



International Conference of Economics, Finance and Accounting Studies

International Conference of Economics, Finance and Accounting Studies is a double-blind peer-reviewed, open-access journal published to reach excellence on the scope. It considers scholarly, research-based articles on all aspects of economics, finance and accounting. As an international congress aimed at facilitating the global exchange of education theory, contributions from different educational systems and cultures are encouraged. It aims to provide a forum for all researchers, educators, educational policy-makers and planners to exchange invaluable ideas and resources.

Reducing State Participation in Commercial Bank Capital: Implications for Lending Efficiency

Norova Nozima Nabievna

Associate Professor of the Department of "Economics and Management" at the Tashkent International University of Financial Management and Technologies, PhD

The globalization of the world economy and the growing intensity of competition among banks, both internationally and domestically, have made the issue of strengthening banks' capitalization increasingly important. Capital serves as the primary financial safeguard against unexpected losses and as the foundation for establishing sound asset management standards. Following the global financial and economic crisis, even though this issue has received considerable attention, many challenges remain. For instance, the International Basel Committee has raised the capital conservation buffer from 1.8% to 2.5% by 2024, the core capital requirement from 6.3% to 7.0%, and the total capital ratio from 9.8% to 10.5%. This, together with the need to cover billions of euros in potential losses, underscores the gravity of the problem.

In this context, the econometric analysis of domestic commercial banks for the period 2016–2024 was standardized to ensure comparability and minimize statistical errors. It is hypothesized that an increase in the volume of loans issued by commercial banks stimulates the growth of goods and services provided by them, thereby enhancing economic activity. To test this hypothesis, the following section presents a correlation and regression analysis of the relationship between bank lending volumes and key performance indicators.

We will carry out an econometric analysis, specifying the following sequence of tasks:

- ✓ We construct a linear correlation equation;
- ✓ We determine the correlation coefficient, determination coefficient;
- ✓ We evaluate the adequacy of the regression equation according to Fisher's F-criterion.

Using the data from the table above, we determine the correlation coefficient that describes the relationship of all factors.

$$r_{xy} = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}} = 0,9008$$

Therefore, there is a very strong close relationship between the private correlation coefficients between the factors, that is, the influencing factor (Xi) and the resulting factor (Y).

So, there is a strong relationship between the value of the goods produced by the commercial bank

and the value of the services it provides.

We will create an econometric model representing the impact of the volume of loans allocated by commercial banks on the value of goods and services. In general, it is expressed as follows for a linear regression relationship in practice:

$$y = a + b \cdot x \quad (1)$$

In order to determine the unknown parameters a and b , we enter data on 8 observations covering the years 2016-2024 mentioned in the table above into the Excel program and perform regression analysis.

The results of the regression analysis are presented in the table below, the data in it will be useful in building our model and evaluating the importance of the built model (Table 1).

Table 1. The result of the econometric analysis of the factors affecting the growth of the value of goods and services

| Dependent variable: Value of goods and services of business entities (Y) | | | | |
|--|-------------|----------------|---------------|----------|
| Method: Least squares method | | | | |
| Selection (Customized): 2016-2024 | | | | |
| Included observations: 8 ra | | | | |
| Variable | Coefficient | Standard error | t- statistics | P- value |
| Constanta | 63531,8528 | 11838,7290 | 5,3664 | 0,0017 |
| X | 2,4169 | 0,4757 | 5,0804 | 0,0023 |
| In the plural R | | 0,9008 | | |
| R- square | | 0,8114 | | |
| Adjusted R-squared | | 0,7799 | | |
| Standard erro | | 20990,8987 | | |

Source: Based on regression analysis results.

The above figure shows the results of the regression analysis.

According to the analysis result, the correlation coefficient R (or r_{xy}) was equal to 0.9008. The dependence characteristic of the dependence density is very strong (falls in the range of 0.9-0.99). We determine that the coefficient of determination is equal to 0.8114.

$$Y = 63531,85 + 2,42 \cdot X \quad (2)$$

We will analyze the quality indicators of the model (2) based on the increase in the value of goods and services.

We use Fisher's F-test to check the statistical significance of the econometric model (2) based on the growth of the value of goods and services or its relevance to the process being studied..

Then Fisher's F-criterion can be expressed as follows:

$$F = \frac{R^2}{1 - R^2} \cdot (n - 2), \quad (3)$$

where: R^2 - coefficient of determination;

n - coefficient of determination.

F- the calculated value of the criterion $F_{\text{хисоб}} = 25,81$ is equal to. If F- if the calculated value of the criterion is greater than the value in the table, then the constructed multifactor econometric model is called statistically significant or adequate to the process being studied.

$$25,81 > 3,87 \quad (t_r > t_f)$$

The inequality is confirmed, so the correlational link is significant.

We check the adequacy of the regression equation using the coefficient of determination R^2 .

We check the adequacy of the regression equation using the coefficient of determination.

$$R^2 = 1 - \frac{\sum(y_i - y_x)^2}{\sum(y_i - \bar{y})^2} = 0,8114$$

It can be seen that the coefficient of determination is equal to the square of the correlation coefficient, which confirms the correctness of the determined regression equation and the existence of a linear relationship.

A number of limitations occurred during the research process. The following can be included among them:

Update of the requirements for the structure of writing a dissertation from this year. This update was manifested mainly in the addition of new requirements, such as conducting econometric analyzes within the scope of the topic, reviewing previously conducted research on the research topic, and conducting a literature review. However, it was definitely beneficial for the listeners. Because, during the writing of the dissertation, some skills were formed in the implementation of econometric analyzes.

Among the measures to be implemented in future research on this topic, it would be appropriate if the following were implemented:

- ✓ Forming data sources before starting the work, having studied the research topic in depth;
- ✓ Studying the recommendations and conclusions of previous scientific researches;
- ✓ Taking a larger time period for econometric analyzes to be more accurate;
- ✓ Use of more advanced methods of econometric modeling.

LIST OF USED LITERATURE

1. Savicheva T.S. (2015) Technologies of lending to small businesses by microfinance organizations In the collection: Problems of economics, organization and management in Russia and the world Proceedings of the VIII International Scientific and Practical Conference. Prague, Czech Republic, pp. 203-205.
2. Smith A. Research on the nature and causes of the wealth of the people. - Petrozavodsk.: 1993. - P.271.
3. K. Capital. Criticism of political economy. - TK KN 2 M .: 1989. - P. 442.
4. www.stat.uz – Official website of the Statistics Committee of the Republic of Uzbekistan.
5. World bank report, 2024.
6. World Economic Outlook. IMF.