Banking Sector Efficiency in Namibia

By Jonathan Adongo

Introduction

Central bankers recognize that efficiency in the banking sector is a key contributor to macroeconomic stability, which is a precondition for economic growth and is important for the effectiveness of monetary policy. In addition, a banking sector’s ability to allocate credit efficiently has positive implications for economic growth.

To inform the efforts of policymakers and regulators in their attempts to boost the effectiveness of the banking sector in allocating credit efficiently, this policy brief focuses on presenting the key findings of more detailed reports aimed at empirically identifying factors that influenced efficiency in Namibia’s banking sector between 1998 and 2003 (see Further Reading section).

Over this period, the commercial banks in Namibia included Bank Windhoek, First National Bank Namibia, Nedbank Namibia and Standard Bank Namibia, whilst state-owned banks included the Agricultural Bank of Namibia and the Namibia Post Office Savings Bank.

Efficiency Measures

Three different measures were adopted to measure efficiency in Namibia’s banking sector. The first was the alternative profit X-efficiency. It is based on microeconomic foundations.

Alternative profit X-efficiency increased from 0.85 in 1998 to 0.86 in 2000. Following a slight decline to 0.85 in 2001 it increased to 0.89 in 2002 and fell back to 0.72 in 2003.

The trend in efficiency from 2001 coincides with merger and acquisition (M&A) activity, which began with the merger between City Savings and Investment Bank and South West Africa Building Society (SWABOU) in 2001 and ended with the merger of SWABOU Bank Limited and First National Bank of Namibia in 2003.
Efficiency Measures

The response time by regulators to worrying efficiency levels will depend on which efficiency measure is used i.e. microeconomic, accounting or macroeconomic.

The second efficiency measure was profit before tax per employee, which is an accounting ratio.

![Figure 2: Profit before Tax per Employee](image)

Profit before tax per employee increased steadily from 0.16 in 1998 to 0.22 in 2003. Except for a the lack of growth in 2002, this measure does not clearly reflect the impact of M&A activity in the Namibian banking sector in that period.

The third efficiency measure was the interest rate spread between deposit and lending rates, which is a macroeconomic measure.

![Figure 3: Interest Rate Spread](image)

The interest rate spread increased from 0.078 in 1998 to 0.079 in 2000, following a slight decline to 0.077 in 1999. From 2001, this spread declined steadily from 0.077 to 0.059 in 2003. Therefore, the interest spread measure clearly illustrates the effects of M&A activity in the Namibian banking sector between 2001 and 2003.

While all three measures illustrate the same effect of M&A on efficiency i.e. an increase, they all differ on post M&A efficiency effects. While alternative profit X-efficiency clearly indicates that efficiency fell in 2003, profit before tax per employee indicates that efficiency increased in 2003 and interest spread indicates that efficiency also increased in 2003 but only very slightly. This implies that the response time by regulators to worrying efficiency levels will depend on the efficiency measure used.

Potential Factors

Using Limited Dependent Variables (LIMDEP) version 7.0, which is an econometric software, these measures of efficiency were regressed on a random effects, panel data set consisting of various factors that were thought to potentially affect efficiency using the Ordinary Least Squares statistical parameter estimation technique. These potential factors were:

<table>
<thead>
<tr>
<th>Table 1: Potential Influencing Factors</th>
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<tbody>
<tr>
<td>Bank size: small, medium, large, huge</td>
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<td>Organizational form: merged, acquired</td>
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<tr>
<td>Organizational governance: owned by holding company owned, multi-layered holding company, international holding company, publicly traded</td>
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<tr>
<td>Organizational characteristics: age, risk</td>
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<tr>
<td>Market concentration</td>
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<tr>
<td>Regulator identity: Bank of Namibia, Government</td>
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Based on industrial economic theory on economies of scale, bank size up to a certain point is expected to be related to a higher level of banking sector efficiency, beyond this point a reversal in this relationship begins to set in because banks may suffer from scale diseconomies due to the difficulties of managing a very large entity.

The effect of a higher level of M&A activity on organizational form is also expected to be related to a higher level of banking sector efficiency due to the efficient structure, relative market power or structure-conduct-performance (market power) hypothesis.

The organizational governance model that ownership by a holding company entails is expected to be related to a higher level of banking sector efficiency. However, ownership by a multi-layered or international holding company is expected to be related to a lower level of banking sector efficiency.

Also, the organizational governance model that a publicly traded holding company entails is expected to be related to a higher level of banking sector efficiency based on principal-agent theory.

Based on the learning by doing hypothesis the age of a bank is expected to be related to a higher level of banking sector efficiency.

On one hand, a higher level of risk is expected to be related to a higher level of banking sector efficiency because this implies a higher reliance on loans as investments, which are more highly valued than securities that are associated with more risk-averse banks.

On the other hand, a higher level of risk can also be expected to be related to a lower level of banking sector efficiency in an environment dominated by micro and small-scale enterprises, which are associated with higher levels of credit and business risk that result in higher default rates.

Based on the quiet life hypothesis, lower market concentration is expected to be related to a higher level of banking sector efficiency because banks in these less competitive markets can charge higher prices for their services, but might feel less pressure to keep costs down.

Where there are limited alternative sources of financial services, banks in markets that lack competition can exercise their market power to charge prices that deviate widely from their equilibrium levels to the detriment of consumers who suffer from lower deposit rates and higher loan rates than would have existed in markets with more competition.

It is expected that regulation by the central bank, Bank of Namibia, will be related to a higher level of banking sector efficiency as opposed to regulation by Government based on their higher level of regulatory expertise.

**Key Findings**

For policy purposes, it is most desirable if evidence is robust across a variety of measures.

From all the factors presented in the previous section that could potentially influence banking sector efficiency in Namibia, only the effect of market concentration was robust across all three measures between 1998 and 2003.

This implies that although M&A deals are positively associated with the measures of efficiency in Namibia’s banking sector, the effects of adverse pricing on the welfare of the society, working in the opposite direction, should be considered by the regulator in any anti-trust assessment of potential deals.

**Market Concentration**

M&A deals in Namibia result in less competition and adverse pricing, which negatively affects the welfare of society and works in the opposite direction from the higher level of banking sector efficiency that these deals represent.
Although the variable capturing risk is only robust when the alternative profit X-efficiency measure is used, risk management in general and small business credit scoring in particular can contribute to reducing the overall operational costs of the banking sector in Namibia.

To the extent that it assists banks in automating the credit and risk management processes and makes it possible to introduce currently available operational innovations, this should have an indirect impact on banking sector efficiency in Namibia.

**Recommendations**

1. Bank of Namibia should consider the adverse effects of excessive banking concentration on the welfare of the Namibian society when assessing merger and acquisition proposals.
2. Credit information systems in general and small business credit scoring tools in particular should be introduced in Namibia to reduce overall costs in the banking sector, which will have an indirect impact on banking sector efficiency and make innovative financial service provision aimed at increasing competition and access to finance a reality.

**Further Reading**


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