

American Journal of Economics and Business Management

Vol. 9 Issue 11 | **pp.** 784-794 | **ISSN:** 2576-5973
Available online @ https://www.globalresearchnetwork.us/index.php/ajebm

Article

Ways to Assess and Enhance the Role of Joint-Stock Companies in the Chemical Industry in the National Economy by Improving the Quality of Corporate Governance

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Abstract: This article analyses scientific views on improving corporate governance in joint-stock companies (JSCs) in the chemical industry by raising its quality. It presents a modern, improved model of corporate governance for industrial JSCs, develops a corporate governance quality index, and quantitatively assesses the role of the chemical industry in the formation of gross regional product (GRP). The article also examines the existing problems of improving corporate governance at chemical enterprises, ways of resolving them and the expected results; the opportunities for raising the quality of corporate governance at chemical enterprises; and the main indicators for measuring that quality. The author's conclusions, proposals and recommendations are presented.

Keywords: Corporate governance, supervisory board, digitalisation, chemical industry, quality, improvement, quality index, integral index, model, gross regional product, quantitative assessment, regression method, investment, competitiveness.

Citation: Xolmurodovich S. D. Ways to Assess and Enhance the Role of Joint-Stock Companies in the Chemical Industry in the National Economy by Improving the Quality of Corporate Governance. American Journal of Economics and Business Management 2026, 9(11), 784-794.

Received: 10th Aug 2026
Revised: 11th Sep 2026
Accepted: 11th Oct 2026
Published: 25th Nov 2026

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1. Introduction

International analyses show that the digital economy is playing an ever more important role in the global economic system. According to Forrester, the digital economy accounted for roughly 15 percent of world nominal GDP in 2024. Its value was nearly USD 16 trillion, while world nominal GDP was estimated at about USD 108 trillion. The average annual growth rate over 2023–2028 is around 7 percent, and the figure is forecast to reach USD 16.5 trillion by 2028. The United States and China together account for nearly two-thirds of the global digital economy [1], that is, their combined share was 66–67 percent. According to OECD data, in 2013–2023 the information and communication technology (ICT) sector in 27 OECD countries grew by 6.3 percent on average, and by 7.6 percent in 2023. The ICT sector grew almost three times faster than the economy as a whole [2]. These trends indicate that e-commerce, ICT infrastructure, digital research platforms and data-driven management systems are becoming key drivers of growth in the world economy. As for digital transformation in industrial enterprises, according to the results of a survey conducted by PwC ("Digital Factory Transformation"), only 10 percent of the global manufacturing companies surveyed had completed digital transformation or reached its final stage. 64 percent of the companies were at an initial stage of digital transformation and had not been able to roll out digital initiatives at scale. The study covered 700 large companies in more than 23 countries [3]. These processes are especially significant for industries such as the chemical industry, which is characterised by high capital intensity, complex technological processes and intensive use of resources.

In this light, improving the quality of corporate governance in industrial joint-stock companies, that is, improving corporate governance itself, on the basis of digital technologies and innovative management principles can give rise to a new form of business model. In the joint-stock companies of Uzbekistan's chemical industry, there is a growing need to accelerate transformation, to assess the economic efficiency of using digital technologies and integrate them into corporate governance systems, and to further develop the scientific and methodological foundations for improving corporate governance by raising its quality. Accordingly, developing ways to improve corporate governance in industrial enterprises by raising its quality, and refining the criteria for assessing its effectiveness, are defined as a priority research direction of this study.

2. Research Methodology

The study used observation, abstract-logical reasoning, systems analysis, comparison, grouping and economic interpretation. The information base consisted of the OECD Principles of Corporate Governance, the regulatory and legal documents of the Republic of Uzbekistan, materials on the practice of international financial institutions, and the scientific works of foreign and local scholars.

Literature Review

Economists hold a variety of views on corporate governance in industrial enterprises, on its improvement and on raising its effectiveness. These views are summarised in Table 1.

Table 1. Scientific views of foreign and local economists on improving the corporate governance system in industrial enterprises

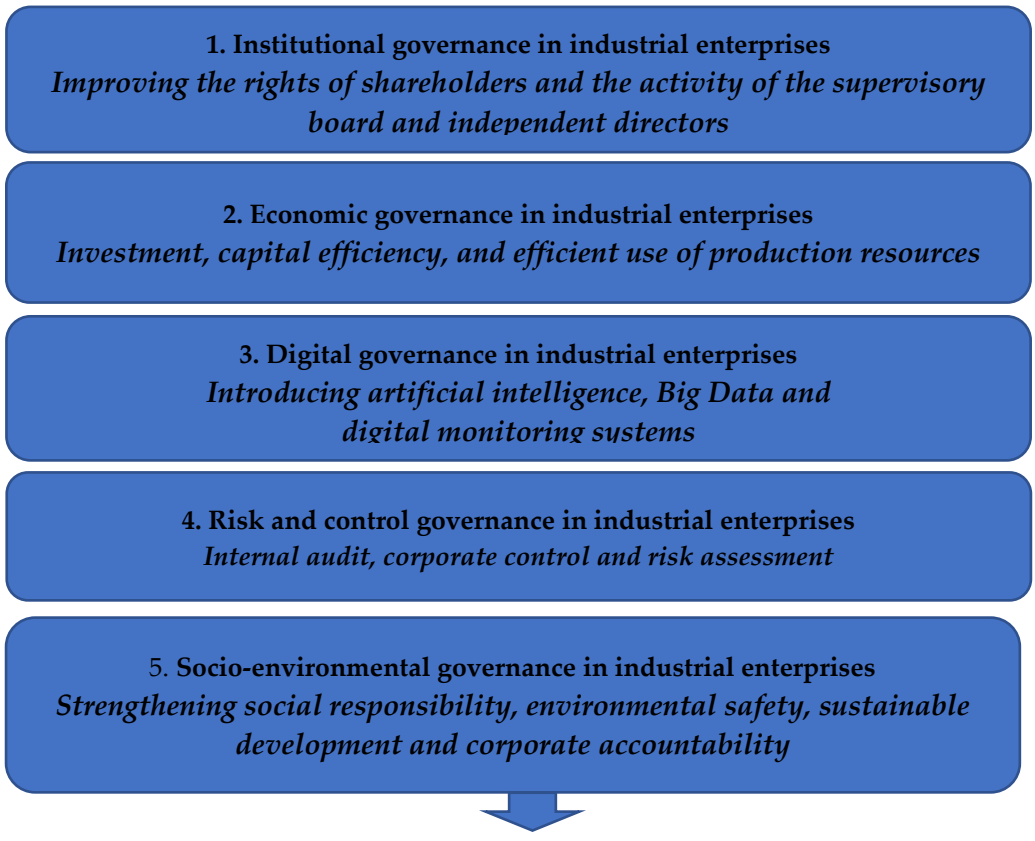
Author(s)	Content and essence of the definitions and approaches
Babajide O., Venancio T., Udechukwu O.	The effectiveness of improving corporate governance in manufacturing enterprises depends on the independence of the supervisory board, the professional qualifications of its members, gender diversity, and their knowledge of sustainable manufacturing.[4]
Tommaso F., Marco T., Mariasole B.	Improving corporate governance in industrial enterprises is a strategic mechanism that serves to improve a company's environmental and social performance; drawing on the capacity of external experts is of key importance.[5]
Xia Wu, Zujun Zhu, Ailing Yan, Kai Zhang	The effectiveness of corporate governance in industrial enterprises lies in aligning all of the company's governance mechanisms with its technological and marketing capabilities, and in integrating management processes with digital technologies and with marketing and production capabilities.[6]
M.K. Izmailov, S.V. Pupentsova	The improvement and effectiveness of corporate governance in manufacturing enterprises is a systemic governance factor that ensures the transformation of the company's business model and ESG management system; it covers production policy, environmental responsibility, the work of the supervisory board, risk management, executive incentives and integration into strategic decisions.[7]
A.A. Terentyev, A.V. Lyzhova, A.K. Dashin	Improving corporate governance in manufacturing and also in the mining and metallurgical sector is a set of interrelated mechanisms covering the institutional factors that affect it, corporate ownership relations, the activity of governing bodies, internal control, risk management and information transparency.[8]
M.K. Izmailov, S.V. Pupentsova, I.A. Dudurgov	Improving corporate governance in industrial enterprises is interpreted as a system of governance mechanisms that serve to interlink strategy formation, strategic planning, strategic analysis and corporate governance instruments, and to adapt them to a changing economic environment.[9]
D.Kh. Suyunov	Improving corporate governance in industrial joint-stock companies means developing management decisions on the basis of digital technology in the activity of the supervisory board and executive body, which carry out the company's goals, functions and tasks.[10]

Author(s)	Content and essence of the definitions and approaches
D.D. Suvanova	Improving the corporate governance system means increasing the company's market value in the process by which corporate governance bodies make, monitor and ensure the implementation of current and strategic management decisions, while pursuing economic efficiency.[11]
D.D. Suyunova	Improving corporate governance is the process of developing a set of measures aimed at raising economic efficiency, studying and analysing the supervisory board's activity in depth, and setting its strategy.[12]
E.D. Khalmuradov	Improving corporate governance in industrial enterprises is expressed through integrating the principles of sustainable development, developing digital corporate governance, improving the organisational structure of the supervisory board and granting it independence, organising stakeholder-oriented strategic management, and effectively managing integrated risks.[13]

In their views on improving corporate governance in industrial joint-stock companies, the economists cited above hold that corporate governance can be improved by organising corporate governance in industrial enterprises effectively around the following themes: sustainable production and corporate control; ESG and socio-environmental responsibility; digital integration and governance mechanisms; institutional factors and corporate risks; corporate strategy and strategic management; competitiveness and corporate control; digital corporate governance and sustainability; and the role of the state.

In our view, improving corporate governance in industrial joint-stock companies is a continuous management process. It coordinates the relations among shareholders, the supervisory board, executive bodies and other stakeholders on the basis of institutional, organisational-economic and digital mechanisms; raises the efficiency with which production and investment resources are used; and integrates innovative technologies, risk management and the principles of socio-environmental responsibility, in order to secure the company's long-term economic sustainability and competitiveness.

On the basis of this analysis, the improved modern model of corporate governance in industrial joint-stock companies can be presented as in Figure 1.



Final outcome in industrial enterprises
Corporate governance effectiveness and the competitiveness of the industrial enterprise

Figure 1. Improved modern model of corporate governance in industrial joint-stock companies

The model developed here should be regarded as an improved organisational-economic mechanism for raising the effectiveness of corporate governance in industrial joint-stock companies, based on the mutual integration of its institutional, economic, digital, risk-control and socio-environmental components [14].

3. Analysis and Results

It is necessary to assess the impact of the chemical industry on the formation of gross regional product (GRP), and also to determine its role in raising the performance of chemical enterprises by improving the quality of corporate governance, in increasing their gross value added, and in strengthening their contribution to the region's socio-economic development.

As an illustration, according to statistical data, the region's contribution to Uzbekistan's GDP amounted to UZS 111.3 trillion in 2025, an increase of 8.1 percent over 2024. This single region accounted for a 6.0 percent share of Uzbekistan's total GDP [15]. This raises the question of how to assess the share of the region's JSCs in GRP. We have analysed nearly 30 JSCs, most of which operate in industry, energy, water supply and processing. Their contribution to the formation of GRP is therefore considerably higher than that of JSCs in ordinary trade or services. It is accordingly necessary to assess the impact of the chemical industry on the formation of the region's gross regional product.

The following methods are appropriate for assessing the impact of the chemical industry on the formation of the region's gross regional product (GRP).

The role of the chemical industry in the formation of gross regional product (GRP) can be analysed quantitatively. This is highly relevant because the chemical industry is strongly linked to industrial output, exports, investment, employment and other sectors. For this reason, five main methods can be proposed.

1. The method of assessing the chemical industry's share in GRP is the simplest one and is applied at the first stage.

On this basis, it is correct to calculate the share of the region's JSCs in GRP not by the revenue of enterprises but by the value added they create. The formula can be given as follows:

$$\mathbf{SJSC = (\Sigma VA \times 100) : GRP}$$

where:

SJSC - share of joint-stock companies in GRP;

VA - value added created by the JSCs of the region;

GRP - gross regional product of the region.

Applying this formula to the four largest joint-stock companies for 2025 gives 2,127.0 + 3,699.7 + 45.3 + 22.0 = UZS 5,894.0 billion, which corresponds to 5.3 percent. Thus, if the income, expenses, wages, depreciation and operating results from the selected JSCs' 2025 financial statements are aggregated and their value added is calculated, the exact percentage of JSCs in the region's GRP can be derived.

The indicator obtained by this method helps to establish the direct importance of the chemical industry in the regional economy.

2. One of the methods for assessing the chemical industry's share in GRP is the Pearson correlation coefficient, carried out through analysis. With it, the relationship between chemical industry indicators and GRP can be determined. That is:

   $\boldsymbol{X_1}$ - volume of chemical industry output;

   $\boldsymbol{X_2}$ - fixed assets in the chemical industry;

   $\boldsymbol{X_3}$ - investment in the chemical industry;

   $\boldsymbol{X_4}$ - number of persons employed in the chemical industry;

   $\boldsymbol{X_5}$ - exports of chemical industry products;

   $\boldsymbol{X_6}$ - corporate governance system at chemical enterprises;

   $\boldsymbol{Y}$ - gross regional product.

The correlation coefficient is recommended to be calculated using the following formula:

$$r_{XY} = \frac{Cov\ (X,Y)}{\sigma_X \times \sigma_Y}$$

where:

$\boldsymbol{Cov\ (X, Y)}$ – covariance of X and Y;

$\boldsymbol{\sigma_X}$ – standard deviation of X;

$\boldsymbol{\sigma_Y}$ – standard deviation of Y.

The advantage of this method is that it shows which factor (the volume of chemical industry output, fixed assets, investment, employment, exports, and the corporate governance system at chemical enterprises) is more strongly or more weakly related to GRP.

3. The next method is multiple regression, which can also be used to determine the relationship between chemical industry indicators and GRP. This method can be used as the principal method. Its basic formula is as follows:

$$\boldsymbol{GRP = \beta_0 + \beta_1 CPV + \beta_2 CINV + \beta_3 CEXP + \beta_4 CEMP + \beta_5 CCG + \varepsilon_t}$$

   where:

   GRP – gross regional product;

   CPV - volume of chemical industry output;

   CINV - investment in the chemical industry;

   CEXP - exports of chemical products;

   CEMP - employment in the chemical industry;

   CCG - corporate governance system at chemical enterprises;

   $\boldsymbol{\beta i}$ - coefficients of influence;

   $\boldsymbol{\varepsilon_t}$ – the effect of other factors not included in the model.

If $\beta 1 = 0.35$, the economic conclusion is that, other factors being equal, a 1 percent increase in chemical industry output may raise GRP by 0.35 percent on average.

4. Another way of determining the relationship between chemical industry indicators and GRP is the elasticity coefficient method. In this method the coefficient can be viewed as an indicator of the percentage by which GRP changes in response to changes in the chemical industry. Its formula can be expressed as follows.

$$\boldsymbol{E} = \frac{\Delta GRP/GRP}{\Delta \mathrm{CPV}/\mathrm{CPV}}$$

   where:

   GRP – gross regional product;

   Δ– *change in gross regional product;*

CPV - chemical industry indicator (output volume).

Δ- *change in the chemical industry indicator;*

In such an analysis, if the elasticity coefficient equals 0.42, it can be seen that a 1 percent increase in chemical industry output tends to raise GRP by 0.42 percent on average. This indicator can be very convenient for interpreting the strength of influence of chemical industry indicators.

5. If a comprehensive assessment of the impact of the chemical industry on GRP is needed, then the **integral index method** can be used to determine the relationship between chemical industry indicators and GRP. The following integral index can be developed.

$$I_{chem} = \sum_{i=1}^{n} w_i Z_i$$

where:

I_{chem} – integral impact index of the chemical industry;

i – indicator number;

n – number of indicators;

w_i – weight coefficient;

Z_i – normalised indicator;

$\sum$ – summation sign.

This makes it possible to build an index of the chemical industry's regional economic impact. It is proposed as an integral-econometric methodology for assessing the direct, indirect and multiplier effects of the chemical industry on the formation of GRP in the regional economy. The methodology takes into account together such factors as the chemical industry's output volume, gross value added, investment, exports, employment, fixed assets, and the corporate governance system and its quality.

First of all, the quality of corporate governance can be understood as the degree to which digital technologies, and also artificial intelligence, are used effectively in the processes of decision-making, control, transparency, accountability and risk management, and in the effectiveness of relations among the company's shareholders, supervisory board, executive body and other stakeholders.

In general, corporate governance in our country's corporate enterprises can be improved by raising its effectiveness and its quality. To this end, some of the problems in the activity of companies worldwide need to be systematised and solutions developed for them. The analytical information and the problems can be presented in Table 2 below.

Table 2. Existing problems in improving corporate governance in companies and ways to resolve them

No	Problems	Main causes of the problem	Proposed solutions	Expected result
1.	Low strategic role of supervisory boards and boards of directors	The boundary between the board's strategic oversight function and the activity of the executive body needs to be clarified	Evaluate the board's activity on the basis of KPIs and develop a corporate governance index	The quality of strategic decisions improves
2.	Weak influence of the institution of independent directors	Independence and professional competence requirements are not applied uniformly in practice	Introduce a national register and certification system for independent directors	The effectiveness of the supervisory board and board of directors and investor confidence increase

3.	Low corporate information transparency	Information is fragmented and the level of digitalisation is low	Create a unified digital corporate disclosure platform	Information asymmetry decreases
4.	Corporate governance and risk management are not integrated	Corporate risks are managed separately in different departments rather than by the supervisory board and board of directors	Establish a risk committee under the supervisory board and board of directors	Corporate risks decrease
5.	Low use of digital technologies in corporate governance	Heavy reliance on paper documents and the human factor in the corporate governance system	Create and continuously improve an electronic corporate governance platform	Corporate and current management costs fall sharply
6.	Insufficient use of artificial intelligence (AI) in developing corporate governance decisions	Inadequate competencies and data infrastructure for using AI in corporate governance	Introduce an AI-based corporate governance system	The speed, accuracy and transparency of corporate governance decisions increase further
7.	The ESG management system is not fully integrated into corporate governance	ESG and KPIs are not fully linked to corporate strategy	Introduce an ESG and KPI committee within the supervisory board and board of directors	The inflow of sustainable investment into companies increases sharply
8.	Shortage of qualified personnel in corporate governance	Supervisory boards and boards of directors are not fully staffed with people who have modern knowledge, experience and skills	Establish a national corporate governance academy	A pool of professional directors is formed

In conclusion, improving corporate governance at chemical enterprises requires raising its quality, and this plays an important role in raising the performance of chemical enterprises.

The quality of corporate governance at chemical enterprises can be seen in the following respects:

First, in the efficient allocation of existing resources. Good corporate governance directs investment to priority projects, cuts excess costs, improves asset utilisation, strengthens the internal control system and limits managers' private interests. As a result, the enterprise's profitability rises, return on assets grows, costs fall and income increases.

Second, The chemical industry requires very large investment for modernisation. Where corporate governance is good, investment is directed mainly to new technologies that save energy, raise labour productivity, reduce unit costs and lead to higher profits.

Third, In the chemical industry, ensuring the quality of corporate governance requires innovation and digitalisation to be carried out within the governance process and at enterprises. In modern chemical enterprises, the use of digital technologies in strategic decision-making by corporate governance bodies, namely artificial intelligence, predictive maintenance, digital monitoring, effective and purposeful use of the internet, and intelligent laboratories, has a positive effect on investment decisions in these technologies.

Fourth, the role of corporate governance quality in the activity of the chemical industry is also seen in ensuring safety. This is one of the most important differences for the chemical industry. In an ordinary enterprise, corporate governance can mainly be assessed by the question "how much profit did we make?" In chemical enterprises, one

must also ask "how much profit did we make, and at what level of risk was it generated?" The quality of corporate governance must therefore also ensure the safety of product use. In the high-risk chemical industry, the supervisory board and the heads of the executive body should keep the safety of management, production, services and other processes on the strategic agenda, monitor risk-related KPIs, analyse near-miss incidents, and integrate safety data into decision-making.

Fifth, to ensure the development of the chemical industry by raising the quality of corporate governance, transparency of information about the enterprise is necessary. High-quality corporate governance increases the transparency of information in the chemical industry and so earns investors' confidence, which raises the company's capital value, widens investment opportunities and increases the enterprise's investment attractiveness. In addition, transparency prevents corruption, does not allow the plundering of enterprise resources, eliminates conflicts of interest and prevents wasteful spending.

Sixth, the role of high-quality corporate governance in ensuring the effective operation of chemical enterprises is linked to the quality of the composition of the supervisory (directors') board. Here the independence of the board, the qualifications of its members, expertise in the chemical industry, understanding of risks, the audit, remuneration and risk committees, and the ESG management system are very important.

In the scientific literature the supervisory (directors') board is today regarded as an important internal mechanism of corporate governance. A meta-analysis covering more than 148 studies and over 330 effect estimates analysed the relationship between corporate governance and firm performance by context. Another large meta-analysis also noted a positive association of factors such as corporate governance indices, board size and institutional ownership with firm value.

On this basis, it is recommended to measure the quality of corporate governance by developing a "**corporate governance quality index"** (CGQI) using the following formula.

$$\boldsymbol{CGQI = \sum_{i=1}^{n} w_i Z_i}$$

where:

CGQI – corporate governance quality index;

$\boldsymbol{i}$ – number of the indicator used in assessing corporate governance quality;

$\boldsymbol{n}$ – number of indicators;

$\boldsymbol{w_i}$ – weight coefficient;

$\boldsymbol{Z_i}$ – normalised indicator;

$\sum$ – summation sign.

To determine the quality of corporate governance, it is therefore appropriate to study its six main indicators, which can be presented in Table 3.

Table 3. Main indicators for determining the quality of corporate governance

No	Indicators	Content of the indicators	Assessment criteria (coefficient or %)	
1.	Quality of the supervisory board	share of independent directors; directors' qualifications; board meetings; committee activity	**0.15**	**15**
2.	Transparency and accountability	quality of financial reporting; audit; information disclosure; provision of information to shareholders	**0.20**	**20**

3.	Rights of shareholders and stakeholders	shareholder participation; dividend policy; protection of minority shareholders' rights	**0.20**	**20**
4.	Internal control and risks	internal audit; risk management; internal control; prevention of conflicts of interest	**0.15**	**15**
5.	Strategic management	strategic planning; KPIs; investment decisions; digitalisation	**0.15**	**15**
6.	Sustainability, ESG and safety	sustainable development; environmental management; social responsibility; occupational safety; production safety	**0.15**	**15**
	Total		**K=1.0**	**%=100**

When expressed in coefficients, $0 \leq CGQI \leq 1$; if assessed on a 100-point scale, $0 \leq CGQI \leq 100$.

On this basis, the performance of chemical enterprises can also be determined comprehensively; that is, an enterprise performance index (EPI) should be determined. It is appropriate to determine it with the following formula:

$$\mathbf{EPI = f\ (ROA + ROE + ROS + LP + ATR) : KS} \quad (5)$$

where:

ROA - return on assets;

ROE - return on equity;

ROS - return on sales;

LP - labour productivity;

ATR - asset turnover ratio.

For the chemical industry it is also appropriate to add indicators such as:

EE- energy efficiency;

CU- utilisation of production capacity;

AF- accident frequency;

WI- waste intensity.

4. Conclusions and Proposals

In conclusion, in raising the performance of chemical enterprises, the quality of corporate governance appears as an institutional mechanism that coordinates decisions on ensuring strategic, financial, operational, informational and other aspects of security. Improving the quality of corporate governance has a positive effect on the operational and financial performance of chemical enterprises by aligning the interests of shareholders and management, allocating resources efficiently, improving the processes of investment and innovation decision-making, reducing information asymmetry, strengthening internal control and risk management, and ensuring safety.

The quality of corporate governance in the chemical enterprises of the region is an important institutional factor that secures the enterprise's financial stability, investment attractiveness, efficient use of existing resources and competitiveness. A high level of corporate governance quality makes it possible to organise relations among shareholders, the supervisory board and executive bodies effectively, to ensure the transparency of decision-making, and to use enterprise resources rationally. In this light, the following proposals can be put forward for improving the corporate governance system in order to raise the performance of chemical enterprises:

First, Increase the transparency and accountability of corporate governance decisions. Chemical enterprises need to organise the process of making strategic, investment and financial decisions openly and transparently. Providing shareholders and

stakeholders with timely information on financial results, investment projects, costs and major transactions strengthens corporate control. This, in turn, improves the quality of management decisions and reduces the risk of inefficient use of resources. **Second,** Strengthen the professionalism of the supervisory board. Because the chemical industry is technologically and capital intensive, members of the supervisory board should have competencies not only in finance and management but also in investment, innovation, industrial technology and environmental risk management. Regular training courses should be organised for this purpose. As a result, a strong and professional supervisory board will oversee the activity of the executive body effectively and ensure that the enterprise achieves its long-term strategic goals. **Third,** Digitalise corporate governance and use artificial intelligence technologies. By integrating the enterprise's financial, production, investment and management data into a single digital system, management can be given the capacity for rapid, well-founded decision-making. AI-based cost analysis, forecasting of production efficiency, risk identification and monitoring of KPIs improve the quality of corporate governance. As a result, management costs fall, and the efficiency of use of labour and material resources rises. **Fourth,** Integrate corporate governance quality with enterprise performance indicators. It is appropriate to assess the quality of corporate governance not only through organisational criteria but also through its effect on the enterprise's economic results. Return on assets, return on equity, labour productivity, unit cost, return on investment and other indicators can be used for this. This makes it possible to determine the relationship between the quality of corporate governance and the enterprise's economic performance. **Fifth,** Integrate stakeholders' interests into the corporate governance system. The activity of chemical enterprises affects not only shareholders but also employees, consumers, suppliers, the state, local communities and the natural environment. Applying a stakeholder approach in corporate decisions therefore increases the enterprise's social and environmental responsibility, which serves to secure its long-term sustainability and investment attractiveness. **Sixth,** Unify the principles of corporate governance, risk management and the ESG management system. Because production, financial, environmental and technological risks are high in the chemical industry, the mechanism for identifying and assessing risks in advance needs to be strengthened within the corporate governance system. Integrating the ESG management system and its principles into corporate strategy makes it possible to reduce environmental risks, to use energy and resources efficiently and to increase social responsibility. This secures the enterprise's economic performance not only in the current period but also in the long term.

In short, the quality of corporate governance is an important factor that affects the performance of chemical industry enterprises both directly and indirectly. High-quality corporate governance improves the soundness of decisions, the efficient use of resources, the efficiency of investment, risk management and innovation activity. The quality of corporate governance in chemical industry enterprises therefore leads to the improvement of corporate governance mechanisms along a chain running from the quality of corporate governance decisions, through the efficiency of use of existing resources and financial results, to the overall performance of the enterprise.

REFERENCES

[1] Forrester, *Global Digital Economy Forecast, 2023 to 2028*. [Online]. Available: https://www.forrester.com

[2] International Data Center Authority (IDCA), *Global Digital Economy Report 2025*. Washington, DC, USA: IDCA, 2025. [Online]. Available: https://www.idc-a.org

[3] OECD, *OECD Digital Economy Outlook 2024*. Paris, France: OECD Publishing, 2024. [Online]. Available: https://www.oecd.org

[4] PwC, *Digital Factory Transformation Survey 2022*. PwC, 2022. [Online]. Available: https://www.pwc.com

[5] B. Oyewo, V. Tauringana, and U. Ojiako, "Corporate governance determinants of sustainable manufacturing practice: The case of zero-defect manufacturing in multinational corporations," *J. Account. Lit.*, Feb. 20, 2025. [Online]. Available: https://www.emerald.com

[6] T. Fornasari, M. Traversi, and M. Bannò, "The role of corporate governance in enhancing environmental and social performance," *Bus. Strategy Environ.*, vol. 35, no. 4, pp. 4876–4894, 2025.

[7] X. Wu, Z. Zhu, A. Yan, and K. Zhang, "Aligning governance mechanisms and firm capabilities for omnichannel integration in manufacturing," *J. Manuf. Technol. Manag.*, Mar. 27, 2026.

[8] M. K. Izmailov and S. V. Pupentsova, "Corporate governance as a driver of companies' environmental responsibility" [in Russian], *Sci. J. ITMO Univ., Ser. Econ. Environ. Manag.*, Mar. 13, 2026.

[9] A. A. Terentyev, A. V. Lyzhova, and A. K. Dashin, "Determinants of corporate governance in the Russian mining and metallurgical industry under institutional turbulence" [in Russian], *J. Manag.*, Oct. 30, 2026.

[10] M. K. Izmailov, S. V. Pupentsova, and I. A. Dudurgov, "Features of the application of strategic management tools in Russian corporations" [in Russian], *Manag. Account. J.*, no. 3, 2026.

[11] D. K. Suyunov and S. E. Elmirzayev, *Korporativ Boshqaruv: Darslik* [in Uzbek]. Tashkent, Uzbekistan: BROK CLASS SERVIS, 2021, 448 pp.

[12] D. D. Suvanova, "Analysis of the digitalization potential of business process management in joint-stock companies and the factors influencing it," *Cent. Asian J. Innov. Tour. Manag. Finance*, vol. 6, no. 3, pp. 1124–1132, Jul. 2025, ISSN: 2660-454X.

[13] D. D. Suyunova, "Corporate in joint stock companies: Ways to use digital technologies to improve management," *Eur. J. Res. Dev. Sustain.*, vol. 4, no. 9, Jun. 2023, ISSN: 2660-5570. [Online]. Available: https://scholarzest.com/index.php/ejrds/article/view/3825/3055

[14] S. Bhagat and B. Bolton, "Corporate governance and firm performance: The recent evidential literature," Journal of Corporate Finance, vol. 58, pp. 142–168, 2019.

[15] E. D. Xalmuradov, "Studying the experience of developed countries in digitalizing business process management in joint-stock commercial banks," *Cent. Asian J. Innov. Tour. Manag. Finance*, vol. 6, no. 3, pp. 1110–1123, Jul. 2025.