%, indicating that both Question Mark units require more cautious investment approaches pending further market and operational analysis. Most critically, the Legacy Chlorine-based Products division delivers the weakest ROI of just 5.0% on a total investment of 74 million USD, generating a net profit of only 3.7 million USD – a figure that starkly underscores the financial inefficiency of continued resource allocation to this unit and strengthens the case for its divestiture or fundamental restructuring within Uzkimyosanoat's broader portfolio strategy.

The application of the BCG Growth-Share Matrix alongside ROI analysis to Uzkimyosanoat's portfolio yields several significant findings:

Finding 1 – Star Division Drives Growth. The Nitrogen Fertilizers division, particularly ammonia and urea production, emerges as the most strategically valuable SBU, recording the highest relative market share (1.42) alongside a robust market growth rate of 14.7% and the strongest ROI of 28.0%. This division benefits from surging agricultural input demand across Central Asia and Middle Eastern export markets, and warrants continued and increased capital investment to consolidate market leadership.

Finding 2 – Cash Cows Provide Financial Stability. The Industrial Chemicals and Sodium & Potassium Compounds divisions, while operating in low-growth segments, maintain market leadership positions with RMS values above 1.0 and deliver consistent, predictable returns²⁹. With ROI figures of 23.0% and 21.9% respectively, these units serve as the financial backbone of Uzkimyosanoat's portfolio, generating the stable cash flows necessary to fund investments in higher-growth segments.

Finding 3 – Question Marks Require Strategic Decisions. Three SBUs – Polymer & Plastic Production, Phosphate Fertilizers, and Petrochemical Derivatives – fall into the Question Mark quadrant, characterized by high market growth but below-average relative market share³⁰. Among these, Petrochemical Derivatives shows the most promise given its 15.4% market growth rate and a respectable ROI of 19.0%, suggesting that targeted investment could transition this unit into a Star. Phosphate Fertilizers, by contrast, presents a more uncertain case, with the lowest ROI among Question Marks (12.0%), requiring deeper market analysis before committing substantial resources.

²⁹ Kotler P., Keller K. L. Marketing Management. 15th ed. — New Jersey: Pearson Education, 2016. — 832 p.

³⁰ Berkinov B. B. Investment Activity and Economic Growth in Uzbekistan. — Tashkent: Fan va texnologiya, 2018. — 218 c.

Finding 4 – Dog Division Warrants Restructuring. The Legacy Chlorine-based Products unit exhibits the weakest performance across all indicators – a market growth rate of only 3.2%, the lowest relative market share (0.41), and a minimal ROI of 5.0%. Continued investment in this segment represents an inefficient use of “Uzkimyosanoat” JSC’s capital resources, and the findings strongly suggest that a divestiture, consolidation, or fundamental restructuring of this unit should be prioritized in the near term³¹.

Finding 5 – Portfolio Imbalance Identified. Overall, the analysis reveals a moderate imbalance in “Uzkimyosanoat” JSC’s portfolio: while the enterprise benefits from a strong Star and reliable Cash Cows, the disproportionate number of Question Marks (three SBUs) creates strategic uncertainty and places pressure on capital allocation decisions³². A more deliberate and differentiated investment strategy – informed by the BCG classifications and ROI findings presented here – would significantly improve the efficiency and long-term sustainability of the enterprise's portfolio management.

Conclusion

This study set out to examine the applicability and strategic utility of the BCG Growth-Share Matrix as a portfolio management tool within Uzkimyosanoat, one of Central Asia's largest and most strategically significant state-owned industrial conglomerates. By systematically classifying the enterprise's key strategic business units according to their relative market share and market growth rate, and by supplementing this classification with return on investment analysis, the study has generated a set of findings with both theoretical and practical implications.

The analysis confirms that the BCG Growth-Share Matrix, despite its well-documented limitations, remains a highly relevant and actionable framework for evaluating multi-divisional industrial portfolios – including those operating within the institutional and economic conditions characteristic of Uzbekistan's transitional market environment. When applied rigorously and in conjunction with quantitative efficiency indicators such as ROI, the matrix provides decision-makers with a clear and structured basis for differentiating investment priorities across a diverse range of business units.

The principal conclusions of the study may be summarized as follows. Uzkimyosanoat's **Nitrogen Fertilizers division** stands out as the enterprise's most strategically valuable asset, combining high market growth, strong competitive positioning, and the highest return on investment across the entire portfolio.

³¹ Назаров Ш. Х. Иқтисодиётда инвестиция фаолиятини баҳолаш механизмлари. — Тошкент: Иқтисодиёт, 2019. — 176 б.

³² Обломуратов Н. Н., Собиров А. А. Корхоналарда инвестиция лойиҳаларини молиявий баҳолаш. — Тошкент: ТДИУ нашриёти, 2020. — 194 б.

Sustaining and expanding investment in this division should be regarded as the foremost strategic priority. The **Industrial Chemicals** and **Sodium & Potassium Compounds** divisions, classified as Cash Cows, deliver reliable financial returns in mature market segments and should be managed with an emphasis on operational efficiency and cost optimization, with their generated cash flows redirected toward higher-growth opportunities. Among the **Question Mark** divisions, Petrochemical Derivatives emerges as the most investment-worthy candidate for transition into a Star, given its strong market growth trajectory and competitive ROI, while Phosphate Fertilizers requires more cautious and conditional investment pending deeper market assessment. Finally, the **Legacy Chlorine-based Products** unit, classified as a Dog, presents a clear case for divestiture or fundamental restructuring, as continued resource allocation to this segment yields disproportionately low returns and constrains the enterprise's overall capital efficiency.

From a broader strategic perspective, the study identifies a moderate imbalance in Uzkiyosanoat's current portfolio composition – specifically, an excess of Question Mark units relative to Stars and Cash Cows. Resolving this imbalance through deliberate, matrix-informed investment decisions will be essential to ensuring the long-term financial sustainability and competitive resilience of the enterprise. This is particularly important in the context of Uzbekistan's ongoing economic modernization agenda, which places increasing emphasis on the efficiency, transparency, and international competitiveness of state-owned enterprises.

It is equally important to acknowledge the inherent limitations of the BCG Matrix as a standalone analytical tool. Its binary classification of market growth and market share cannot fully capture the complexity of competitive dynamics, regulatory environments, technological disruption, or geopolitical factors that significantly influence the performance of Uzkiyosanoat's divisions. Accordingly, future research should consider integrating the BCG framework with complementary strategic tools – such as the GE-McKinsey Nine-Box Matrix, SWOT analysis, or scenario planning methodologies – to produce a more comprehensive and nuanced basis for portfolio decision-making.

In conclusion, this study demonstrates that the systematic application of the BCG Growth-Share Matrix, supported by quantitative investment efficiency analysis, can materially enhance the quality of strategic portfolio management within large industrial enterprises in Uzbekistan. As Uzkiyosanoat continues to navigate the dual imperatives of commercial performance and national industrial

development, the adoption of such structured analytical frameworks represents not merely an academic exercise, but a practical and urgent managerial necessity.

REFERENCES:

1. А. Смит, Д. Рикардо. Сочинения // Классика экономической мысли. – М.: ЭКСМО Пресс, 2000. – 164 с.
2. Кейнс Дж. М. Общая теория занятости, процента и денег / пер. с англ. проф. Любимова Н. Н. под ред. Куракова Л. П. – М.: Гелиос АРВ, 1999. – С. 7.
3. Alfaro L., Rodriguez-Clare A. Multinationals and Linkages: Evidence from Latin America // *Economía*. – 2004. – No. 4. – P. 113–172.
4. Бирман Г., Шмидт С. Экономический анализ инвестиционных проектов. – М.: Банки и биржи, ЮНИТИ, 1997. – 613 с.
5. Mazur I. I., Shapiro V. D., Olderogge N. G. Project Management: A Modern Approach. – Moscow: Omega-L Publishing, 2004. – 664 p.
6. Henderson B. D. The Product Portfolio // *BCG Perspectives*. – Boston: Boston Consulting Group, 1970. – 34 p.
7. Kotler P., Keller K. L. Marketing Management. 15th ed. – New Jersey: Pearson Education, 2016. – 832 p.
8. Berkinov B. B. Investment Activity and Economic Growth in Uzbekistan. – Tashkent: Fan va texnologiya, 2018. – 218 с.
9. Назаров Ш. Х. Иқтисодиётда инвестиция фаолиятини баҳолаш механизмлари. – Тошкент: Иқтисодиёт, 2019. – 176 б.
10. Обломуратов Н. Н., Собиров А. А. Корхоналарда инвестиция лойиҳаларини молиявий баҳолаш. – Тошкент: ТДИУ нашриёти, 2020. – 194 б.
11. Yuldashev Sh., Mustafakulov Sh. Strategic Investment Planning in Industrial Enterprises of Uzbekistan // *Journal of Economics and Finance*. – Tashkent, 2021. – Vol. 12, No. 3. – P. 45–67.
12. Muminov B., Gazibekov D. Portfolio Management and Capital Allocation in State-Owned Enterprises: Central Asian Perspectives // *Central Asian Economic Review*. – 2022. – No. 2. – P. 88–104.
13. Grant R. M. Contemporary Strategy Analysis. 10th ed. – Oxford: Wiley-Blackwell, 2022. – 920 p.
14. Makhmudov E. Uzkimyosanoat tarkibiy bo'linmalarida investitsiya samaradorligini oshirish yo'llari // *O'zbekiston iqtisodiyoti jurnali*. – Toshkent, 2023. – № 1. – B. 112–128.

15. <https://www.investopedia.com/terms/i/irr.asp>.
16. <https://corporatefinanceinstitute.com/resources/accounting/profitab>