



Research on Performance Evaluation Optimization of Rural Commercial Bank Based on Profit Center under Digital Background

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Abstract. In the digital era, commercial banks are using digital technology to improve the efficiency and accuracy of financial management and improve the accuracy and foresight of financial information. This paper takes SZ Rural Commercial Bank as an example, and proposes an optimization plan for profit center performance evaluation based on business lines through analysis of external and internal environment. Including the basic principles of profit center construction and the deepening application of digital transformation to management accounting, EVA and RAROC are introduced to measure the "return after risk" and "risk-adjusted return on capital" indicators. Through the analysis of profit center performance evaluation results and EVA and RAROC of different profit centers, the highlights and difficulties of value creation of different profit centers are clarified, and the overall operating performance indicators of SZ Rural Commercial Bank also show a trend of improvement. This paper holds that the optimization of profit center performance evaluation can help banks improve their business level, optimize resource allocation, strengthen internal cooperation, identify market opportunities and risks, and stimulate the enthusiasm of employees, so as to promote the steady development and sustainable profit of banks.

Keywords: digitalization, profit center, performance evaluation, management accounting.

1 Introduction

Taking a survey of the existing research results related to the performance evaluation of commercial banks, it can be found that the academic circle mainly combines traditional theories. So far, there are not many scholars in the academic circle to discuss the performance evaluation of commercial banks from the dimension of profit center combined with digital transformation[1].

The innovation of this paper is reflected as follows: under the background of actively responding to the industry competition and interest rate marketization, this paper takes SZ Rural Commercial Bank as the specific research object to discuss how to deepen the comprehensive measures of financial fine management such as management

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accounting and risk quantification under the background of digital transformation, and achieve the balance of "quantity, cost, profit, risk and pricing"[2]. This case analysis is conducive to promoting commercial banks, especially local juridical banks represented by SZ Rural Commercial Bank, to strengthen the management, operation and decision-making functions of financial management, to promote the optimization of performance evaluation, and to improve the overall governance level of commercial banks as enterprises. At the same time, further promote SZ rural commercial bank into the industry financial integration, improve resource allocation and utilization efficiency[3]; In addition, for financial workers, in the form of new technologies, they can continue to expand their career direction and promote functional transformation. This study is expected to provide reference and reference for more enterprises similar to SZ Rural Commercial Bank in the context of digital transformation to improve financial fine management.

2 Literature Review

Clarissa G (2023) believes that digital technology plays an important role in improving financial transparency and strengthening internal controls. By analyzing the case studies of several multinational companies, they reveal how cloud computing and big data analytics can help enterprises optimize their financial reporting processes and risk management. This study provides a practical framework for exploring how digital transformation can optimize financial management processes. SIDORENKOLE (2019) examines how blockchain technology can improve supply chain financial management and increase supply chain transparency. By deploying smart contracts, businesses are able to automate payment and audit processes, reducing fraud and errors. The study provides a basis for understanding the potential of blockchain in improving the efficiency of financial management, and provides a new perspective on the discussion of research questions. Someone explores the use of artificial intelligence (AI) in predicting financial performance and supporting decision making. They demonstrate how AI tools can help analyze historical data, predict future trends, and provide real-time decision support to management. The study highlights the potential of AI to improve the precision of financial management and the speed of decision making. Chakraborty G (2020) analyzes the role of digital tools in facilitating corporate social responsibility (CSR) reporting. Their research points out that by leveraging digital platforms, companies are able to collect, analyze and report CSR-related data more effectively, resulting in increased corporate transparency and stakeholder trust[4]. This provides insights into how digitization can help enterprises achieve value orientation in financial management[5].

On the basis of fully clarifying the existing research results and combining with digital transformation[6], this paper discusses the optimization research of SZ Rural Commercial Bank's performance evaluation through the combination of organizational structure theory and performance evaluation, and analyzes the direction of financial fine management.

3 Case Introduction

The research object of this paper is SZ Rural Commercial Bank, which is a joint-stock financial institution jointly initiated by natural person and legal person. Headquartered in the WJ district of SZ City, the bank is "the people's own bank of SZ". The institution traces its roots back to rural credit unions established in the 1950s. After decades of development, it was successfully restructured and established as Rural Commercial Bank in 2004. Subsequently, in 2016, SZ Rural Commercial Bank was officially listed on the Shanghai Stock Exchange, becoming the fourth rural commercial bank nationwide to achieve A-share listing, which marked an important step towards the capital market. At present, SZ Rural Commercial Bank has a total of 94 branches, covering 3 provinces and 8 cities, including 75 branches in Suzhou and 15 off-site branches in Zhenjiang, Jiangsu and Xianning, Hubei.

In terms of operation, SZ Rural Commercial Bank continues to expand its asset scale, steadily increase the balance of deposits and loans, and ranks the top in the market share of deposits and loans in WJ region. However, under the background of intensified interest rate liberalization, sinking customer base of state-owned stock banks, and insufficient effective demand, SZ Rural Commercial Bank faces the pressure of narrowing net interest margin and pressure on revenue. Optimizing performance evaluation and matching it with the business development of the whole bank has become an urgent and critical task.

With the continuous development of SZ rural commercial Bank business, the traditional performance evaluation method of regional branches has been difficult to meet the requirements of modern bank management: the traditional evaluation method often pays too much attention to short-term business growth and market share, but ignores long-term profitability and risk control. The profit center performance evaluation pays more attention to the profitability of each business line of the bank, can more accurately reflect the operating performance of each business department of the bank, and provide more scientific decision-making basis for the bank management.

Through the separate accounting and assessment of the performance of each profit center, the profit status, cost structure and risk control of each business department can be more clearly understood, so as to formulate business strategies and management measures to realize the optimal allocation of resources and effective control of risks. By linking performance to profit, business departments can be encouraged to actively seek new profit growth points, improve business innovation ability and market competitiveness. At the same time, this evaluation method can also promote the cooperation and competition between business departments and promote the coordinated development of the whole bank.

Therefore, in the digital era, it is an inevitable trend for SZ Rural Commercial Bank to optimize its performance evaluation from regional branch performance evaluation to profit center performance evaluation. By analyzing and mining a large amount of data, SZ Rural Commercial Bank can also find the law and trend of business development, providing strong support for its own strategic transformation and innovative development.

4 Analysis on Traditional Performance Evaluation of SZ Rural Commercial Bank

4.1 The Performance Evaluation of Regional Branches is too Simple, Emphasizing Scale and Light Efficiency

(1) Sub-branches pay little attention to the term structure of products, and the deposit interest rate remains high

(2) Regional sub-branches do not pay much attention to the process management of customer number, and there is a point of surprise behavior

(3) The regional branch has a low awareness of economic capital consumption, and the capital growth rate does not match the income growth rate

(4) Risk measurement is relatively backward and can not reflect the driver of operating results

4.2 The Implementation of the Responsibility Center is Not in Place, and the Incentive and Constraint of the Assessment are Not Obvious

(1) The degree of digitalization is limited, limiting the application of management accounting and Management accounting is not widely used in performance evaluation.

(2) Management accounting is not used in the depth of performance evaluation.

5 SZ Rural Commercial Bank Profit Center Performance Evaluation Optimization Scheme

5.1 Profit Center Construction of SZ Rural Commercial Bank Based on Business Lines

1. Introduce the Basic Principles of Profit Centers.

(1) *Accounting and Assessment Respectively.* The profit center operates and accounts independently, establishes a complete balance sheet and profit and loss statement, accurately measures the value contribution of the profit center, conducts assessment and management in an independent way, focuses on the operational performance of the profit center, and attaches importance to the further development of the product line business.

(2) *Reasonable Distribution of Benefits.* The reasonable profit center is the responsibility center for SZ Rural Commercial Bank to obtain economic benefits, and the control scope of the institution should be in line with the operational performance. A sound mechanism should be established to realize the reasonable distribution of interests, provide a strong guarantee for the profit center and other stakeholders to maintain the balance of interests in the reform stage, provide a comprehensive guarantee for the legitimate interests of branches, play a good role in promoting the close cooperation between

the profit center and branches and departments of the head office, and form a joint force in the overall operation stage of the bank.

(3) Unification of Responsibilities and Rights. Each profit center should establish a clear operational responsibility system, set up a clear goal, establish a performance evaluation system consistent with the characteristics of the business product line, and combine the operating performance of the profit center to make a reasonable allocation of resources, clear rewards and penalties, and establish a management mechanism of responsibility, rights and interests relative to each other, so that the profit center can create higher returns and profits under the drive of operational pressure.

5.2 Optimization of the Performance Evaluation of SZ Rural Commercial Bank by Digital Transformation

1. Digital Optimization at the Internal Pricing Level.

In order to adapt to changes in the market environment, the head Office is encouraged to reasonably guide business development, make business driving more effective, product pricing more flexible, asset liability management, liquidity management, interest rate risk management more active, and the realization process of regulatory indicators and business indicators more active and targeted.

With the help of digital power, SZ Rural Commercial Bank marks the underlying data of different customers and products with "digital labels". Based on the optimized data, the bank gives different degrees of pricing concessions to the internal pricing of customer loans that meet the policy standards of inclusive small and micro, manufacturing, and private enterprises. At the same time, for green financial credit, scientific and creative credit products and other business types in line with the strategic development orientation, there is also a certain pricing tilt.

2. Optimization of Digitalization in Risk Measurement.

With the deepening of digital transformation, SZ Rural Commercial Bank has established a customer and debt rating system for non-retail business. Customer ratings are classified according to industry, and 19 models have been developed to basically achieve full coverage of public customers. Meanwhile, based on the internal rating results, SZ Rural Commercial Bank has designed internal rating applications including customer access, credit authorization, post-loan monitoring, limit management, etc. Evaluation results, default loss rate and other risk quantitative parameters as model results, widely used in the whole credit process risk control, and lay a foundation for the subsequent economic capital measurement

At present, for the risk of public business and retail business, SZ Rural Commercial Bank has achieved full coverage of measurement, through scientific and reasonable determination of customer default rate, default loss rate, $PD \times LGD$ measurement of customer risk cost rate, and through the system real-time monitoring of customer credit rating and repayment ability changes in the customer default rate timely correction. The calculation of default loss ratio (LGD) is based on the actual loss of the bank's ten years

of historical default debt, and subdivides all kinds of debt from the guarantee method and collateral rate. Combined with the expert experience of asset settlement and protection in recent years, the loss ratio of relevant dimensions is revised and finally determined.

3. Optimization of Operating Cost Allocation by Digitization.

SZ Rural Commercial Bank pays attention to the concise and efficient product-oriented full cost allocation scheme, and realizes the full cost measurement of lines, customers and other dimensions through the measurement of operating costs at the account level, supports the real value evaluation system of each dimension, fully reveals the cost distribution, and provides effective support for strengthening cost control and improving cost management efficiency.

The operating costs of SZ Rural Commercial Bank can be divided into two types: First, direct expenses, that is, management expenses and other expenses related to the operation activities of branches; Second, the indirect cost, that is, the cost that the branch should share by the superior organization to provide help in the operation and development, such as the cost of science and technology operation and maintenance, security costs and so on.

In terms of direct cost measurement, SZ Rural Commercial Bank uses cost segmentation, cost allocation and other methods to apportion the operating costs attributable to the institution in the process of marketing operation by scale, efficiency and other indicators. In terms of indirect cost measurement, SZ Rural Commercial Bank takes into account the actual situation of profit center and non-profit center department setup and cost accounting. It is allocated to each account layer by layer through the cost management system.

6 Research Conclusion

The optimization of profit center performance evaluation is helpful for commercial banks, especially small and medium-sized banks represented by SZ Rural Commercial Bank, to grasp the profit status of each business unit more accurately. In-depth analysis of earnings performance across products, customer segments, and geographies provides a clearer picture of which businesses have high profit contributions and which are loss-making or have limited growth potential. This refined management enables banks to more accurately formulate business development strategies, optimize resource allocation, and invest limited resources in businesses with more profitable potential and market prospects.

The optimized profit center performance evaluation can promote the cooperation among various departments within the bank to solve the problems and challenges encountered in the process of business development. The optimization of profit center performance evaluation also helps to improve the enthusiasm and work efficiency of bank employees. Through clear performance evaluation indicators and reward and punishment mechanisms, banks can stimulate the enthusiasm and innovation spirit of

employees, and promote them to contribute more wisdom and strength to improve business profitability and overall performance.

To sum up, the optimization of profit center performance evaluation plays a positive role in promoting SZ Rural Commercial Bank, helping the bank to improve its business level, optimize resource allocation, strengthen internal collaboration, identify market opportunities and risks, and stimulate employees' enthusiasm, so as to promote the bank's steady development and sustained profitability.

7 Discussion

In-depth analysis of earnings performance across products, customer segments, and geographies provides a clearer picture of which businesses have high profit contributions and which are loss-making or have limited growth potential. This refined management enables banks to more accurately formulate business development strategies, optimize resource allocation, and invest limited resources in businesses with more profitable potential and market prospects. To sum up, the optimization of profit center performance evaluation plays a positive role in promoting SZ Rural Commercial Bank, helping the bank to improve its business level, optimize resource allocation, strengthen internal collaboration, identify market opportunities and risks, and stimulate employees' enthusiasm, so as to promote the bank's steady development and sustained profitability.

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