## Discussion and Construction of Economic Value Added in Banking Performance Appraisal

#### **Ching-Wen Wang**

School of Finance and Accounting Fuzhou University of International Studies and Trade Fuzhou, China

wangjingwen@fzfu.edu.cn

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Abstract: With the development of the economy, the tradition of internal operating procedures and the change of external structure have brought great bottlenecks to the banking industry. "21st-century economic report" the banking regulatory commission data shows that the non-performing loan rate of commercial banks continued to increase. In addition, foreign banks are flocking into the Chinese market, making them more competitive. In this case, we must start from the bank itself to carry on the effective computation and the appraisal of the performance. In this way can form a certain incentive mechanism for improvement. In the past, the study found that most Banks to create real value is not high as traditional indicators, Banks have inflated the actual benefit, is not conducive to the overall performance of listed commercial banks in our country, such ability more can find their own development problems of real and effective and the real situation, Only by improving the performance appraisal system can the banking industry develop better.

#### **1. Introduction**

With the comprehensive opening of the banking market and the challenge of many foreign banks entering the country, only by improving the operating performance of banks can they narrow the gap with other banks and stabilize their own development in the face of increasingly fierce market competition can they not be hit hard when the next crisis comes. At present, there are a lot of indicators to evaluate the business performance of the banking industry, so it is very important to choose a suitable and effective evaluation method, which can effectively motivate managers and internal employees to create more profits and play a certain role in improving the value evaluation of commercial banks in China.

The internal operation mode of banks needs to be adjusted gradually with the changes in the financial environment, so the way to evaluate performance should not only focus on profit. When the external conditions change, the banking industry also needs to actively find ways to adjust the original idea and adapt to the development of the new economic environment. At present, many scholars believe that one of the quantitative indicators to evaluate the competitiveness and performance of the banking industry is the method of economic value-added.

The performance evaluation of commercial Banks is a very big impact on the macroeconomic, scientific, and objective evaluation of commercial Bank's operating results, can reflect the development of commercial Banks is reasonable is effective, stable create profits for shareholders, also, through economic value added to test whether the project can be sustainable, can also illustrate the usefulness of the performance evaluation of the economic value-added method. Economic value-added indicators changed the traditional indicators of short-term behavior, also warned the management of commercial Banks in the emphasis on short-term profits at the same time, more should pay attention to the bank's long-term sustainable development, thus establishing an effective mechanism of management and bonuses, only internal mechanism to run efficiently, can fundamentally to the overall development of Banks to provide internal motivation and good inner conditions.

#### 2. Literature Review

Many large foreign companies have long started to use EVA to evaluate the value created by the company, such as Coca-Cola, Diageo, SPX in the United States, and Sony in Japan. They reward managers based on their ability to create value in the company.

Bank of America was the first to introduce EVA performance evaluation, and slowly some well-known international commercial banks followed closely, such as Citibank. In the actual use process, the use of economic capital will be more stringent pre-approval, it can be used as a preventive. Therefore, it can be a good demonstration of the bank's ability to create real value.

In foreign countries, many scholars have conducted empirical studies on corporate performance, analyzing traditional indicators such as return on assets, return on equity, EVA, and so on, and finally proving that EVA is more effective than other traditional indicators.

For example, Debdas Rakshit (2006) used the EVA performance evaluation method to evaluate the performance of the sample companies in the past five years and believed that the traditional performance evaluation index could not reflect the real operating situation of the company, so the performance evaluation system of EVA was needed.

For example, Uyemura (1996) took the top 100 banks in the United States as samples to demonstrate the performance of banks by using return on assets and EVA, and the results showed that EVA could effectively reflect the real situation of banks. Teemu Malmi (2001) found in his study that EVA can improve the accuracy of bank performance evaluation and enhance the role of bank operation management and incentive. In addition, Franco Fiordelisi (2004) took 71 European banks as research samples to demonstrate the degree of correlation between EVA and the index of shareholder value, and the study showed that EVA can truly reflect the shareholder value of banks. Then, Li Tao and Wang Chao (2010) tested the relationship between EVA of banks and the interests of shareholders in the way of regression analysis.

To sum up, while the application of EVA in foreign countries is mature, the study of EVA in China's commercial banks is still in its infancy. In 2002, China Construction Bank introduced this indicator for the first time, affirming how crucial the performance evaluation is to the performance evaluation of the entire commercial banks. And December 29, 2012, cloth of State-owned Assets Supervision and Administration Commission of the State Council issued the revised "interim measures for the central enterprise operating performance evaluation, head of the" clear requirement to apply the economic added value of state-owned enterprises and will rise to fifty percent of the total index evaluation of economic value-added, and the traditional indicators such as the proportion of the total amount of profits dropped to twenty percent.

At present, the performance appraisal system has become one of the core parts of the domestic and foreign banking management and control system, which can comprehensively evaluate the value creation ability from the bank to individual employees and apply the business concept of value maximization to all departments of commercial banks. Although there are some differences in the models or values used by many authors, it is not difficult to see the positive nature of EVA applied in the performance evaluation of commercial banks.

#### 3. Overview of Economic Value-Added Theory

#### 3.1 The Connotation of Economic Added Value

Economic Value Added (EVA) was proposed and registered as a trademark by Stemsetwart in 1982. Is a new type of enterprise performance evaluation method, on the accounting statements, calculation of the final profit enterprise refers to the profit after tax, but for an EVA principle, after-tax profits cannot fully reflect the enterprise's ultimate profitability or value, without considering the enterprise cost of capital and capital costs, and EVA can evaluate enterprise created wealth for shareholders.

#### **3.2 Eva Calculation Formula**

The calculation formula of EVA is as follows:

EVA = after-tax operating profit - total cost of capital = after-tax operating profit - cost of capital × weighted average cost of capital. The detailed formula is shown in Equations (1)-(7).

NOPAT: After-tax operating profit, which represents the company's operating profit (profit before interest and tax) after deducting income taxes on a cash basis. Therefore, net operating profit after tax is the after-tax profit obtained from the operation of the company without involving the capital structure, that is, the after-tax investment income of all the capital, reflecting the profitability of the company's assets.

Tc: Total invested capital, which is all capital invested by creditors and owners.

WACC refers to the total cost of capital calculated by the weighted average of the cost of capital of various long-term funds based on the proportion of variable capital in the total capital of the enterprise. The weighted average cost of capital can be used to determine the required rate of return for venture capital projects with an average.

EVA=NOPAT - TC $\times$ WACC	(1)
NOPAT = Net profit + non-operating expenses $\times$ (1-income tax rate) - non-operating income $\times$ (1-income tax rate)	(2)
+ current deferred income tax liabilities - current deferred income tax assets + interest expenses on debt $\times$	
(1-income tax rate) + changes in impairment provisions for various assets in the current period + minority	
shareholders' equity	
Tc = debt capital + equity capital	(3)
Debt capital = bonds payable + current deferred income tax liabilities - current deferred income tax assets	(4)
Equity capital = common equity + minority shareholders' equity + non-operating expenses $\times$ (1-income tax rate) -	(5)
non-operating income $\times$ (1-income tax rate) + the sum of the ending balance of various assets impairment	
provisions in the current period	
WACC= Cost of Debt Capital Ratio × Debt Capital/Total Capital × (1-Income Tax Rate) + Cost of Equity Capital	(6)
Ratio × Equity Capital/Total Capital	
Cost of equity capital ratio = risk-free return + risk premium * coefficient B	(7)

#### **3.3 Advantages of Eva Method**

1.EVA can accurately judge the future development potential of a bank. The traditional performance evaluation method is generally analyzes the accounting data, and so forth, such as balance sheets and income statements, mainly in the business of the has already happened in the past to evaluate and analyze the reason, values a company's capital condition such as the proportion of deposit, or profits, this evaluation method can make the company into a value only short-term gains and ignore the long-term planning, The evaluation method of EVA takes into account the situation of equity capital, which not only accurately evaluates the operating performance of a bank, but also values the ability of the bank to develop in the future. From the overall layout and perspective, EVA is more comprehensive and objective.

2.EVA can better reflect changes in the external environment. China's market economy is not very perfect and stable, often affected by policy implementation. Camp in 2016, for example, just the implementation of change projects, and other tax changes that would bring some changes to the balance sheet and income statement, but separate statements to analyze, from the difference is not obvious, but also can't reflect whether a company's management level, the technical level is improved, EVA just to make up for the shortage.

3. Truly reflect the operating performance of the bank. Although the EVA calculation still needs the data in the statement, EVA has adjusted the data to some extent, screened the data according to the different conditions of various industries, and tried to avoid the deviation of the true conclusion, so that the analysis can be more specific to a certain industry.

#### 3.4 Disadvantages of Eva Method

## 4. The Calculated Result of Eva is an Absolute Number, Which is Not Conducive to the Horizontal Comparison between Banks of Different Sizes.

This method can reflect the operating performance of the bank in different periods when the size of the bank does not change.

But for different assets size of banks or the same bank size changes in the case, it cannot be on

the bank

Compare the performance of the banks.

# 5. Eva Reflects the Result of Bank Operation, Which is Not Conducive to the Analysis of Existing Problems in Bank Operation

The problem. When we evaluate the performance of banks, on the one hand, we can use it as a basis to motivate relevant personnel.

Another, more important aspect is to find out the problems existing in the bank's operation to improve the operation activities

Line improvement. In this regard, compared with the traditional performance evaluation methods, EVA is somewhat inadequate.

V. Conclusions and Suggestions

The study found that most Banks to create real value is not high as traditional indicators, is not conducive to the overall performance appraisal, hope the Banks can build up a more perfect EVA performance appraisal system, so that more can find their own development problems of real and effective and the real situation, can suit the remedy to the case, to solve, to improve the performance appraisal system.

Based on the above, three suggestions are put forward. First, promote EVA. To maximize the value of banks, it is necessary to strengthen the promotion of the EVA concept and establish a perfect EVA performance evaluation system. Then, an EVA-based incentive system is established to link the wealth of managers and employees with the performance of the company. Only in this way can employees be more motivated to work hard and improve their own and the wealth of the company. Finally, increase the commercial bank interest margin income. In the process of using EVA, we know that Eva is influenced by NOPAT, to improve NOPAT, we need to increase the bank's income. Therefore, we need to be through the deposit-loan interest rate spread to achieve. Based on this, we need to improve the bank's service quality, attract more customers, to find high credit, high-quality assets of corporate cooperation.

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### References

[1]Debdas Rakshit. EVA based performance measurement:a case study of Dabur India limited[J],Vidyasagar Univesity Journal of Commerce, 2006,13(11):40-59

[2] Uyemura D ,Kantor C,Pettit J.EVA for banks:value creation,risk management and profitablity measurement.Journal of Applied Corporate Finance,1996,(9):94-113

[3]Teemu.Malmi.Balanced.Score.cardsin.Finnish.Companies:Aresearch.Note[J].Managemen Accounting Research,2001(02)

[4]Franco.Fiordelisi.Phil.Molyneux.Value.Creation.in.Banking.http://ssrn.com/abstract=965 441,February 2007

[5]LiTao,WangChao.The.Study.on.Application.Value.of.EVA.in.Enterprise.Performance Evaluation[P].E-Business.and.E-Government .(ICEE), 2010 International Conference on,2010.