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# SERVICE QUALITY MANAGEMENT OF BANK FINANCING BASED ON CSR IN THE DIGITAL ECONOMY IN THE INTERESTS OF SUSTAINABLE DEVELOPMENT

***Abstract:*** *The article aims to determine the prospects for improving the service quality management of bank financing based on corporate social responsibility (CSR) in the digital economy in the interests of sustainable development. The results of economic and mathematical modeling of the impact of the service quality management bank financing based on corporate social responsibility in the digital economy on sustainable development results, using the method of regression analysis, showed that standard corporate social responsibility in the digital economy does not have a positive effect on sustainable development. The novelty of the article lies in the development of a digital approach to the service quality managing of bank financing based on corporate social responsibility for sustainable development. All three areas of the service quality management of bank financing in a new approach - the manifestation of CSR, FinTech development and SDG support - are systemically interconnected and support each other. This ensures a constant improvement in the service quality of bank financing. Improving the security of banking (it is recommended to increase it by 97.28%) and development of Internet banking (it is recommended to increase it by 96.81%) are proposed as measures for the practical implementation of the new approach. Due to the practical implementation of the proposed author's recommendations, the level of sustainable development will become the maximum (reach 1st place), that is, increase by 96.64%. The results obtained underline the prospects of implementing new measures of the service quality management of bank financing based on corporate social responsibility in the digital economy.*

***Keywords:*** *Bank Financing; Digital Technologies; Corporate Social Responsibility; Sustainable Development; Quality Management, Quality.*

## 1. Introduction

The transition to a new socially-oriented model of economic growth is a synergistic effect that arose due to the simultaneous successful implementation of initiatives in the field of scientific and technological progress, globalization, the "knowledge economy" development and the social

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market economy under the impact of the Sustainable Development Goals (SDGs). Initially, the transition to a new model of economic growth occurred spontaneously, but subsequently, this model created tangible advantages for stakeholders and therefore began to be managed (supported) purposefully.

The implementation of the socio-oriented model of economic growth creates benefits for the state in the form of improving the quality of life, for society (workers) in the form of increasing and better revealing human potential, as well as for enterprises (employers) in the method of improving the quality and accessibility of human resources and increasing labour productivity. The current practice of public financing for the implementation of the new economic growth's model, popular around the world, firstly, undermines the market mechanism, since relies on public funding.

Secondly, the practice of public financing is not available in the context of economic crises, in particular, the COVID-19 crisis, and situations in which there is a deficit in the state budget. Insufficient service quality of bank financing is a problem in the way of spreading alternative practices. The corporate social responsibility (CSR) of banks plays an important role in the risk management of bank financing.

Among the main characteristic of the service quality of bank financing, banking security risks should be noted (Guerra and Castelli 2021). In a broad sense, this characteristic of the quality covers not only the theft of funds from the bank accounts of enterprises but also breakdowns in the operation of banking services, leading to the paralyzation of the enterprises' bank accounts. Sustainable development projects require a high degree of flexibility in bank financing and are therefore especially exposed to this characteristic of the quality. In the context of the digital economy dominated by electronic payments, the standard CSR of banks associated with ensuring physical security (security systems, video surveillance, etc.) is much less effective than responsibility in the form of using advanced cybersecurity systems (Deng et al. 2021).

Among the significant characteristic of the quality of service of bank financing is the inconvenient access to bank financing, due to which, at the right time, this financing may not be provided timely to an enterprise in need (Manuylenko et al. 2021). Bank offices are subject to strict operating hours, therefore bank financing for sustainable development projects cannot be continuous. Standard CSR, in the form of extended office hours, only partially mitigates this characteristic of quality. A characteristic is the development of Internet banking, which makes bank financing continuously available (Gabudeanu et al. 2021).

Another characteristic of the service quality bank financing that should be prioritized is associated with the length and complexity of decision making (Boitan & Marchewka-Bartkowiak 2021). On the part of banks, this characteristic of the service quality manifests itself in the need to take into account many factors (income, profitability, long-term prospects for the development of an enterprise, the potential profitability of a sustainable development project) when determining the possibility of providing bank financing to an enterprise in need, and also the terms of this financing (interest profit margin, repayment period).

The corporate social responsibility of banks is manifested in the fact that their employees devote a lot of time to careful consideration of each project in the field of sustainable development to make the most informed and correct decision on the provision of bank financing. Standard CSR can reduce the possibility of making bad decisions, but it does not speed up decision-making. In the digital economy, scoring technologies contribute not only to the highly accurate modeling of investment projects but also to quick intellectual support for making decisions about their bank financing.

On the part of enterprises in need of bank financing, this characteristic of the quality manifests itself in the difficulty of accurately determining the amount of bank financing required for the implementation of planned projects in the field of sustainable development. At each stage of the SDGs implementation, new and unprecedented projects are required, the scale of which can change in the course of their implementation. To help enterprises implementing sustainable development projects accurately determine the amount of required bank financing, banks demonstrate corporate social responsibility in the form of information and consulting support for financing these projects. However, the analytical abilities of a person are limited, which does not allow them to completely overcome the considered quality characteristic.

Achieve its greater reduction potentially allows advanced technologies available in the digital economy. For example, the automation of banking based on Big Data and Artificial Intelligence (AI) facilitates highly precise project activities and the analysis of many alternative scenarios for implementing sustainable development projects, thereby allowing the most reliable determination of the limit of bank financing that will ultimately be required for the successful completion of projects (Filchenkov et al. 2021).

Based on the foregoing, this article hypothesizes that in the digital economy, new promising areas of the service quality management of bank financing based on corporate social responsibility are becoming available, which make a greater contribution to sustainable development than the standard practices of this responsibility. The purpose of the article is to determine the prospects for improving the service quality management of bank financing based on corporate social responsibility in the digital economy in the interests of sustainable development.

This article fills a gap in the literature on distinguishing between such global trends of our time as digitalization and sustainable development. Using the example of the service quality management of bank financing, this article shows for the first time that these trends are closely interrelated. The novelty of the article lies in the development of a digital approach to the service quality management of bank financing based on corporate social responsibility in the interests of sustainable development. In the structure of the article, in addition to the above introduction, a literature review, description of materials and research methodology, results, discussion and conclusion are highlighted.

## 2. Literature Review

The theoretical basis of this study was formed by the works of modern scientists on five thematic blocks of scientific knowledge. First block: The importance of banking financing for accelerating economic growth and sustainable development. This block is emphasized by scholars such as Abashidze et al. (2020), Inshakova and Bogoviz (2020), Inshakova et al. (2020a), Inshakova et al. (2020b). The second block: Perspectives and practical experience of the service quality management of bank financing based on digital technologies. These questions have been explored by experts such as Chen et al. (2019), Lu et al. (2020), Nastiti and Kasri (2019).

Third block: Characteristics of the quality of service of bank financing. In their work, Osipov et al. (2021) formed a holistic scientific understanding of financial quality assurance in the unity of state financing of innovation and foreign direct investment. Thach et al. (2021) proposed applied recommendations for improving the quality management practices of Industry 4.0 technologies and cybersecurity risk management in current banking activities in emerging markets (using the example of Vietnam).

Karanina et al. (2021) substantiated that the diagnosis of economic security risks is a manifestation of the quality of management in the global financial markets, and also systematized the factors, threats, criteria and indicators of industrial and industrial engineering. Steblyanskaya et al. (2021) proposed a mathematical dynamic model for sustainable growth in green finance. Santos and Soares (2021) conducted a case study and suggested recommendations for improving the financial analysis of KPIs when implementing DMAIC in a pharmaceutical organization.

Fourth block: Impact of bank financing on sustainable development Secinaro et al. (2021) conducted a large-scale bibliometric analysis, based on which they demonstrated that social finance and banking research is the driving force of sustainable development. Broccardo et al. (2021) substantiated the trend towards a business model of sustainable social finance and proved that peer-to-peer financing is the legitimate heir to cooperative banking.

Popescu et al. (2021) undertook a critical review of sustainable finance methods and structures and proposed new methodologies for measuring the sustainability of investment funds for the most accurate identification of bank financing for sustainable development projects. Rodrigo-González et al. (2021), based on the theory and practice of creating value in a circular economy, proposed sustainable financing with a real options approach.

Adiyoh et al. (2021) highlighted the key role of sustainable finance in achieving Sustainable Development Goals in Nigeria, with a particular focus on Chinese foreign direct investment. Xiong and Yao (2021) found that China’s green finance contributes significantly to its sustainable economic development. Yang et al. (2021) identified and predicted the credit risk of SMEs in sustainable supply chain finance based on data from China.

Quatrini (2021) identified challenges and opportunities for scaling up sustainable financing after the COVID-19 crisis: based on examples and promising innovations from science and practice. Pyka and Nocoń (2021) proposed capital requirements for banks in terms of implementing the concept of sustainable financing. Cumming et al. (2021) consider it necessary to create sustainable financing for sustainable protected and protected areas, taking into account the examples of COVID-19. Ziolo et al. (2021) noted the significant role of sustainable finance in achieving SDGs. Jones et al. (2021) also pointed out that bank financing is essential for future sustainable prosperity.

Fifth block: Features of corporate social responsibility of banks. Sobhani et al. (2021) proved that socially responsible human resource management improves the attitude of personnel and enhances the status of the bank, and also noted the trend of increasing corporate social responsibility of Bangladeshi banks. Risi (2020) pointed out that socially responsible investment in the work of Swiss banks and insurance companies contributes to sustainable development. Davies and Green (2020) conducted an international study and concluded that, in general, banks adhere to the UN Responsible Banking Principles.

Amann and Tripathi (2019) described the path to transfering a socially responsible business school using the example of the Canara Bank School of Management, India. Kumar et al. (2019) noted the peculiarities of corporate social responsibility of Indian banks. Wibowo et al. (2019) demonstrated the significant impact of socially responsible marketing on the corporate reputation of PT Bank Negara Indonesia in Malang County (based on a study of a branchless banking agent at PT BNI). Gill et al. (2017) has shown that socially responsible investment, domestic sources of finance and access to bank finance contribute to India’s sustainable development.

This literature review provides evidence of a reliable theoretical basis for this study. Simultaneously, the inpluence of bank financing quality on the implementation of a socially-oriented model of economic growth and sustainable development has not been quantified. A shortcoming of the existing literature is the reliance on standard corporate social responsibility in the formation of an approach to the service quality management of bank financing with insufficient consideration of new opportunities - new areas of the service quality management of bank financing based on corporate social responsibility, which are available in the digital economy. The prospects of the quality of service management improvement of bank financing based on corporate social responsibility in the digital economy remain unclear and require further independent study, which is carried out in this article.

## 3. Materials and methodology

To test the hypothesis put forward, this article uses the regression analysis method, which determines the regression dependence, firstly, of sustainable development (SD) from standard corporate social responsibility (its indicator is the Social Entrepreneurship Index, Csr). Secondly, from the implementation of promising fields of the service quality management of bank financing based on corporate social responsibility in the digital economy:

- Improving the security of banking (its indicator is Cyber security, Bsec)
- Development of Internet banking (its indicator is "Internet retailing", Bint)
- Automation of banking based on artificial intelligence (its indicator is "Use of Big data and analytics", Bai).

The materials of World Digital Competitiveness Ranking 2020 (IMD, 2021) acted as the information and empirical base of the research. The research model has the following form:

$$SD=a+b_1*Csr+b_2*Bsec+b_3*Dint+b_4*Bai \quad (1)$$

Based on the presented model, the optimization problem of searching the maximum value of the Sustainable Development Index (goal: SD → max), achieved through the increase of the service quality of bank financing based on corporate social responsibility (variable variables: Csr, Bsec, Bint, Bai), is solved. The hypothesis is recognized as proven if the increase in SD due to Bsec, Bint, Bai will be higher than its increase due to the increase in Csr.

To obtain the most accurate and reliable results, a unique selection of countries was formed, which included the countries of the two groups conditionally allocated in this research. The first group includes top countries in consumer banking finance - World Bank rating leaders (2021b) countries by "Firms, using banks to finance working capital (% of firms)" for 2020. The folowing group includes top countries in banking business financing - World Bank rating leaders (2021a) by the value of the indicator "Domestic credit provided by financial sector (% of GDP)" for 2020. The values of these indicators in the sample of countries are shown in Figure 1.

The data for the research are presented in Table 1.

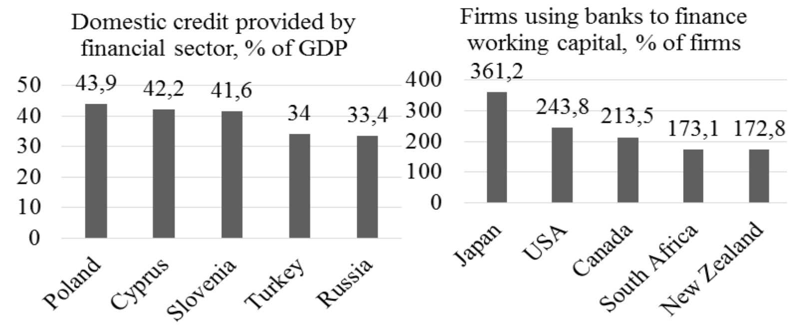


**Figure 1.** Selection: top countries in consumer banking finance and banking business finance in 2020

Source: Built by the author based on materials World Bank (2021a), World Bank (2021b).

**Table 1**. Sustainable development and promising areas of the service quality management of bank financing based on corporate social responsibility in the digital economy in 2021

| Sample of countries | Country | Sustainable Development Index, points 1-100 | Promising areas of the service quality management of bank financing based on corporate social responsibility in the digital economy, rank 1-63 | | | Social Entrepreneurship (Corporate Social Responsibility) Index, points 1-100 |
|---|---|---|---|---|---|---|
| | | | Improving Banking Security (Cyber security) | Internet Banking Development (Internet retailing) | Automation of banking based on artificial intelligence (Use of big data and analytics) | |
| | | SD | Bsec | Bint | Bai | Csr |
| Top countries in consumer banking financing | Poland | 80.22 | 46 | 33 | 22 | 46.651 |
| | Cyprus | 74.87 | 32 | - | 50 | 40.769 |
| | Slovenia | 81.60 | 22 | 39 | 28 | 38.079 |
| | Turkey | 70.38 | 35 | 41 | 42 | 41.272 |
| | Russia | 73.75 | 48 | 37 | 33 | 61.147 |
| Top Countries for Banking Financing of Business | Japan | 79.85 | 45 | 16 | 63 | 57.793 |
| | USA | 76.01 | 33 | 2 | 9 | 73.238 |
| | Canada | 79.16 | 13 | 6 | 4 | 70.452 |
| | South Africa | 63.74 | 54 | 59 | 44 | 46.878 |
| | New Zealand | 79.13 | 39 | 17 | 48 | 84.173 |

The symbol "-" means that the IMD materials (2021) do not specify the value of the key figure, it is assigned the worst possible value (63rd position).

Source: Compiled by the author based on IMD (2021), Institute of Scientific Communications (2021), UNDP (2021).

## 4. Results

The results of economic and mathematical modeling of the impact of the service quality management bank financing based on corporate social responsibility in the digital economy on sustainable development results reflect the following regression equation, refining the research model (1):

$$SD=92.68-0.12*Csr-0.16*Bsec-0.22*Dint+0.08*Bai \quad (2)$$

Following the obtained regression equation (2), standard corporate social responsibility in the digital economy does not effect positively on sustainable development, as proved by the negative value of the regression coefficient (-0.12). By increasing the Banking Security (Cyber security) to the 1st place, the growth of Sustainable Development Index by 0.12 points is achieved. With the development of Internet banking (Internet retailing) to 1st place, an increase in Sustainable Development Index by 0.22 points is ensured. The closeness of the correlation between the considered indicators is evidenced by a high correlation: 70.25%. Also, using the method of correlation analysis, it was determined that:

– In Top Countries for Banking Financing of Business, the contribution of digitalization of bank financing services to sustainable development is more pronounced (the sum of the correlation coefficients: -148.04%) than in Top countries in consumer banking financing (-80.38%);

– In Top Countries for Banking Financing of Business, the correlation of the Sustainable Development Index with Improving Banking Security (Cyber security) is -26.92%, and with Internet Banking Development (Internet retailing) -53.46%. In Top countries in consumer banking financing, the correlation of the Sustainable Development Index with Improving Banking Security (Cyber security) is -59.27%, and with Internet Banking Development (Internet retailing) -88.77%;

– The contribution of Internet Banking Development (Internet retailing) to sustainable development is more pronounced (sum of correlation coefficients: -142.23%) than the contribution of Improving Banking Security (Cyber Security) (-86.19%).

The results of the regression analysis allow identifying the prospects for maximizing sustainable development through the implementation of promising areas of the service quality management of bank financing based on CSR in the digital economy. Based on the results of regression analysis, a new digital approach to the service quality managing of bank financing based on corporate social responsibility for sustainable development has been developed. For the practical implementation of the author’s approach, it is proposed to give priority attention to improving banking security (cyber security) and internet banking development (internet retailing).

It was revealed that with the full-scale implementation of promising areas of the service quality management of bank financing based on corporate social responsibility in the digital economy, the Sustainable Development Index (SD) can increase at most by 16.42% and reach 88.33 points (compared with 75.87 points on average for the selected countries). For this, the following recommendations are proposed for the practical implementation of promising areas of the service quality management of bank financing based on corporate social responsibility in the digital economy: Improving Banking Security (Bsec) by 97.28% and Internet Banking Developing (Bint) by 96.81%.

In addition to quantitative recommendations in the form of the above reference values of statistical indicators, it is advisable to formulate qualitative recommendations in this article as well. They are designed to guarantee that the opportunities of the digital economy are used in the bank financing practice for sustainable development based on the principles of corporate social responsibility.

Firstly, it is proposed to improve banking security not only in the aspect of protecting personal data and protecting the bank accounts of enterprises from the actions of cybercriminals but also in the aspect of ensuring uninterrupted access of enterprises implementing sustainable development projects to bank financing. Preferential social and green bank financing guarantees with enhanced cybersecurity should be provided.

Secondly, it is recommended to develop and launch special applications or special Internet banking capabilities for bank financing of projects in the sphere of sustainable development. The meaning of providing special opportunities for projects that receive social or “green” bank financing is more flexible conditions of this financing and its expanded information and consulting support. Due to this, enterprises will be able to obtain additional financing at all stages of projects’ implementation in the field of sustainable development, which will help to overcome its deficit because of the flexibility of banks.

The developed digital approach to the service quality management of bank financing based on corporate social responsibility in the interests of sustainable development has the following features. The first feature: corporate social responsibility is manifested not so much in the care of financial institutions (banks) about employees (which is carried out, but is indirect), as in taking care of consumers through maximizing the quality of bank financing services. The new mechanism for the manifestation of corporate social responsibility in the author’s approach orients financial organizations (banks) not towards intermediate (for example, improving working conditions, creating highly productive jobs, unleashing human potential - as in the usual approach) but on the final result, expressed in the creation of additional value of bank financing services for consumers.

The advantage of the new mechanism for manifesting corporate social responsibility, which is the background of the author’s approach, is that corporate social responsibility ceases to be an end in itself for financial organizations (banks) and becomes a tool for achieving the goal of improving the quality of bank financing services. Due to this, consumers become the key beneficiaries of the corporate social responsibility of financial institutions (banks), which makes it possible to maximize the contribution of this responsibility to improving the quality of life and supporting sustainable development.

The second feature: when managing the quality of bank financing services, technologies of the fourth technological order (Industry 4.0) are actively introduced. FinTech development contributes to improving the quality of bank financing services in a new - digital context. Improving the reliability and security of bank financing services (based on improving banking security), the availability and convenience of obtaining them (based on the internet banking development) form the basis for the quality management of the services under consideration. In addition to this, in the long term, the listed measures should be supplemented by automation of banking based on artificial intelligence.

An additional measure is currently ineffective, since it is a pilot (test) innovation, unfinished by financial institutions (banks) and not mastered by consumers of bank financing services. Therefore, the additional measure should now recede into the background. In this regard, the author’s approach is based on the Boston Consulting Group matrix (BCG matrix). The recommended as the main measure - improving banking security and internet banking development - are cash sows, and the proposed as an additional (future) measure, automation of banking based on artificial intelligence acts as a question mark. The proposed hierarchy of digital innovations ensures the stability of FinTech and sustainable growth in the quality of bank financing services in the long term.

The third feature: service quality management of bank financing is carried out in the interests of sustainable development. Quality is interpreted not only as a source of increasing the competitiveness of financial institutions (banks) but also as a way to achieve their contribution to the implementation of the SDGs. This broad interpretation of the quality of bank financing services allows most fully and reliably outlining the boundaries of quality management and maximizing its systemic efficiency, covering both competitiveness and contribution to sustainable development. The built-in support of the SDGs in quality management in a broad interpretation of the quality of bank financing services allows for the first time to integrate business (represented by financial institutions - banks) into the practice of achieving sustainable development.

The essence of the developed digital approach to the service quality management of bank financing based on corporate social responsibility in the interests of sustainable development reflects the logical scheme of its implementation (Figure 2).

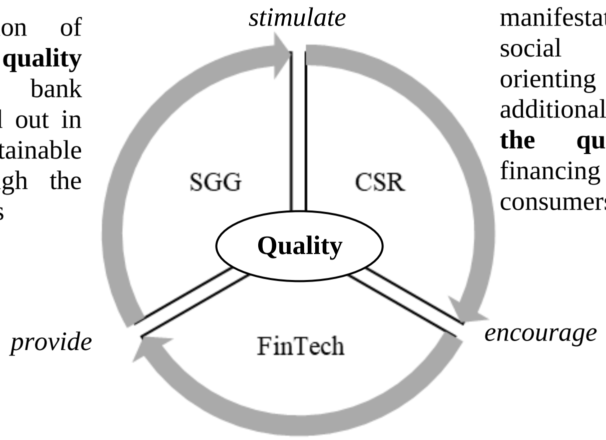


**Figure 2.** A digital approach to the service quality management of bank financing based on corporate social responsibility for sustainable development
Source: Author

Figure 2 shows all three areas of the service quality management of bank financing in a new approach - the manifestation of CSR, FinTech development and SDG support - are systemically interconnected and support each other. This ensures a constant improvement in the quality of bank financing services.

## 5. Discussion

The results obtained contribute to the development of the Theory of the service quality management of bank financing. In contrast to existing works that reveal the fundamental provisions of this Theory, this article has shown that, firstly, the quality of bank financing services largely determines the progress in the implementation of Sustainable Development Goals. Corporate social responsibility in the provision of bank financing services improves their quality and supports sustainable development.

Secondly, digital technologies - banking security (cyber security) technologies, as well as Internet banking (Internet retailing) technologies - improve the quality of bank financing services, are manifestations of corporate social responsibility, and also contribute to sustainable development. The conclusions made have built a bridge between FinTech (digital banking), formed and intensively developing under the influence of the Fourth Industrial Revolution, and sustainable development (implementation of the SDGs). Improving quality based on corporate social responsibility is a progressive mechanism that allows combining high technology and sustainability.

Theory implications are related to the fact that the obtained results develop and complement the fundamental provisions of the Theory of the service quality management of bank financing by clarifying the importance of the quality of these services for sustainable development. Earlier (in the previous works of various authors) it was believed that improving the quality of bank financing services based on advanced digital technologies only contributes to the growth of the competitiveness of financial institutions (banks). As proven in this article, an additional benefit of digitalization as a source of growth in the quality of bank financing services is support for the SDGs (contribution to Sustainable Development).

Policy implications are that the conclusions drawn fundamentally change the existing understanding of the optimal service quality regulation of bank financing. As the results of this article have shown, state regulation of the quality of these services should be aimed at stimulating technological transit (digital modernization) of financial institutions (banks) not only in the favour of increasing their competitiveness but also in the interests of maximizing their contribution to the implementation of the SDGs. Consequently, more flexible and targeted incentives are needed, among which pride of place goes to the call for responsible digital innovation.

Management implications are that this article has demonstrated that management of technological modernization and management of sustainable development are not alternative (mutually exclusive), but complementary areas of corporate governance of financial institutions (banks). To receive a synergistic effect from these areas, it is recommended to systematically implement them within the framework of the quality of service management of bank financing based on corporate social responsibility. This opens up a revolutionary view on the practice of business management of financial organizations (banks), in which quality becomes the central category.

Social implications are expressed in the fact that the results of this article have expanded the range of practical benefits of the service quality management of bank financing. Society can benefit much more from improving the quality of bank financing services than previously thought. In contrast to the growth of the competitiveness of the economy, which has a distant relationship to the quality of life, sustainable development largely determines the quality of life. Hence, the service quality management of bank financing based on corporate social responsibility can and should contribute to improving the quality of life - this is facilitated by the developed new digital approach to this management, which assumes reliance on advanced technologies and a focus on contributing to the implementation of the SDGs.

## 6. Conclusion

Concluding the study, it is worth noticing that standard corporate social responsibility in the new digital context turned out to be an insignificant factor in sustainable development. The most promising measure for the service quality management of bank financing based on digital technologies is Improving Banking Security (regression -0.16 places): it is recommended to increase it by 97.28%. The second most promising measure for the service quality management of bank financing based on digital technologies is Internet Banking Development (regression -0.22 places): it is recommended to increase it by 96.81%. Developed to implement the recommended measures, the digital approach to the service quality management of bank financing based on corporate social responsibility for sustainable development has the following characteristics.

The first characteristic: corporate social responsibility is manifested not so much in the care of financial institutions (banks) about employees (which is carried out, but is indirect) as in taking care of consumers through maximizing the service quality of bank financing. The second feature: with the service quality management of bank financing, technologies of the fourth technological order (Industry 4.0) are actively introduced.

The third feature: the service quality management of bank financing is carried out in the interests of sustainable development. Quality is interpreted not only as a source of increasing the competitiveness of financial institutions (banks) but also as a way to achieve their contribution to the implementation of the SDGs. All three areas of the service quality management of bank financing in a new approach - the manifestation of CSR, FinTech development and SDG support - are systemically interconnected and support each other. This ensures a constant improvement in the service quality of bank financing.

Because of the practical implementation of the proposed author's recommendations, the level of sustainable development will become the maximum (reach 1$^{st}$ place), that is, increase by 96.64%. The results obtained underline the prospects of implementing new measures of the service quality management of bank financing based on corporate social responsibility in the digital economy. The contribution of the article to the literature is to substantiate a new scientific and methodological approach to the service quality management of bank financing based on corporate social responsibility in the interests of sustainable development. The advantage of the new approach is that it makes it possible to most fully and effectively use the new opportunities for corporate social responsibility in the field of bank financing that has opened up in the digital economy.

One limitation of the results of the study is that there is no clear contribution of Automation of Banking based on artificial intelligence to sustainable development. The reason for the lack of this connection may be both the insignificance of this area for sustainable development, and the insufficiently high level of development of this area to identify its contribution to sustainable development, and also the insufficiently high level of corporate social responsibility of banks in the implementation of this area. It is proposed to devote further scientific research to clarify the reasons and in-depth study of the contribution of banking automation based on artificial intelligence to sustainable development.

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