

# Risks Faced by Bank of Australia and How to Deal with It

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**ABSTRACT.** Banks are faced with various risks, so an effective strategy is necessary. This paper analyzes the business performance of two Australian banks and points out the risks they face and the countermeasures. In addition, this report also discusses about the current macroeconomic prospects and the future trend of the monetary policies of Australia and China. We hope this report can be helpful to the related performance analysis and risk management.

## 1. INTRODUCTION

Almost all the banks are facing different kinds of risks, which are the most severe issue recently. To solve them, Bank CEOs must develop sound and effective strategies to deal with potential diversities and challenges. The objective of this report is to compare the performance of National Australia Bank and Westpac Bank and inform CEOs the risks that the bank will face based on forecasting an increase of 122 basis points in interest rate so that take positive and timely measures and improve the profitability of banks.

The following report will be divided into main two parts. Firstly, the performances are measured based on calculation and key ratios analysis for both banks. In the second section, as a risk management team, we will brief to the Bank CEO and Each group. Due to rising interest rates, the impacts on both banks are analysed. Meanwhile, there are some strategies and recommendations generated through some changes about declining in net worth using futures and other risks faced in current business respectively.

## 2. MEASURING BANK PERFORMANCE

### 2.1. Analysis based on performance data

Based on the performance data collected in annual reports of National Australia Bank and Westpac Bank, this report compares and contrasts the performance of two banks from 2015 to 2017. According to the balance sheets and income statements, the following conclusions are drawn. As for National Australia Bank, the interest expense, operating expense and income tax expense were on the decline for this period. The amount of provision for loan losses was increasing from \$733 million to \$824 million so that this bank had more allowances for uncollected loans and loan payments. In addition, the interest income of banks was increasing, which increased the earnings of banks. With the slight decline of net interest margin, the ability of bank to make investment decisions has been weakened. The amount of average interest earning assets of both National Australia Bank and Westpac Bank had annual growth of \$30 billion. In terms of these three kinds of expenses of Westpac, almost all of them showed a floating trend of decreasing first and then rising in the past three years instead of interest income. Besides, both provision for loan losses and NIM peaked in 2016 at \$1124 million and 2.10% respectively. There has been an upward trend of the total equity over the past three years. Compared with NAB, Westpac is more stable in terms of income.

### 2.2. Analysis based on bank ratios

In respect of the presentation of these two banks' ratios, the income ratios, expense ratios and other ratios are calculated which will be shown in the appendix. In 2015, the income ratio difference

between the two banks was large which was 0.73%. In 2016, the gap became smaller and in 2017 it became 0.31%. This means Westpac bank earned more on asset than NAB bank. Furthermore, the provision for loan loss ratios of both NAB bank and Westpac between 2015 and 2017 had a little change, and these ratios were almost at 0.10%. As for the interest expense ratios and tax expense ratios, Westpac bank also had higher ratios than NAB bank. Moreover, for other ratios, ROE ratios of Westpac bank were above NAB bank over three years. In 2016, the ROE ratio of Westpac bank was 12.82%, while the ROE ratio of NAB bank only reached 0.70%. Thus, NAB's investors have earned far less in this year than those in the other two years. As far as ROA ratio was concerned, Westpac performed better than NAB bank, which means that per Australian dollar asset in Westpac was more profitable for investors than NAB. The ROA ratios of Westpac were close to 1.00%, but the ROA ratios of NAB bank were under 0.70%. However, the EM of NAB bank was higher than that of Westpac. Therefore, Westpac had a smaller asset size. Therefore, Westpac performed better than National Australia Bank between 2015 and 2017 in terms of most performance data and ratios.

### **2.3. Risk Assessment**

Both of two banks will have credit risk which is the potential that customers will fail to meet the obligations in accordance with agreed terms. As for Westpac Bank, according to the annual reports, impaired assets among cross-border outstanding were \$12 million as at 30 September 2017 (2016: \$277 million, 2015: \$6 million) which would let this bank be exposed to the credit risk. This bank's consumer credit risks are diversified because of large market share in Australia. For National Australia Bank, it is also exposed to the credit risk which may influence its financial performance. Lending activities occupy the largest percentage of the bank's credit risk. Besides, credit risk also has other sources which include books of banking and trading, other financial instruments and extension of commitments and guarantees.

## **3. Measuring Bank Performance**

### **3.1. Interest rate risk measure**

Through some relative calculations, the change in interest rate will lead to the change of the bank's net worth. An increase of 122 bps in the interest rate will cause a net loss of 328.71 million on the bank's equity directly. Some solutions must be made to deal with the situation or this may result in a disaster as a result of the lack of attention. Moreover, it may make bank exposes to interest risk and liquidity risk. The equity reflects the bank's performance and the poor performance will cause loss of confidence of the investors and the market, finally even results in insolvency of the market.

Some assets and liabilities are sensitive to the change of the interest rate. If the interest rate increases, the present value of the assets and liabilities seem to decrease and the net interest income will be impacted. According to our calculation, over a 30 days horizon, as the RSL is larger than RSA, the bank may have a negative repricing gap of -\$785 million, and the impact of interest rate increasing 122 bps on net interest income will be -\$9.577 million. Furthermore, over one year horizon, the bank has a negative cumulative gap of -\$810 million and a loss of net interest income of \$9.882 million. In conclusion, the statistics show that the loan base of our bank is expanding faster than the deposits.

### **3.2. A review & designing a future strategy**

The bank is facing the situation of a great loss of the equity. Some hedging strategies must be used to balance this risk. The bank forecasts the increase of interest rate which leads to the decrease of spot price and also value of the assets, shown from the positive Dgap. We can use hedging strategy to go short IFRs now and buy them later in order to cover the potential net worth loss. According to the calculation, the amount of futures contracts we need to sell now is 3022. When we suffered the loss brought by the increase of interest rate, we can cover part of the loss on net worth using these earnings on IFRs. We will still suffer a net loss is after we hedge the risk exposure on equity.

### 3.3. Other risks the bank is facing

#### 3.3.1. Credit risk

Credit risk refers to the possibility that the cash flow of loans and securities held by banks will not be fully repaid.[1] Credit risk usually arises in the period of economic contraction and special events that have significant impact on the company's operation. During the period of economic contraction, borrowers are more likely to fail to repay in time due to the overall deterioration of profitability. At the same time, when the event has an important adverse impact on the company's operation, it is very likely to produce credit risk. For example, when people know that there is melamine in Sanlu milk powder which is harmful to the health of infants, the subsequent lawsuits and public boycotts make the famous Sanlu Company bankrupt and unable to repay its debts, resulting in credit risk.[2]

In the bank, there are about 17.86% loans may be existing the credit risk, and there are many ways to manage credit risk. The traditional methods are standardization of loan ascertainment and diversification of prospective borrower. The standardization of loan ascertainment is to examine the credit standing of borrowers according to certain procedures and indicators to avoid possible credit risk. For example, if a bank decides whether to lend a loan to a company, it should first have a detailed understanding of the company's financial situation. Moreover, banks can reduce credit risk by decentralizing loans. The basic principle is the offset of credit risk, which means constructing appropriate portfolio among different industries can reduce certain credit risk.

#### 3.3.2. Liquidity risk

Liquidity risk refers to the risk that commercial banks cannot obtain enough funds in time or cope with asset growth or to pay maturing debts at reasonable cost, although they have solvency.[3] When a bank lacks liquidity, it cannot rely on debt growth or quick liquidation of assets at a reasonable cost to obtain enough funds, thus affecting its profitability. In extreme cases, inadequate liquidity can lead to the failure of bank. If the interest rates rise, the T-notes and T-bonds in the balance sheet could fall in value. Therefore, taking liquidity gap into account to measure the liquidity risks plays an important role on the enough liquidity and profitability of the bank.

According to the calculations, it found that the bank has about 20.71 cents liquidity per asset. Meanwhile, the negative liquidity gap is about \$475 million, which can be seen that the bank has liquidity risk and there is no enough cash to cover the funds. Therefore, the bank can increase the interest rates of loans or stop issuing new loans. At the same time, the Fgap of \$1015 million which is positive shows that the bank cannot cover the borrowings by enough liquidity assets. To solve the negative liquidity risk, stored liquid funds can be used or additional funds can be borrowed.

### 3.4. Other risks the bank is facing

#### 3.4.1. Current macroeconomic outlook

The mid-year report pointed out that since 2018, China's economic operation has been basically stable, while profits of industrial enterprises have rebounded. Employment situation has been stable, and prices have been basically stable. Investment growth has continued to decline, but imports and exports have maintained a relatively high growth rate. However, many uncertainties are gradually emerging or increasing. The sustained decline in consumption growth has led to a decline in the vitality of enterprises' operation and forced to increase leverage. On the other hand, the growth rate of disposable income of residents is lower than the growth rate of household debt, thus further squeezing household liquidity and increasing the difficulty of de-leveraging. What is more serious is that the negative feedback effect of debt between households and business sectors spills over into the banking system, leading to an increase in the bad debt rate of banks.

The RBA said that household consumption is the most critical factor affecting the economic development prospects. Due to the recent declines in house prices and stock markets, it is expected to have some impact on the household expenditure index. Despite greater optimism about GDP growth and unemployment, the current rate of economic inflation is growing slowly. Australia's economy is doing well, with GDP growth expected to around 3.5%, but growth will slow by 2020 due to slower growth in resource exports. The RBA expects unemployment will fall and inflation will

intensify by 2020. The outlook for the labor market is still optimistic. As economic growth exceeds expectations, the unemployment rate is expected to fall to 4.75% by 2020. Slow wage growth is not conducive to stimulating consumer spending growth. Although economic growth may accelerate and unemployment may decline, the RBA remains cautious about the prospects for wage growth, suggesting that expected growth in the next few years may be slow.[4]

#### 3.4.2. *Future directions of the monetary policy*

When discussing the orientation of monetary policy in 2018, China's government work report said that prudent monetary policy should be neutral and moderate.[5] Manage the general gate of money supply and maintain the reasonable growth of the broad money M2, credit and social financing scale. Maintain the reasonable and stable liquidity, and increase the proportion of direct financing, especially equity financing. This means tight regulatory policies and relatively flexible monetary policies will be used to avoid excessive tension and out of control in the process of de-leveraging.

The Australian dollar strengthened again, as American dollar weakened and the global economy continued to grow strongly. Commodity prices enabled investors to maintain liquidity with the Australian dollar in this environment. Interest spreads and a slump in the property market will eventually lead to a fall in the Australian dollar. If the economy develops as expected, cash interest rates may be adjusted to rise in the next step. Uncertainty in consumer prospects remains an important consideration.[4]

## 4. Conclusion

In part one, after the calculation of essential ratios, Westpac Bank performed better compared to NAB Bank in general. In the second section, with the interest rate increasing by 122 basis point, it caused the net interest income decline at 9.577million in 30-day period and at 9.882 million over a year because of a negative cumulative gap, which also led to the net worth of bank loss about \$328.71million. According to the influence on net worth as well as the NII, in order to hedge interest rate risk better, we suggest to go short on 3022 IRFs now and buy them later which will make a loss of \$148072622.2. In the future, the Chinese government will adopt strict regulatory policies and relatively flexible monetary policies to cope with the market environment.

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