ACADEMIC JOURNAL
ISSN 2697-2212

Academic Journal of Digital Economy and Stability
Volume 39, Issue 2 | April-2026

Available Online: *https://economics.academicjournal.io/*

Article

Increasing the Economic Efficiency of Modern Enterprises on the Basis of Divergence

Meyliyev Farrukh[*1]

1. Karshi State Technical University Deputy Dean for Academic Affairs, Faculty of Oil, Gas and Geology
* Correspondence: farruxmeyliyev995@gmail.com

Citation: Farrukh M. Increasing the Economic Efficiency of Modern Enterprises on the Basis of Divergence. Academic Journal of Digital Economics and Stability 2026, 39(2), 455-462.

Received: 21st Jan 2026
Revised: 16th Feb 2026
Accepted: 11th Mar 2026
Published: 20th Apr 2026

Abstract: This article examines the role and significance of the divergence process in improving the economic efficiency of modern enterprises. It analyzes the issues of strengthening competitiveness, increasing production efficiency and reducing market risks through the diversification of products, services, technologies and management processes. The study investigates the impact of divergence on innovative development, digital transformation and sustainable economic growth. It also highlights the importance of divergence strategies in ensuring the efficient use of resources, entering new market segments and increasing investment attractiveness. The results provide a theoretical basis for developing scientific and practical recommendations aimed at improving the economic efficiency of modern enterprises.

Keywords: Divergence, Economic Efficiency, Enterprise Management, Innovative Development, Digital Transformation, Diversification, Competitiveness, Investment Attractiveness, Production Efficiency, Strategic Management, Technological Modernization, Market Segments, Economic Growth, Efficient Resource Utilization.

1. Introduction

The rapid development of the global economy, intensification of competition and transition of technological progress to a new stage impose new requirements on modern enterprises in terms of increasing economic efficiency. In conditions of deepening market relations, enterprises must not only use existing resources efficiently but also ensure sustainable development by searching for new opportunities, developing innovative activity and diversifying their operations. From this perspective, divergence is becoming one of the strategic directions of modern enterprise activity.

In economic processes, divergence means forming new areas of activity, expanding the range of products and services, introducing technological innovations and diversifying the market opportunities of the enterprise. This process enables enterprises to reduce risks associated with one-sided activity, increase sources of income and adapt to changes in market conditions. Especially under the digital economy, divergence is becoming an important factor in introducing innovative technologies, creating new business models and increasing production efficiency.

Today, the development of artificial intelligence, Big Data, cloud technologies, robotics and automation systems creates new opportunities for enterprises. Divergence processes implemented on the basis of these technologies help reduce production costs, increase labor productivity, improve product quality and strengthen management efficiency. As a result, enterprises can consolidate their competitive advantages in domestic and foreign markets.

In the economy of Uzbekistan, consistent reforms are also being carried out to modernize industrial enterprises, accelerate innovative development and widely introduce digital transformation. State programs aimed at improving the investment environment, supporting innovative activity and stimulating technological renewal of enterprises serve as important factors for increasing economic efficiency.

The relevance of this study is explained by the need to scientifically assess the impact of divergence processes on economic efficiency in modern enterprises, to identify their advantages and opportunities, and to develop scientific and practical recommendations for their application in enterprise activity. The findings may serve to increase enterprise competitiveness, accelerate innovative development and ensure economic stability.

Literature Review

Divergence processes in increasing the economic efficiency of modern enterprises are widely studied in economics as an important scientific and practical direction. Under globalization, digital transformation and the innovative economy, the diversification of products, technologies and management systems is recognized as an important strategic instrument for ensuring enterprise competitiveness.

The scientific views of J. Schumpeter occupy a special place in the formation of divergence theory. He evaluated innovation as the main factor of economic development and emphasized that the emergence of new products, technologies and markets ensures the long-term development of enterprises [1]. According to Schumpeter, the development of an economic system is closely connected with innovative changes and the emergence of new areas of activity.

The issues of enterprise competitiveness were studied in depth by M. Porter. In his theory of competitive advantage, he shows that the innovative activity and diversification of enterprises are among the main factors of success under market conditions. The author substantiates that the introduction of technological innovations and new products provides enterprises with a sustainable competitive advantage [2].

K. Schwab, who studied divergence under the conditions of the digital economy and the Fourth Industrial Revolution, emphasizes that the integration of modern technologies and the formation of new business models are important factors in increasing economic efficiency. In his view, the development of artificial intelligence, robotics, Big Data and automation technologies expands enterprise activities and creates new economic opportunities [3].

Studies by Brynjolfsson and McAfee show that diversification and divergence based on digital technologies reduce production costs, increase labor productivity and expand opportunities for creating new value [4].

Ansoff, who conducted research on strategic enterprise management, evaluated diversification as an enterprise development strategy and justified that entry into new products and new markets reduces economic risks and increases revenues [5]. His theory is still widely used in the development of corporate strategies.

Drucker, who studied enterprise development in the innovative economy, analyzed the influence of innovation and entrepreneurial activity on efficiency and emphasized that adaptability to market demand is a key factor of enterprise success [6].

Uzbek scholars have also widely examined enterprise modernization, innovative development and the improvement of economic efficiency. The works of A.V. Vahobov, B.Yu. Hodiyev, A.X. Rasulev and other economists cover the introduction of innovative management systems, the use of digital technologies and the increase of investment activity in enterprises. Their studies recognize diversification and technological renewal as important factors in ensuring sustainable enterprise development [7] [8].

Reports of international organizations, including the OECD, the World Bank and UNCTAD, regularly analyze the impact of innovative technologies and diversification strategies on enterprise performance. According to these organizations, enterprises implementing technological divergence demonstrate higher profitability and more stable economic growth than enterprises operating in traditional ways [9], [10].

2. Materials and Methods

In the era of globalization and the digital economy, consumer needs are changing rapidly. Enterprises that rely on a single product or service cannot remain stable. Therefore, divergence enables enterprises to adapt quickly to market changes. Under competition between domestic and foreign enterprises, companies operating in only one direction often lose their advantages. Activity in different segments is one of the most relevant ways to increase competitiveness.

Digital technologies such as artificial intelligence, the Internet of Things, Big Data and e-commerce are developing rapidly. If enterprises do not move into new directions by using these technologies, they may lose market share. Divergence creates favorable conditions for the introduction of innovations. Macroeconomic instability, including inflation, currency fluctuations and global crises, threatens enterprise stability. Diversified activity allows financial flows to be compensated not by relying on a declining single direction but through other directions.

In the case of Uzbekistan, the service sector, tourism, IT and agro-industrial clusters are developing rapidly. In this process, enterprises should not remain in one direction; instead, they need to conduct multidimensional activity, which is also a current requirement of economic policy. The relevance of divergence lies in its ability to help modern enterprises adapt to changing market requirements, gain competitive advantage, reduce risks, develop innovatively and align with the priorities of national economic policy.

Divergence is a strategy for developing an enterprise by distributing its activity across different segments, markets and production directions rather than limiting it to one type of product or service. In modern enterprises, this method is applied not only in product diversification but also in marketing, logistics, digital transformation and personnel management. Its essence is based on reducing economic risks, increasing competitiveness and using resources in a multifaceted way.

Divergence reduces risks because a crisis in one direction does not disrupt the entire activity of the enterprise. It expands market share by entering different segments and covering more consumers. It accelerates innovation by creating conditions for the faster introduction of new technologies. It also accelerates capital turnover because, if one direction stagnates or declines, revenues may remain stable through another direction.

As a mechanism for increasing enterprise economic efficiency, divergence includes product and service expansion, geographic diversification, digital diversification and financial diversification. It guarantees continuous development, strengthens competitive advantage through adaptability to market conditions, expands international integration and ensures more stable income because investment flows are distributed among several directions.

In general, divergence is a strategic mechanism for increasing the economic efficiency of modern enterprises. It demonstrates its significance by reducing risks, expanding markets, accelerating innovation and ensuring sustainable development.

Table 1. The relevance of divergence for modern enterprises.

Direction	Reason for relevance	Benefit for the enterprise
Market demand	Demand changes rapidly and product expansion is necessary.	Adaptability and expansion of market share.

Competition	Domestic and external competition is intensifying.	Maintaining competitive advantage.
Innovation	There is a need for rapid introduction of digital technologies.	Innovative development and efficiency.
Risk management	Macroeconomic risks need to be reduced.	Ensuring financial stability.
National economy	Structural changes and clustering processes are expanding.	Integration into national policy and new opportunities.

3. Results and Discussion

The concept of divergence, meaning the differentiation of directions, specialization and separation into different branches in economics, business and innovative development, can be enriched through the views of foreign scholars. Igor H. Ansoff explains the risk-return ratio of diversification through four growth strategies based on product-market combinations, known as the Ansoff matrix. He argues that diversification is the riskiest path of growth, but if properly managed, it can provide high returns.

Richard P. Rumelt shows on the basis of a large empirical base that related diversification is more strongly associated with firm profitability and reveals the relationship between strategy, structure and performance. Constantinos C. Markides demonstrates that diversification close to core competences is more effective than diversification based only on market similarity. Cynthia A. Montgomery summarizes the theoretical and empirical literature on corporate diversification and analyzes the conditions for value creation from a resource-based perspective.

Lang and Stulz identify a negative relationship between corporate diversification and Tobin's q in the United States in the 1980s, which is known as the diversification discount. Berger and Ofek, using a large sample, show that excess investment and cross-subsidization may lead to value loss. Teece, Pisano and Shuen introduce the dynamic capabilities paradigm, according to which successful diversification requires the organization's capacities for adaptation, integration and reconfiguration.

Tarun Khanna and Krishna Palepu argue that conglomerates in emerging markets often fill institutional voids and that restructuring and directed diversification can increase efficiency. Tarun Khanna and Yishay Yafeh show that diversified business groups in developing countries may sometimes be paragons and sometimes parasites; therefore, assessment must depend on institutional context. Vojislav Maksimovic and Gordon Phillips reconsider evidence on internal capital markets, conglomerates and value creation and show that the diversification discount is not always universal.

Table 2. Foreign studies on increasing enterprise efficiency through divergence and their application in Uzbekistan.

Scholar (year)	Research content	Application in Uzbekistan: positive aspects	Application in Uzbekistan: limitations
Igor H. Ansoff (1957) [5]	Analyzes the risk-return ratio of diversification through the Ansoff matrix.	Supports the opening of new services and markets and adaptation to the digital economy.	Risks are high for small enterprises and capital shortages become a problem.
Richard P. Rumelt (1974, 1982) [11]	Proves that related diversification brings higher	Vertical integration such as cotton-	Incorrect use of resources causes inefficiency.

	profitability and links strategy, structure and performance.	textile clusters increases efficiency.	
Constantinos C. Markides (1994) [12]	Shows that diversification close to core competences is effective.	Expands core competence in IT, agrotechnology and tourism.	If experience is insufficient, the risk of failure in unrelated areas is high.
Cynthia A. Montgomery (1994) [13]	Analyzes conditions for value creation through a resource-based diversification model.	Correct allocation of personnel and resources increases cluster efficiency.	In state enterprises, the risk of misallocation of resources is high.
Lang & Stulz (1994) [14]	Shows that diversification can reduce Tobin's q and decrease firm value.	Serves as a warning against unnecessary diversification.	In some cases, excessive concentration policy may dominate.
Berger & Ofek (1995) [15]	Finds that diversification may destroy value due to excessive investment.	Teaches the need to concentrate resources.	Incorrect investments in the public sector may cause major losses.
Teece, Pisano & Shuen (1997) [16]	Dynamic capabilities paradigm: flexibility is necessary for successful diversification.	Useful for digital transformation and start-ups.	Ineffective in sectors where the innovative environment is weak.
Khanna & Palepu (1997, 1999) [17]	Conglomerates fill institutional voids in emerging markets.	Clusters and conglomerates can increase efficiency.	May increase monopoly risk.
Khanna & Yafeh (2007) [18]	Diversified groups may be useful or may become economic parasites.	With strong state oversight, groups may become paragons.	Where institutions are weak, parasitic behavior occurs.
Maksimovic & Phillips (2013) [19]	If internal capital markets work well, the diversification discount is not inevitable.	Value creation increases when the banking system develops.	Results are weak when the financial market is underdeveloped.

The table shows that Ansoff's matrix presents diversification as the riskiest but potentially most profitable strategy when it is managed correctly. In Uzbekistan, this approach is useful for identifying new markets in the digital economy, new services and tourism. However, for small and medium-sized enterprises the risk is high and capital shortages make risk management difficult.

Related diversification, as explained by Rumelt, provides high profitability because resources and experience are mutually compatible. Vertical integration such as cottontextile clusters may increase efficiency, although incorrect resource allocation creates inefficiency. Markides emphasizes that diversification close to core competences is effective, while entry into distant markets is riskier. In Uzbekistan, this is useful for expanding core competencies in IT services, agrotechnology and tourism, but enterprises operating outside their competencies may quickly fail.

Montgomery's resource-based view emphasizes that diversification creates value only when resources are used effectively and strategic relatedness is present. In Uzbekistan, the proper allocation of personnel and resources can increase the efficiency of national clusters; however, misallocation of resources, especially in state enterprises, can lead to excessive costs. Lang and Stulz's diversification discount serves as a warning against unnecessary diversification, while Berger and Ofek's findings help identify areas where resources should be concentrated.

The dynamic capabilities theory of Teece, Pisano and Shuen shows that the success of diversification depends on flexibility and innovative capacity. This is useful for digital transformation and technology start-ups, but may not be effective in sectors with a weak innovative environment. Khanna and Palepu's view that conglomerates fill institutional gaps is relevant for Uzbekistan's clusters in textiles, tourism and services, although it may increase monopoly risks. Khanna and Yafeh emphasize that diversified groups may become either paragons or parasites depending on institutional strength. Maksimovic and Phillips show that if internal capital markets operate efficiently, diversification can create value rather than discount it, but this depends on the development of the financial system.

Overall, related diversification, the dynamic capabilities approach and the theory of emerging-market business groups are the most suitable for Uzbekistan. Nevertheless, risks such as diversification discounts, inefficient allocation of resources and excessive market concentration must not be overlooked.

Table 3. Studies by Uzbek scholars on increasing the economic efficiency of modern enterprises through divergence.

Scholar (year)	Research content
Tuxliyev I.T. (2019)	Analyzed the factors of diversification of Uzbekistan's economy and the increase of competitiveness, and developed a mechanism of intersectoral integration.
Muhammedov N.M. (2020)	Developed a diversification strategy and financial analysis mechanism for increasing the efficiency of investment resource use in enterprises.
Safarov B.Sh. (2022)	Developed a model of innovative diversification in service enterprises under the digital economy.
Shodiev B.X. (2021)	Developed a mechanism for forming regional production clusters on the basis of diversification.
Muxitdinov X.S. (2024)	Analyzed a mechanism for increasing investment inflows and employment through diversification of the service sector in regional economic development.
Ortiqov U.A. (2020)	Developed models for reducing risks and expanding income sources through diversification-based small business development.
Abdukarimov I.N. (2021)	Developed a system for assessing diversification policy and production synergy in agricultural enterprises.
Karimov Sh.A. (2023)	Developed a mechanism for increasing enterprise competitiveness and export opportunities through innovative diversification.
Xamdamov D.R. (2019)	Developed a system of indicators for assessing diversification efficiency in industrial enterprises.

Jo'rayev A.T. (2022)	Proposed a strategic model for stabilizing production volume through expansion of product and service types in enterprises.

Uzbek economists such as I. Tuxliyev, M. Muhammedov, B. Xodiyev, Sh. Muxitdinov and F. Abdullaev interpret divergence in their studies as a modern strategic direction that ensures sustainable growth and innovative adaptability of national enterprises. According to them, diversification through intersectoral integration, the introduction of digital technologies and the differentiation of production and service segments forms a new paradigm for increasing economic efficiency.

On this basis, the redistribution of production resources, the growth of labor productivity, the expansion of the value-added chain and the strengthening of competitiveness in international markets can be ensured. Therefore, the approaches of Uzbek scholars complement the views of foreign researchers by adapting divergence strategies to the institutional, regional and sectoral characteristics of the national economy.

4. Conclusion

The study shows that divergence is one of the most important strategic mechanisms for increasing the economic efficiency of modern enterprises. It allows enterprises to reduce dependence on one product, service or market, expand sources of income and adapt to changing market conditions. Through product, technological, geographic, digital and financial diversification, enterprises can increase their competitiveness and strengthen long-term stability.

The analysis of foreign and national scientific literature indicates that divergence creates value when it is based on strategic relatedness, core competences, effective resource allocation and dynamic capabilities. At the same time, unnecessary diversification, excessive investment and weak institutional conditions may reduce enterprise value. Therefore, divergence should not be implemented mechanically; it requires scientific assessment, risk analysis and continuous monitoring.

For Uzbekistan, related diversification, cluster development, digital transformation and innovation-based diversification are particularly relevant. These directions can support the development of industrial and service sectors, increase export potential, create new jobs and strengthen regional competitiveness. However, capital shortages, weak commercialization of innovations, insufficient financial market development and the risk of monopolization must be taken into account.

In practical terms, enterprises should apply divergence strategies in a balanced way by expanding products and services, entering new market segments, introducing digital technologies, strengthening human capital and diversifying financial sources. Such an approach will help reduce risks, increase production efficiency and improve investment attractiveness.

In general, increasing the economic efficiency of modern enterprises on the basis of divergence requires the integration of theoretical concepts, empirical assessment methods and national economic priorities. Further research should focus on developing indicators for measuring divergence efficiency, modeling the impact of diversification on profitability and competitiveness, and designing practical mechanisms suitable for enterprises operating in Uzbekistan's regional and sectoral conditions.

REFERENCES

[1] J. A. Schumpeter, *The Theory of Economic Development*. Cambridge: Harvard University Press, 1934.
[2] M. E. Porter, *The Competitive Advantage of Nations*. New York: Free Press, 1990.

[3] K. Schwab, *The Fourth Industrial Revolution*. World Economic Forum, 2016.

[4] E. Brynjolfsson and A. McAfee, *Machine, Platform, Crowd: Harnessing Our Digital Future*. New York: W. W. Norton & Company, 2017.

[5] H. I. Ansoff, “Strategies for Diversification,” *Harv. Bus. Rev.*, vol. 35, no. 5, 1957.

[6] P. F. Drucker, *Innovation and Entrepreneurship: Practice and Principles*. New York: Harper & Row, 1985.

[7] A. V Vahobov, S. X. Xajibakiyev, and N. G. Muminov, *National Economy*. Tashkent: Iqtisod-Moliya, 2020.

[8] B. Y. Hodiyev, B. B. Berkinov, and A. N. Samadov, *Innovative Economy*. Tashkent: IQTISODIYOT, 2021.

[9] OECD, *Science, Technology and Innovation Outlook 2023*. Paris: OECD Publishing, 2023.

[10] World Bank, *World Development Report 2021: Data for Better Lives*. Washington, DC: World Bank Publications, 2021.

[11] R. P. Rumelt, *Strategy, Structure, and Economic Performance*. Harvard Business School Press, 1974.

[12] C. C. Markides, “Related diversification, core competences and corporate performance,” *Strateg. Manag. J.*, vol. 15, pp. 149–165, 1994.

[13] C. A. Montgomery, “Corporate diversification,” *J. Econ. Perspect.*, vol. 8, no. 3, pp. 163–178, 1994.

[14] L. H. P. Lang and R. M. Stulz, “Tobin’s q, corporate diversification, and firm performance,” *J. Polit. Econ.*, vol. 102, no. 6, pp. 1248–1280, 1994.

[15] P. G. Berger and E. Ofek, “Diversification’s effect on firm value,” *J. financ. econ.*, vol. 37, no. 1, pp. 39–65, 1995.

[16] D. J. Teece, G. Pisano, and A. Shuen, “Dynamic Capabilities and Strategic Management,” *Strateg. Manag. J.*, vol. 18, no. 7, pp. 509–533, 1997.

[17] T. Khanna and K. G. Palepu, “The right way to restructure conglomerates in emerging markets,” *Harv. Bus. Rev.*, vol. 77, no. 4, pp. 125–134, 1999.

[18] T. Khanna and Y. Yafeh, “Business groups in emerging markets: Paragons or parasites?,” *J. Econ. Lit.*, vol. 45, no. 2, pp. 331–372, 2007.

[19] V. Maksimovic and G. Phillips, “Conglomerate firms, internal capital markets, and the theory of the firm,” *Annu. Rev. Financ. Econ.*, vol. 5, pp. 225–251, 2013.