REJUVENATING THE ZIMBABWEAN ECONOMY: THE ROLE OF BANKS

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ABSTRACT
There is a question of calibration among financial institutions; that is how much loan and advances are “enough” for the economy to grow. The banking industry has taken some steps to stimulate sustainable development, however more needs to be done. The aim of this paper is to provide an overview of the whole banking industry, its functions and roles they play. The regression models are used to make a comparative analysis between GDP and total advances, and deposits including the flow of credit to agricultural, manufacturing and mining sectors and their sectoral growth rate, respectively. Yearly data on total credit and advances, and total deposits with their corresponding GDP for the period of 1998 to 2005 was used. The credit to different sectors and their corresponding growth data used was from 1998 to 2003. Empirical results show that the variation in GDP can be explained by total credits and advances. However, there is no evidence that total deposits and banking lending rates are significant in determining GDP. The conventional banks can adopt the profit-sharing model in financing firms.

Keywords: Banking industry, gross domestic product, bank credit, bank roles, profit-sharing model.

INTRODUCTION
Over the years financial intermediaries have become a significant aspect of the Zimbabwean economy. Banks are unique businesses, not only as guarantors of deposits, but also as suppliers of capital. The banking industry is the heart of the economic development of any country. Its role to sustainable development is enormous, because of its intermediary roles in an economy. The availability of banking infrastructure is considered as one of the prerequisites for rapid and balanced development of any country. There is a question of calibration among financial institutions; how much loan and advances is “enough” for economy to grow? The drying up of capital inflows invested in the Zimbabwe Stock Exchange is continuing to challenge liquidity management. The balance of payment is in deficit at a time when domestic credit demand is very high resulting in a vicious loop of reduced access to liquidity slowing growth. Banks' loan to deposit rates leaves a lot to be desired (Chagwiza, 2012). The majority of Zimbabwean banks lending and investment policies, clearly are at variance with the economic turnaround efforts needed in the country. Some financial intermediaries are paralyzing the money and capital markets by sterilizing huge domestic deposits that they are not passing on to the productive sectors of the economy through lending. Industries and businesses are now seeking offshore loans because local institutions are reluctant to extend their hand to them to recapitalize (RBZ Monetary Policy, 2011).

The banking industry transforms money in terms of duration, scale spatial location and risk. Thus it influences the pace and direction of economic growth. Zimbabwe desperately needs capital injection to resuscitate its decade long ailing economy. Some banks are not able to lend in order to preserve capital and liquidity ratios. If they opt to offer loans, they offer short term and expensive forcing industries and businesses to opt for rights issues or not borrowing at all, which has restricted
their capacity to raise output. In other words, Zimbabwe's banking industry is battling a liquidity crisis, which has undermined its capacity to on lending.

The paper explores the role of the whole Zimbabwean banking sector in progress toward sustainable development. Thus we need to ascertain the relationship between the total deposits and advances, and GDP; credit deposit ratio and GDP; lending rates and GDP. Here we make use of regression models that have been widely used to analyse the number of bank failures over some period analysed using explanatory variables such as bank profitability, corporate profitability and bank borrowings (Davutyan, 1989 and Saha, 2010).

The rest of the paper is organized as follows. First we map out the architecture and the roles of banks in a macroeconomic system by looking at their products in general. In the same section we present a typology of actions that the banking industry is taking. We then define the data and models used. Results are presented and we conclude the paper with a brief discussion of the findings.

THE ZIMBABWEAN BANKING INDUSTRY

The availability of cheap credit is a boon for the economic development of the country. Thus the Zimbabwean banking system can have a positive influence on the economic growth through channeling resources in the direction of national objectives and priorities. Zimbabwe needs to resuscitate all its economic sectors which were grounded during the hyperinflation era. Following the inauguration of the unity government in early 2009, Zimbabwe has embarked on the implementation of Short-Term Economic Recovery Programme which has seen a certain amount of progress in the country's economy. The Reserve Bank of Zimbabwe (hereinafter RBZ) has engaged banks in priority lending mainly focusing on three crucial economic sectors of the country namely; agriculture, mining and manufacturing. The three sectors are the wheels of the economic development and they need to be heavily funded. However, the banks’ lending to different sectors is not uniform. This is because banking industry is still struggling after the restoration of the economy and is not running its business operations at the full capacity. Some banks are struggling to meet the minimum capital requirement set by the central bank and the amount of money that banks loan lend is directly affected by the reserve requirements set (RBZ Monetary Policy, 2011)

Several companies in different sectors are seeking loans and advance to recapitalize operations. The rise in demands for loans is due to capital constraints being experienced. Manufacturing companies have a pronounced insufficiency of resources to finance operations such as to maintain and increase volumes of production. The goal of expansion and diversification is far beyond the means of most companies. Some banks are surviving on the bank charges and minimum balances for investing, making it hard to generate money for lending to needy investors. Major deposits are done by companies as allowances and wages of their employees who will withdraw almost all of their allowances. Majority of those workers are earning less than the poverty datum line making it difficult for them to save. The traditional lines of credit are not available; those few available are short-term and very costly. Due to the fact that Zimbabwe has no currency of its own it has adopted the use of multicurrency for the transactions, and the central bank is no longer perform all its roles especially being the lender of last resort (RBZ Monetary Policy, 2011).
In Zimbabwe, the banking sector is divided into three classes which are; central bank, public sector banks and private sector banks. The RBZ has the responsibility of monitoring and regulating bank operations, and crafting policies. The RBZ performs the function of lender of last resort to instill confidence in the money and credit markets. Public sector banks comprised of institutions owned by the government. The institutions were established to enhance the government goals and policies. Then majority of banks in Zimbabwe fall in the private sector, which are wholly owned by companies and individuals. However, Zimbabwean banks can be loosely classified according to their sector priorities, such as; industrial banks (Infrastructural and Development Bank of Zimbabwe), agricultural banks (AgriBank) and foreign exchange banks which are responsible for international payments (RBZ Monetary Policy, 2011)

ARCHITECTURE OF THE BANKING SECTOR

The Zimbabwean banking industry is divided into five groups. They are grouped according to their main functions. We have the commercial banks that carry out the business through network of branches, agencies and mobile facilities. The banks offer the current and deposit account facilities, and provide loans and overdrafts to needy business organizations and individuals. They also offer foreign exchange facilities including accepting foreign exchange deposits (Basil, 2002; Heffernan, 2005 and Somashekar, 2009). In addition they are involved in financial advice and clearing systems. Then second, we have the merchant banks, which their function is to provide wholesale banking services to complement the banking facilities extended by commercial banks. This type of bank is specializing in the money and capital markets. Merchant banks provide trade financing through acceptance of credit facilities, that is short and medium term credits. As commercial banks, according to RBZ Monetary Policy (2011), merchant banks can provide corporate advisory services at a fee, and are involved in underwriting of securities and portfolio management. They can provide foreign exchange facilities (Basil, 2002; Somashekar, 2009).

There are few building societies in Zimbabwe and they are mainly involved in savings, fixed deposits, a wide range of share deposits and mortgage lending. Individuals and companies who need to purchase houses and commercial buildings but not having adequate money may be assisted by those buildings societies through mortgage loans. There is only one savings bank in Zimbabwe. The bank is involved in offering savings accounts and offer post services such as telegraph, registered mails and general letters. It has a network of branches dotted around the whole country (RBZ Monetary Policy 2011).

ROLE OF THE BANKS

In an ailing economy like of Zimbabwe, banking industry plays a very important role. The banks create money in the economy by making loans to different economic sectors, thus banks are in the epicentre of capital formation. The banks, according to Jeucken (1999), receive money and passing it on to productive and needy sectors. The banks provide short, medium and long term finance to priority sectors. They mobilize people and economic agents who are reluctant to deposit their money to deposit through offering attractive deposit rates. According to RBZ Monetary Policy (2011), Zimbabwe deposit rates are an insult to the depositors and ranges from 0.5% to 15%. Monetisation is one of the important roles played by banks. Monetisation is the process of converting or establishing something into legal tender and this is the supreme role of the central bank. Monetisation may also refer to exchanging securities for currency, selling a possession, charging for something that used to be free or making money on goods or services that were previously unprofitable. Banks have to
concentrate on maybe the rudimentary functions of accepting deposits, ensuring the safe return with the agreed additive, after utilizing those deposits for its lending activities (Basil, 2002; Heffernan, 2005, Saha, 2010 and Somashekar, 2009).

The banking industry transforms money by duration. The involvement of banks in priority sector lending leads to economic development. The RBZ has crafted sectoral thresholds for lending that banks are supposed to adhere to when issuing loans. The major beneficiaries of bank loans are the agriculture, manufacturing, distribution, households and mining sectors. The banking industry has a duty to offer short- and long-term loans to different economic agents. In selecting sectors to offer loans, the banks look at those projects that are commercially viable and have national impact in terms of employment creation, foreign currency earnings, community development and other social and economic benefits (RBZ Monetary Policy, 2011).

According to RBZ Monetary Policy (2011), the lending rates remained prohibitive to the productive sectors. The lending rates range from 12% and 18% annually which violates the cheap money policy role. According to Jeucken (1999), there are four typology of banking which are; defensive, preventative, offensive and sustainable. The banks that fall under defensive banking are non-active and may try to delay or oppose new legislation. They are more concerned about profitability. Then the banks that fall under preventative banking are those that integrate potential revenues, costs and risks in their day to day business. These banks will only consider their internal processes. The offensive banking is those that are continuously looking for win-win solutions. Then the banks that fall under sustainable banking are those that foster projects at a higher risk, lower rate of return and longer payback periods. Here the banks do not look for the highest sustainable rate of return but for the highest sustainable rate of return while being profitable in the long run (Jeucken, 1999). However, there are very few banks in Zimbabwe that fall in this ring.

**METHODOLOGY**

The yearly data on total credit and advances, and total deposits with their corresponding GDP for the period of 1998 to 2005 is used. Monthly data on lending and deposit rates for the period of March 2009 to December 2010 is used. We find the relationship between lending rates and GDP growth rate on yearly bases from 1998 to 2007. The data on the flow of credit to different sectors and their growth rates used is from 1998 to 2003. Regression models are used which shows the relationship between a single independent $Y$ and one or more independent variables, $X_1, X_2, \ldots, X_i$. The models are used to assess the effect of or relationship between, explanatory variables on the response and for the general description of data structure. The typical model that is used is the linear model which follows;

$$Y = f(X_1, X_2, \ldots, X_i)$$  \hspace{1cm} (1)

The equation (1) can written as equation (2) below

$$Y_i = \beta_{0i} + \beta_{1i}X_{i1} + \beta_{2i}X_{i2} + \ldots + \beta_{ui}X_{ui} + \varepsilon_i$$  \hspace{1cm} (2)

where $\beta_{0i}$ is a constant term and $\varepsilon_i$ is the random error term representing the collection of everything that is not accounted for by observable variables included in the model. The model offers $i$ marginal effects $\frac{\partial Y_i}{\partial X_{ui}} = \beta_{ui}$, for $i = 1, 2, \ldots, i$. 

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which represent effect from a unit change in economic variables on the conditional expected value of the dependent variable.

The Minitab 10.2 software package was used to analyse the data. The tests were carried to determine the stationarity of data, and where necessary the data was transformed through differencing and introducing logarithms. The dependent variables were generated using the explanatory variables. Tests were carried out to determine the statistical significance of different variables and the best model was chosen according to the highest value of the adjusted coefficient of determination.

RESULTS
The economic importance of variables was roped in to choose the appropriate variables. Here the determinants of GDP are total credit and advances, and total deposits which are shown in Table 1 below. We define D as the total deposits (short and long-term deposits), and A as total loans and advances.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>20.9659</td>
<td>0.7051</td>
</tr>
<tr>
<td>D</td>
<td>0.004379</td>
<td>0.001852</td>
</tr>
<tr>
<td>A</td>
<td>-0.0024091</td>
<td>0.0009670</td>
</tr>
</tbody>
</table>

R-squared Adjusted 62.5%

From Table 1 above, the p-value of the total deposit is not less than 0.05 then we infer that total deposits are not significant in determining GDP. However the second variable, total credit and advances are significant in determining GDP since p-value is less than 0.05. The total advances and loans reduce the country's GDP while total deposits increase. The model is good but not the best as we observe R-squared adjusted value. Table 2 shows how GDP is related to the bank lending rate L. The power of bank lending rate is very weak in determining GDP.
Table 2: The relationship between GDP and Bank Lending Rates

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-3.258</td>
<td>1.258</td>
</tr>
<tr>
<td>L</td>
<td>-0.003724</td>
<td>0.003635</td>
</tr>
<tr>
<td>R-squared Adjusted</td>
<td>11.6%</td>
<td></td>
</tr>
</tbody>
</table>

As evidenced by the analysis above, the p-value is less than 0.05 and thus it can be inferred that GDP does not depend on the banking lending rates. In other words, the bank lending rates are not significant. In particular, the bank lending rate reduces the GDP. Therefore we can conclude that the model is not good enough to be used to determine GDP.

Turning to sectoral growth and credit, we have Table 3 which shows the effects of credit to the agricultural sector. We define $A_c$ as the credit that is availed to the agricultural sector. The power of credit to the agricultural sector is very high implying that there is a strong relationship between agricultural sector growth and credit channeled to the sector. The model is very good and can be used to determine the growth in agricultural sector.

Table 3: The relationship between Agricultural Sector Growth and Credit to the Sector

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.541</td>
<td>2.928</td>
</tr>
<tr>
<td>$A_c$</td>
<td>-0.0017689</td>
<td>0.0003496</td>
</tr>
<tr>
<td>R-squared Adjusted</td>
<td>83.1%</td>
<td></td>
</tr>
</tbody>
</table>

The Table 4 below shows the relationship between the growth of manufacturing sector and the credit to the sector. Observing the R-squared adjusted we can infer that the credit to the manufacturing is not explaining the growth in manufacturing sector. Thus the power of credit to the manufacturing sector is weak.
Table 4: The relationship between Manufacturing Sector Growth and Credit to the Sector

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-6.946</td>
<td>2.124</td>
</tr>
<tr>
<td>$M_c$</td>
<td>-0.0002520</td>
<td>0.0002127</td>
</tr>
</tbody>
</table>

R-squared Adjusted  26.0%

The Table 5 below shows the relationship between the growth of mining sector and the credit to the sector $N_c$. The credit to the sector is not strong but average. The power of the credit to the mining sector is average which implies the model is not the best to determine the mining sectoral growth.

Table 5: The relationship between Mining Sector Growth and Credit to the Sector

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>10.788</td>
<td>6.069</td>
</tr>
<tr>
<td>$N_c$</td>
<td>-0.016196</td>
<td>0.006347</td>
</tr>
</tbody>
</table>

R-squared Adjusted  52.4%

CONCLUSIONS

The banking industry is the linchpin of the economy and its roles determine the direction of the economy. It has taken some steps to stimulate sustainable development. Linear regression models were used to determine the relationship between the dependent and explanatory variables. We can safely conclude that total deposits are not significant in determining GDP but the total credit and advances are very significant. It has been found that conventional banks lending interest rates are high and the deposit interest rates are very low. The high lending rates prohibit firms from borrowing, hence slowing down economic recovery. However, as evidenced above, the banking lending rates do not determine country's GDP which is not in tandem with the notion that the lending rates influence country’s GDP.

The relationship between sector credits and sector growths was analysed. Interestingly, it has been found that the credit to
agricultural sector is significant but the credit to manufacturing and mining sectors is not significant. However in a nutshell we can conclude that the agricultural sector is heavily funded compared to other sectors. Of importance, the priority sectors, that is the manufacturing and mining, are less funded compared to other sectors other than agriculture.

The banks favour lending low-risk activities. They are generally less willing to finance high-risk projects with long payback periods hence they charge high interests. This implies that there are very few banks fall in the sustainable banking ring. In addition, banks are reluctant to finance small to medium enterprises that lack adequate collateral securities, even though such firms may be more innovative and promising than others. Most banks are mainly concentrating on bridging savings and investments. However, some banks have shifted from interest earnings as source of profits to provisional earnings. Hence we are strongly recommending the conventional banks to adopt the profit-sharing model. By adopting Islamic Banking modes of finance will be superb to overcome high credit risks. The two basic modes of finance that Zimbabwe may adopt are sharing and sale modes. On sharing mode, banking institutions provide financing to companies on the expectation of a share return and it can be permanent, declining or timed. On the other hand, the sale mode is when a bank buys assets and raw materials for a company against future repayment. Sale based modes end up in one lump sum deferred payment or in installments spread throughout a certain period of time. Further research should look at the feasibility of introducing the Islamic Banking modes of finance in Zimbabwean economy and other methods of financing stressed companies.

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ACKNOWLEDGEMENTS
The author is grateful to ZIMSTAT, Reserve Bank of Zimbabwe, Samabert Business Consultancy Pvt Ltd, Univen and all financial intermediaries for their support with their respective institution data and information.

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