

**PROSPECTIVE DIRECTIONS FOR THE DEVELOPMENT OF POSTAL
COMMUNICATION ENTERPRISES IN UZBEKISTAN (A CASE STUDY OF
JSC “UZBEKISTAN POST”)**

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Abstract: This article investigates the development prospects of postal communication enterprises in Uzbekistan, focusing on JSC “Uzbekistan Post.” It analyzes revenue structure and dynamics using correlation and multiple regression methods. The results show that logistics, pension payments, utility services, and service exports significantly drive revenue growth, while traditional services have a weaker impact. The econometric model demonstrates high explanatory power ($R^2 = 0.9964$). Forecast results indicate stable revenue growth for 2025–2030, reflecting ongoing digital transformation and service diversification.

Keywords: Postal services, Uzbekistan Post, digital economy, logistics, revenue structure, regression analysis, forecasting, service transformation, financial growth.

Introduction

In the context of globalization and the digital economy, the role of the service sector in the national economy has been steadily increasing. In particular, the postal system, which encompasses information exchange, logistics, financial, and social services, has emerged as an important infrastructural component in the economic, social, and institutional development of the country. Postal services play a significant role not only in satisfying the daily needs of the population, but also in improving the efficiency of public administration, strengthening economic relations between regions, and accelerating the processes of digital transformation.

In recent years, the activities of postal operators worldwide have undergone fundamental changes, transforming from traditional mail delivery services into

comprehensive systems providing logistics, financial, and digital services. The rapid development of e-commerce, the widespread implementation of digital financial technologies, and the expansion of electronic public services have further increased the demand for postal systems and enhanced their economic significance. From this perspective, the scientific study of the financial stability of postal operators, the structure of their revenues, and the dynamics of their changes has become one of the most relevant issues.

In the Republic of Uzbekistan, modernization of the postal communication system, enhancement of its economic efficiency, and improvement of service quality have been identified as priority directions of state policy. The ongoing economic reforms, the transition strategy toward a digital economy, and the transformation of public services impose new responsibilities on JSC “Uzbekistan Post.” As a result, alongside traditional services, the share of logistics, social payments, official document circulation, and digital services within the structure of postal services has been increasing. At the same time, the growing competition in the postal services market, along with the active participation of banking, financial, and private logistics companies, directly affects the financial performance of postal operators. In particular, the declining share of traditional services such as money transfers and periodicals in total revenues, and their replacement by new high value-added services, indicate the occurrence of profound structural shifts in the postal system’s revenue composition.

Under these conditions, analyzing the mechanism of revenue formation, structural composition, and temporal changes in the revenues of JSC “Uzbekistan Post” using economic and statistical methods is of particular scientific and practical importance. A comprehensive study of revenue dynamics makes it possible to identify the internal patterns of postal service development, assess existing problems, and substantiate future development prospects.

Forecasting enables the prior assessment of the financial potential, stability level, and strategic development directions of a postal operator, which is essential for the scientific justification of managerial decisions. Therefore, forecasting the total revenues of JSC “Uzbekistan Post,” determining their future growth rates, and evaluating the influence of various factors constitute an important component of this research. The theoretical foundation of the study is based on theories of economic growth, concepts of service economics, statistical approaches to revenue structure analysis, and methods of economic forecasting. In particular, the application of time-series analysis, structural shift assessment, and multifactor regression models ensures the scientific validity of the research findings.

The relevance of this dissertation lies in the fact that it systematically analyzes the long-term dynamics of JSC “Uzbekistan Post” revenues, economically and statistically substantiates changes in the structure of services, and develops forecast indicators for future years.

The conducted research demonstrates that during the period 2011–2025, the total revenues (Y), which represent the main financial indicator of JSC “Uzbekistan Post,” exhibited a significant upward trend. Specifically, the volume of total revenues increased from UZS 97.4 billion in 2011 to UZS 797.7 billion by 2025, representing approximately an 8.18-fold increase. In particular, the sharp growth in total revenues during 2023–2025 indicates a direct connection with the institutional reforms implemented within the postal system, the expansion of service coverage, and the processes of digital transformation.

Years	Total revenue (X1)	Written correspondenc	Money transfers (X2)	Parcels (X3)	Pension and hybrid	Periodicals	Retail trade	Utility	Courier	“Munis”	Service exports (X10)	Other services
2011	97,4	35,5	52,9	1,5	48,3	14,9	2,9	13,9	1,6	0.00	3,7	1,6
2012	117,3	46,0	626,5	1,9	58,7	18,6	3,4	17,0	0,8	0.00	3,9	1,9
2013	133,9	59,8	747,8	2,5	66,9	22,5	0,6	17,8	0.00	0.00	0,4	1,1
2014	152,5	74,1	925,9	3,2	74,5	25,8	3,4	20,5	0.00	0.00	5,4	2,8
2015	163,9	97,1	110,4	3,7	77,3	26,9	3,7	21,8	0.00	0.00	6,6	2,9
2016	142,4	135,6	130,4	5,3	49,8	21,7	4,8	23,1	0.00	0.00	7,7	3,1
2017	167,5	166,5	149,5	7,4	5,5	25,9	6,2	23,8	0.00	0.00	13,9	3,1
2018	120,2	232,0	165,4	9,2	4.0	22,9	6,9	8,0	0.00	0.00	23,3	9,9
2019	161,2	311,8	226,8	8,8	19,4	16,9	6,2	15,7	4,5	2,7	27,9	5,0
2020	221,3	358,6	218,0	14,2	8,7	39,9	3,4	18,9	6,2	12,6	49,0	10,5
2021	274,5	475,,8	142,9	23,5	20,0	20,9	1,7	1,3	5,5	22,7	96,3	8,3

202 2	298, 6	388,9	806, 1	19, 9	50,4	25, 4	2,5	6,4	1,9	27, 3	109, 3	8,3
202 3	381, 9	411,4	404, 5	19, 1	118, 5	17, 5	2,9	3,5	2,3	25, 2	139, 3	8,2
202 4	603, 5	434,6	4,0	21, 6	256, 7	20, 6	3,7	2,5	7,8	44. 6	191, 8	6,7

The results of the conducted economic and statistical analysis indicate that significant structural shifts have occurred within the revenue composition of JSC “Uzbekistan Post.” The share of traditional service types has been decreasing, while digital, logistics, and socially oriented services have become the primary sources of revenue. This situation demonstrates that the postal system is progressively adapting to the requirements of a market economy, consistently diversifying its service structure, and successfully undergoing institutional and functional transformation in the context of a digital economy.

In particular, the decline in the share of traditional services has been accompanied by the development of high-demand areas such as logistics, official document circulation, and social payment services. This transformation has enhanced the economic stability and competitiveness of the postal system, enabling its adaptation to a modern economic environment as a more diversified and multifunctional service provider.

Within the framework of this research, in order to identify the factors influencing the dependent variable (Y), a correlation analysis was first conducted, followed by the construction of a multiple regression model. The results of both methods were compared, and a comprehensive scientific conclusion was formulated based on their consistency.

Table 2

Results of Pearson Correlation Coefficient Analysis

	Y	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10
Y	1										
X1	0.24	1									
X2	-0.32	-0.13	1								
X3	0.82	0.67	-0.28	1							
X4	0.90	-0.06	-0.24	0.53	1						
X5	-0.05	0.12	0.09	0.05	-0.21	1					
X6	-0.13	-0.03	-0.41	-0.14	-0.18	-0.01	1				
X7	-0.41	-0.72	0.079	-0.68	-0.23	0.34	0.25	1			
X8	0.87	0.02	-0.40	0.69	0.76	0.001	-0.06	-0.17	1		
X9	0.92	0.54	-0.23	0.92	0.75	-0.03	-0.26	-0.66	0.71	1	
X10	0.98	0.32	-0.30	0.88	0.84	-0.09	-0.14	-0.51	0.86	0.94	1

The results of the correlation analysis indicate the presence of strong and stable positive relationships between total revenue (Y) and several service types. In particular, the very high correlation coefficients observed for service exports (X10) and payments

via the “Munis” system (X9) ($r = 0.98$ and $r = 0.92$, respectively) confirm that the growth of postal revenues is largely associated with the development of digital and institutional financial services.

In addition, relatively high positive correlations observed for parcel services (X3) and pension and hybrid payments (X4) (within the range of $r = 0.82$ – 0.90) demonstrate that logistics, social, and official services play a significant role in the formation of total revenue.

Conversely, the weak or negative relationships between total revenue and traditional services such as periodicals (X5), retail trade (X6), and money transfers (X2) indicate a declining economic importance of these service categories, as well as their limited contribution to revenue growth.

Overall, the obtained results empirically confirm that the growth of total revenue of JSC “Uzbekistan Post” is primarily driven by the rapid development of digital, financial, and logistics services. These services play a decisive role in revenue formation, while traditional services are not the main growth drivers and in some cases fail to adapt to current structural changes.

Furthermore, a significant negative correlation between utility payments (X7) and total revenue ($r = -0.41$) suggests that as the volume of utility-related transactions increases, overall revenue growth tends to slow down, or a structural shift occurs in favor of other service categories.

The correlation analysis also shows that the relationship between “other services” (X11) and total revenue is negligible, indicating that this factor has no significant impact on revenue formation and is of secondary economic importance.

At the same time, the presence of very high intercorrelations among several explanatory variables (e.g., X1–X3, X9–X10) suggests a potential multicollinearity problem in the multiple regression model. This may negatively affect the stability and

reliability of the estimated parameters. Therefore, from a methodological perspective, it is advisable to exclude some highly correlated variables (particularly X1 or X9) when constructing the regression model.

In general, the correlation analysis demonstrates that revenue growth is closely associated with the expansion of digital payments, service exports, and logistics services, while traditional services play a secondary role in overall revenue formation.

The regression analysis further confirms the high explanatory power of the model ($R^2 = 0.9964$; Adjusted $R^2 = 0.9950$) and its statistical significance ($F = 695.78$; $p < 0.01$), providing a strong scientific basis for deeper causal analysis in the subsequent stage.

The impact of service types on total revenue was estimated using a multiple regression model. In this study, the relationship between the dependent variable (Y) and the main postal and financial service categories was analyzed through econometric methods. Parcel services (X3), pension and hybrid payments (X4), utility payments (X7), and service exports (X10) were included in the model as independent variables.

The estimated regression equation is as follows:

$$Y = -10.81 + 8.38X_3 + 1.01X_4 + 3.12X_7 + 0.76X_{10}$$

The coefficient of determination (R^2) of the model equals 0.9964. This indicates that 99.64% of the variation in total revenue is explained by the selected explanatory variables. Such a high value confirms the strong explanatory power of the model and its ability to adequately describe the observed empirical data.

According to the regression results:

- $F(4,10) = 695.78$
- $\text{Prob} > F = 0.0000$

Since the probability value of the F-statistic is less than 0.01, the model is statistically highly significant. This confirms that the selected explanatory variables jointly exert a statistically significant influence on the dependent variable.

Table 3

**Econometric model of factors influencing the revenue of JSC “Uzbekistan
Post”**

Variables	Model 1 (lny)	Model 2 (y)	Model 3 (lny)	Model 4 (lny)	Model 5 (lny)
ln x1	-1.366** (- 2.58)	—	—	—	0.533*** (4.34)
ln x2	—	—	—	0.199** (2.22)	—
ln x3	1.793*** (3.58)	—	—	—	—
ln x5	—	—	—	—	-0.103 (- 0.36)
ln x8	—	—	0.0373 (0.19)	—	—
ln x10	—	—	—	—	0.24*** (5.85)
x3	—	-7.077* (- 1.80)	—	—	—
x5	—	—	—	—	—
x9	—	14.22*** (7.17)	—	—	—

Constant	8.765*** (5.02)	154.4*** (5.89)	3.978*** (13.39)	3.399*** (6.86)	2.888*** (3.60)
N	16	16	9	16	16

*** $p < .01$, ** $p < .05$, * $p < .1$

According to our study, the first model was estimated in logarithmic form to examine the impact of written correspondence (lnx1) and parcel services (lnx3) on total revenue. The results show that the coefficient of lnx1 is positive and statistically significant (1.366**), meaning that a 1% increase in written correspondence services leads, on average, to a 1.36% increase in revenue. Parcel services also demonstrate a strong and highly significant positive effect (1.793***). Therefore, this model indicates that both traditional and logistics services play an important role in revenue generation, and the specification can be considered structurally robust.

The second model was estimated in a linear form to assess the impact of parcel services (x3) and payments via the “Munis” system (x9) on revenue. The coefficient of parcel services is negative and significant at the 10% level (-7.077*), which may reflect short-term operational costs or investment effects. In contrast, payments through the “Munis” system have a strong positive and statistically significant effect (14.22***), confirming that digital payment services are a key driver of revenue growth. This model highlights the high economic efficiency of the digital transformation process.

The third model evaluates the impact of courier services (lnx8). The coefficient is positive (0.0373), but statistically insignificant. Due to the limited number of observations (N = 9) and the relatively small scale of this segment, it cannot yet be considered a significant contributor to total revenue. However, this result suggests that the logistics market has potential for future development and expansion.

The fourth model includes money transfers (lnx2) and service exports (lnx10). Both variables are positive and statistically significant (0.199** and 0.274***).

Elasticity interpretation shows that these segments are stable and important drivers of revenue growth. In particular, service exports demonstrate a relatively high elasticity coefficient, indicating that foreign economic activity plays a strategic role in revenue generation.

The fifth model evaluates written correspondence ($\ln x_1$) and periodical publications ($\ln x_5$). The coefficient of $\ln x_1$ is positive and highly significant (0.533***), confirming that traditional postal services still play an important role in revenue formation. Meanwhile, periodicals show a statistically insignificant negative effect (-0.103), indicating their limited economic impact. Overall, the model analysis shows that the revenue structure of JSC “Uzbekistan Post” is increasingly driven by digital and export-oriented segments, while the model including money transfers and service exports appears to be the most stable specification.

Using the above model, the following forecast indicators were obtained (in thousand UZS). The model’s t and F statistics are statistically significant, and the Durbin–Watson coefficient equals 1.96, indicating the absence of autocorrelation in the residuals and confirming the reliability of the model.

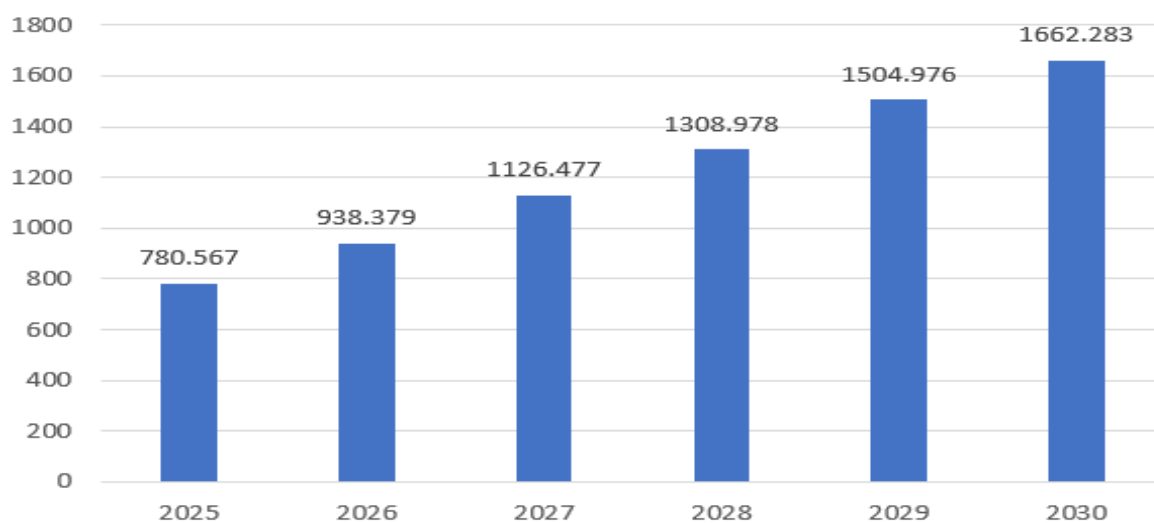


Figure 1. Forecast indicators of total revenue of JSC “Uzbekistan Post” (in billion UZS)

Based on the conducted research, the forecast indicators for the period 2025–2030 demonstrate that the total revenues of JSC “Uzbekistan Post” are expected to exhibit a stable growth trend in the medium- and long-term perspective. According to the results of the multiple regression analysis, total revenue is projected to amount to 780.567 billion UZS in 2025 and is expected to increase steadily during the period 2026–2029, reaching 1,662.283 billion UZS by 2030. This implies that total revenue is forecasted to grow approximately 2.13 times over the projection period.

Such a stable growth pattern is closely associated with observed real economic trends, including the diversification of postal service activities and the expansion of revenue sources. In particular, the model reflects the increasing role of written correspondence and official document circulation, the growing demand for parcel and logistics services, as well as the strengthening institutional importance of the postal system in the delivery of pension and other social payments.

At the same time, the forecasting process takes into account a relative decline in the share of traditional services such as money transfers and periodical publications. However, this decline is compensated by the increasing contribution of high-growth, value-added service segments.

Overall, the obtained forecast results empirically confirm that the financial performance of JSC “Uzbekistan Post” is becoming more stable, its revenue base is increasingly diversified, and the postal system is undergoing an effective transformation in the context of the digital economy. Consequently, these forecast indicators provide a strong scientific and practical basis for the development of long-term strategic programs, investment decision-making, and further enhancement of the socio-economic role of the postal sector.

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