

THE VALUATION OF EXTERNAL PROJECTS BY SOUTH AFRICAN BANKS

AA Tickner*, F J Mostert**, J H Mostert***

Abstract

While banks are in competition to expand their market share, their credit portfolios may become less diversified without adequate reward for the increased risks. Even well-capitalised banks may come under financial pressure when global economic conditions turn. This research paper focuses on the valuation by banks of the clients' projects to determine whether and to which extent the banks are going to provide financing for their clients' projects.

The *objective* of this research evolves around the improvement of financial decision-making by banks when they are valuating the projects of their clients. The objective of this research is achieved by means of a literature study as well as an empirical survey which focuses on the top banks in South Africa. The determining factors which are considered by banks when the projects of clients are valuated, the problem areas experienced by the banks during the valuation process and the adjustments requested by banks are amongst the aspects that are addressed.

Keywords: Adjustments, Banks, Determining factors, External projects, Problem areas, Valuation

JEL code: M

*Department of Business Management, Stellenbosch University, Private Bag X1, Matieland, 7602, South Africa

Tel: +27 83 264 9426

Fax: +27 21 808 2226

Email: aatickner@gmail.com

**Corresponding author. Department of Business Management, Stellenbosch University, Private Bag X1, Matieland, 7602, South Africa

Tel: +27 21 808 2219

Fax: +27 21 808 2226

Email: fjm@sun.ac.za

***Department of Business Management, Stellenbosch University, Private Bag X1, Matieland, 7602, South Africa

Tel: +27 21 927 6417

Fax: +27 21 808 2226

E-mail: Jan.Mostert@absacapital.com

1 Introduction and objective of research

Banks all across the world have since the 1990s been in competition for market share expansion. This may have put banks in the position of accepting credit portfolios which are less diversified, without being rewarded for the increased risks. Even well-managed banks can come under financial pressure when global economic conditions deteriorate, as many found out in the recent economic recession (De Wet, Van Eyden & Gupta, 2009:1000). Banks should create general as well as specific provisions for possible loans losses which may occur in order to curb financial distress (Gideon *et al.*, 2009:310).

The South African banking sector was not as severely influenced by the global financial crisis, because of the introduction of the National Credit Act, and various other measures put in place by the South African banks and the national government. Competition between South African banks were improved since the 1980s according to Verhoef (2009:197), but the four big groups in the banking sector still dominated the local landscape. She also

concluded that the improved competition did not improve the efficiency of the banks.

External projects are investments that are made by the clients of banks. The clients may approach the banks in order to obtain the necessary financing for their projects *from* the banks. This research paper is about the valuation of the clients' projects by the banks, to determine whether and to which extent the banks are going to provide financing to their clients. These decisions are of prime importance to banks, because it was concluded that the most important risk factor of a bank is the quality of its loan portfolio (Barnhill, Papapanagiotou & Schumacher, 2002:433).

The *objective* of this research embodies the improvement of financial decision-making by banks when they are valuating the projects of their clients. The determining factors which are considered by banks when the projects of their clients are valuated and the problem areas experienced by the banks in the valuation process, are amongst the various aspects which are addressed by this research. The objective of this research is achieved by means of the literature

study in the next section, as well as the empirical survey which follows thereafter.

2 Determining factors when external projects are valuated

Various factors should be considered by banks when they are valuating the projects of their clients. The following determining factors are seen as the most prominent factors, focusing on the role of the business plan, the business and financial risks involved, the solvency, profitability, liquidity and net cash inflows of the client's enterprise, the corporate governance of the client's business, as well as the future growth opportunities of the business operations. A brief discussion of each of the factors is given in the following sections.

2.1 The role of the business plan

The process of compiling a business plan forces an enterprise to evaluate its own situation, as well as the possible challenges and scenarios it may face. Smaller firms usually have a tougher time convincing banks to grant loans because of their perceived risks and costs involved (Pretorius & Shaw, 2004:225). This means that small firms need to have an extremely good business plan in order to convince banks to consider their projects and evaluate them to obtain financing. The business plan should contain amongst others detailed information about the external project and the existing enterprise to satisfy the requirements of the banks.

2.2 Business risk of the client's operations

The business risk of an enterprise related to the risk of the operations without taking the financing of the project into account (Brigham & Daves, 2004:489-494 & 994; Firer *et al.*, 2004:536). The variability of the turnover and the selling price, the cost structure and cost-effectiveness, the operating leverage, the capital intensity of the operations and the exposure to foreign exchange rate risk will, amongst others, impact on the business risk of the client's project and its entire business.

2.3 Financial risk of the client's business

The financial risk of an enterprise refers to the additional risk of the equity capital when an external project is financed with debt capital (Brigham & Daves, 2004:494-496). As the providers of debt capital usually receive a fixed periodic interest payment irrespective of the financial performance of the enterprise, the equity capital bears the financial risk (Brealey, Myers & Allen, 2006:458). Banks will, however, be interested in the financial risk of the client's project as it may put the entire business of the

client in bankruptcy and the bank may be deprived of its funding.

2.4 Solvency of the client's business

Solvency focuses on the creditworthiness of an enterprise which project is valuated by the bank. Banks will always require a safety margin which is represented by a positive difference between the enterprise's assets and its liabilities (Lambrechts, 1990:119-120). This safety margin together with the ability of the client's business to earn a reasonable return on its capital should indicate to the bank whether it is financially feasible that the loan and its interest will be reimbursed by the client. There are also various critical elements which focus on the management of working capital and fixed assets, as well as the control of expenses, which should be applied to preserve solvency (Bochedi, 2010:19).

2.5 Profitability of the client's business

The return on the capital employed was mentioned in the preceding section to support the solvency considerations of the client's business. The profitability ratios of the client's enterprise reveals the combined result of the fixed and current asset management, as well as the impact of debt financing on the financial operations of the enterprise (Brigham & Daves, 2004:238). Although the concepts of profitability and liquidity differ, the profitability of the client's business over the long run is a prerequisite for the liquidity of an enterprise to reimburse the loan capital and periodic interest payments to the bank.

2.6 Liquidity of the client's business

The capacity of an enterprise to generate cash in the short-term focuses on the concept liquidity and addresses the ability of the current assets to cover the enterprise's current liabilities (Els, 2012:67). It is therefore a much broader concept than only the cash flow considerations of a business. Liquidity embodies the ongoing ability of a business to honour the required payments in the short-term under the assumption that its normal operations are sustained (Lambrechts, 1990:113). The liquidity of the client's business is consequently of prime importance to the bank when the client's projects are valuated. It should be emphasised that the enterprise's liquidity position must be supported by an adequate level of profitability.

2.7 Net cash inflow of the client's business

The *net* cash inflow focuses on the difference between the cash inflow and cash outflow of an enterprise during a particular period. The net cash flow available to the client's business after all payments due are settled, should be of prime importance to banks. This

safety margin indicates how easy the client's enterprise can repay the bank loan and settle the periodic interest payments to the bank. The sustainable growth rate of cash flow should also be taken into account (Burger & Hamman, 1999:101). This represents the rate at which an enterprise can expand while a target cash balance is maintained.

2.8 Corporate governance of the client's business

The governance of the client's business is important as it indicates the organisational, cultural and ethical nature of an enterprise and its ability to reach the stated goals. The emphasis should be on the structure and competence of the board of directors, involving executive, non-executive and independent directors, as well as an efficient audit committee. Aspects which are sometimes deliberately not mentioned by a client when a bank values the project of an enterprise, may include excessive salaries and personal expenses by directors and executive managers, as well as unacceptable high staff rewards (Bochedi, 2010:19). Banks should pay due attention to the capability and experience concerning the corporate governance of a client's enterprise when its project is valued. This determining factor plays an important role in the functioning and success of a business over the long term.

2.9 Future growth opportunities of the business operations

When valuating the project of a client's enterprise, banks should also focus on possible growth opportunities which may be available to an enterprise in the anticipated future. Not only may future development options lead to the expansion of the enterprise, but the increase of business activities may impact on the solvency, profitability, liquidity and net cash inflow thereof. When a bank only focuses on the valuation of the current external projects, it may lead to a short-sighted assessment of an enterprise's financial and operational abilities.

3 Research methodology

The objective of the research paper was already defined as the improvement of financial decision-making by banks when they value the projects of their clients. The perceptions of the market leaders of the banking industry in South Africa are therefore of prime importance, as they should provide a pro forma structure for the particular industry. The value of the particular perceptions of the market leaders is however not limited to South Africa. It should also be significant to banking industries in other developing countries with emerging market economies, as South

Africa is classified as such and recently became a member of the BRICS countries (MSCI Barra, 2010; SouthAfrica.info, 2011).

The total assets according to the consolidated financial statements of the South African banks were used to rank them in a declining order. The sample of the empirical study consists of top 10 banks which represent more than 99% of the total assets of all the banks in South Africa. The literature study formed the basis of the questionnaire which was compiled. The questionnaire and a covering letter were sent to the chief executives of the 10 banks. One of the executives indicated that his bank was not actively involved in the valuation process of external projects and this bank was eliminated from the sample to avoid the distortion of the empirical results. After following up, executives of the remaining nine banks completed the questionnaires.

The respondents provided answers to some of the questions on a five point Likert interval scale. These answers were weighted as it was explicitly stated on the questionnaire that the five point Likert interval scale forms a continuum (Albright, Winston & Zappe, 2002:224-229 & 245). The answers of the respondents received the following weights:

Answers of the respondents		Weights assigned
Extremely important	Always	5
Highly important	Very often	4
Moderately important	Sometimes	3
Little important	Seldom	2
Not important	Never	1

The weights will be applied in the next section which addresses the results of the empirical survey.

4 Empirical results

The empirical results focus on the importance of various factors when banks value the projects of clients, the problem areas concerning the valuation of external projects, and how often the various factors will be adjusted by a client at the bank's request. The empirical results obtained from the executives who completed the questionnaires are addressed in the following sections.

4.1 Importance of various factors when valuating external projects

The importance of the various factors when banks are valuating the projects of their clients appears in Table 1.

Table 1. The importance of the various factors as perceived by the respondents when they value the projects of their clients

Factors of the client's business being valuated	Extremely important	Highly important	Moderately important	Little important	Not important
The net cash flow of the external project being valuated	7	2			
The expected profitability of the external project being valuated	4	5			
The strength of the balance sheet, in terms of the net assets of the enterprise being valuated	5	4			
The solvency margin of the enterprise being valuated	3	3	3		
The level of risk associated with the particular industry of the external project	5	4			
The number of years of experience which the enterprise has in the particular industry of the external project		8	1		
The role of the business plan in the valuation of the external project	4	4	1		
Particulars of successes or failures of the enterprise being valuated, in their previously executed projects	2	6	1		
The role of competition in the market in which the external project will take place	2	6	1		

In order to have a clear depiction of the answers provided by the respondents, the results shown in Table 1 were weighted as described in Section 3. The

following table contains the total weighted scores calculated, in a declining order of importance.

Table 2. The weighted responses on the importance of the various factors as perceived by the respondents when they value the projects of their clients, in a declining order of importance

Total weighted score calculated	Declining order of importance	Factors of the client's business being valued
43	1	The net cash flow of the external project being valued
41	2	The strength of the balance sheet, in terms of the net assets of the enterprise being valued
41	2	The level of risk associated with the particular industry of the external project
40	4	The expected profitability of the external project being valued
39	5	The role of the business plan in the valuation of the external project
37	6	Particulars of successes or failures of the enterprise being valued, in their previously executed projects
37	6	The role of competition in the market in which the external project will take place
36	8	The solvency margin of the enterprise being valued
35	9	The number of years of experience which the enterprise has in the particular industry of the external project

The net cash flow of the client's project which is valued by the bank received the highest total weighted score calculated. As the repayment of the loan and settlement of the periodic interest payments to the bank is of prime importance in this regard, it is not surprising that this determining factor was rated so highly by the respondents.

The following two determining factors in the declining order of importance have the same total weighted score calculated. They are the strength of the balance sheet in terms of the net assets of the enterprise being valued, which emphasises the solvency thereof, as well as the level of risk associated with the particular industry of the external project, which addresses the associated business risk. Both factors are very important considerations to the responding banks for obvious reasons.

The fourth important determining factor according to the perceptions of the respondents focuses on the expected profitability of the external project being valued. As previously mentioned, the profitability of the client's business over the long term is a prerequisite for adequate liquidity to make the due payments to the bank.

A business plan must provide detailed information concerning various aspects of an external project and a client's enterprise to meet the requirements of banks. This factor received the fifth highest total weighted score calculated according to Table 2. The respondents therefore have the perception that the role of the business plan is also an important factor when a client's project is valued.

It is interesting to note that the following four factors are also important according to the respondents, but that they are not at the same level of importance as the factors which were already discussed:

- Particulars of successes or failures of the enterprise being valued, in their previously executed projects;
- The role of competition in the market in which the external project will take place;
- The solvency margin of the enterprise being valued; and
- The number of years of experience which the enterprise has in the particular industry of the external project

Possible reasons why these four factors are at the end of the declining order of importance can be as follows:

- Historical successes or failures may be due to causes which may not exist currently and which will not impact on the present external project.
- Competition is quite normal and some level of competition will always be part of any business operation. Competition also impacts on the level of risk associated with the particular industry which was already discussed as one of the second most important factors.
- The solvency *margin* in isolation is not so important. The strength of the balance sheet in terms of the net assets of the enterprise being valued, was already discussed as one of the second most important factors. This factor addresses the entire aspect of solvency.
- When the number of years of experience which the enterprise has in the particular industry of the external project is inadequate, the know-how can be obtained by employing experts who have superior knowledge concerning the specific industry.

4.2 Problem areas when valuating external projects

The three most important problem areas which each of the respondents perceived when valuating external projects appear in the following table.

Table 3. The three most important problem areas when valuating external projects, as perceived by the respondents

Number of respondents who mentioned the problem area	Problem areas
8	The net cash flow of the external project being valuated
6	The expected profitability of the external project being valuated
5	The strength of the balance sheet, in terms of the net assets of the enterprise being valuated
3	The level of risk associated with the particular industry of the external project
1	The solvency margin of the enterprise being valuated
1	The number of years of experience which the enterprise has in the particular industry of the external project
1	The role of the business plan in the valuation of the external project
1	The role of competition in the market in which the external project will take place
1	The review of all the risk drivers of the external project

The net cash flow of the client's project was mentioned by eight of the nine respondents as a topic which may cause problems during the valuation process. As the emphasis of the valuation should be on the ability of the client to repay the bank loan and meet the periodic interest payments to the bank, problems may be likely to occur here. Possible solutions to solve this problem area should focus on the accuracy of expected cash flow to convince the banks about the external projects' ability to generate adequate net cash flow and to compare the cash flow of similar projects in international markets.

Six of the nine respondents indicated that the profitability of the external project being valuated may also cause problems during the valuation process. As the long-term profitability of a client's business is a prerequisite for an adequate level of liquidity, emphasis will also be placed by banks on this financial aspect. Without acceptable profitability over the long run, liquidity levels may be insufficient to reimburse the loan capital and settle the due interest payments to the banks. The assessment of the factors which affect the sustainability of the external project's earnings should therefore be carefully considered, while benchmarking against the earnings of the particular industry should also help to solve this problem area.

Not only the financial operating results of the client's business should play a role, but banks will also focus on the strength of the balance sheet in terms of the net assets of the enterprise being valuated. The solvency of the client's business may also cause problems as the safety margin provided by the enterprise may not be adequate to the bank,

according to five respondents. This problem area may be addressed by proper valuation of the particular assets to determine whether adequate collateral is available to cover the client's responsibilities towards the bank.

Only a third of the respondents mentioned the level of risk associated with the particular industry of the external project. The business risk of the client's project may be too high according to the bank and the client may experience problems to convince the bank about its ability to manage the associated risk. Careful assessment of the prevailing economic, financial and business climate, both domestically and internationally, should indicate the level of risk which can be anticipated.

To conclude, the problem areas which the respondents experience focus mainly on the cash flow, the profitability and the level of risk of the external projects, as well as the strength of the balance sheet in terms of the net assets of the enterprise being evaluated. Accurate projections and valuations of economic, financial and business information, as well as the proper financial assessment thereof should provide solutions to the stated problem areas.

4.3 How often the various factors will be adjusted by the enterprise at the bank's request

Following the preceding section which focused on the problem areas experienced by the respondents, it is clear that various factors will often have to be adjusted by the enterprise at the bank's request. The perceptions of the respondents on how often the

various factors will be adjusted by the enterprise during the valuation process appear in Table 4.

Table 4. How often the various factors will be adjusted by the enterprise during the valuation process at the bank's request, as perceived by the respondents

Factors of the enterprise being valued	Always	Very often	Some-times	Seldom	Never
The required net cash flow of the external project being valued	3	3	3		
The expected profitability of the external project being valued	2	4	2	1	
The employment of applicable measures to decrease the level of risk associated with the particular industry of the external project	1	5	2	1	
The acquisition of experienced employees to increase the experience which the enterprise has in the particular industry of the external project		2	5	2	
The role of the business plan in the valuation of the external project	1	3	4	1	

The perceptions of the respondents according to the preceding table were weighted as described in Section 3. The total weighted scores calculated as shown in Table 5 provides a clear depiction of how

often the various factors will be adjusted by the enterprise during the valuation process at the bank's request.

Table 5. The weighted responses on how often the various factors will be adjusted by the enterprise during the valuation process at the bank's request as perceived by the respondents, in a declining order of importance

Total weighted score calculated	Declining order of frequency	Factors of the enterprise being valued
36	1	The required net cash flow of the external project being valued
34	2	The expected profitability of the external project being valued
33	3	The employment of applicable measures to decrease the level of risk associated with the particular industry of the external project
31	4	The role of the business plan in the valuation of the external project
27	5	The acquisition of experienced employees to increase the experience which the enterprise has in the particular industry of the external project

Based on the total weighted score calculated according to the preceding table, the required net cash flow of the external project being valued must be *most* often adjusted by the enterprise at the bank's request. The expected profitability of the external project is the *second* factor in a declining order of frequency, which must be adjusted by the enterprise at the request of the bank. These empirical results correspond with the two problem areas as indicated by the largest number of respondents according to Table 3. These two problem areas therefore lead to the banks requesting that the enterprises must adjust their submissions concerning the required net cash flow and expected profitability.

The employment of applicable measures to decrease the level of risk associated with the

particular industry of the external project, as well as the role of the business plan are respectively the *third* and *fourth* factors in a declining order of frequency which enterprises must adjust at the request of banks. Based on the perceptions of the respondents, the acquisition of experienced employees to increase the experience which the enterprise has in the external project's particular industry is least often adjusted by the enterprise at the bank's request.

5 Conclusions

It was stated in Section 1 that the *objective* of this research embodies the improvement of financial decision-making by banks when they are valuating the projects of their clients. Based on the literature study

and the empirical survey involving nine of the top 10 banks in South Africa, the following important conclusions were made, which should improve the financial decision-making by banks in developing countries with emerging market economies when they value the projects of their clients:

(1) The net cash flow of the client's project is regarded as the most important factor when banks are valuating the project, while the strength of the balance sheet in terms of the net assets of the enterprise being valuated and the level of risk associated with the particular industry of the external project are next in the declining order of importance. The expected profitability of the external project which is valuated is perceived as the fourth important factor in the valuation process.

(2) The problem areas which the largest number of banks experience when valuating the projects of their clients are the required net cash flow of the project, the expected profitability of the external project and the strength of the balance sheet in terms of the net assets of the enterprise being valuated. Recommended solutions to solve the stated problem areas are situated in accurate projections and valuations of economic, financial and business information as well as the proper financial assessment thereof.

(3) It is concluded that the required net cash flow of the external project being valuated is most often adjusted by the enterprise at the request of the bank, while the expected profitability of the project is the second factor in a declining order of frequency. It should be emphasised that these adjustments correspond with the two problem areas which were identified by the largest number of respondents. The employment of applicable measures to decrease the level of risk associated with the particular industry of the external project as well as the role of the business plan, are aspects which are less frequently adjusted at the request of banks.

References

1. Albright, S.C., Winston, W.L. & Zappe, C.J. 2002. *Managerial Statistics*. Australia: Duxbury.
2. Barnhill, T.M., Papapanagiotou, P. & Schumacher, L. 2002. Measuring integrated market and credit risk in bank portfolios: An application to a set of hypothetical banks operating in South Africa. *Financial Markets Institutions & Instruments*, 11(5): 401-442.
3. Bochedi, G. 2010. Solvency risk: Critical elements for preserving solvency. *Enterprise Risk*, 4(3): 19.
4. Brealey, R.A., Myers, S.C. & Allen, F. 2006. *Corporate Finance*, 8th ed. Boston: McGraw-Hill.
5. Brigham, E.F. & Daves, P.R. 2004. *Intermediate Financial Management*. 8th ed. Ohio: Thomson South-Western.
6. Burger, J.H. & Hamman, W.D. 1999. The relationship between the accounting sustainable growth rate and the cash flow sustainable growth rate. *South African Journal of Business Management*, 30(4): 101-109.
7. De Wet, A.H., Van Eyden, R. & Gupta, R. 2009. Linking global economic dynamics to a South African-specific credit risk correlation model. *Economic Modelling*, 26: 1000-1011.
8. Els, G. (Ed.) 2012. *Corporate Finance, A South African Perspective*. Cape Town: Oxford.
9. Firer, C., Ross, S.A., Westerfield, R.W. & Jordan, B.D. 2004. *Fundamentals of Corporate Finance*, 3rd South African ed. London: McGraw-Hill.
10. Gideon, F., Mukuddem-Petersen, J., Mulaudzi, M.P. & Petersen, M.A. 2009. Optimal provisioning for bank loan losses in a robust control framework. *Optimal Control Applications and Methods*, 30: 309-335.
11. Lambrechts, I.J. (Ed.) 1990. *Financial Management*. 1st English edition. Pretoria: J.L. Van Schaik.
12. MSCI Barra. 2010. *Emerging Markets*. [Online]. Available: http://www.msccibarra.com/products/indices/tools/index_country_membership/emerging_markets.html [Accessed on 19 October 2010].
13. Pretorius, M., & Shaw, G. 2004. Business plans in bank decision-making when financing new ventures in South Africa. *South African Journal of Economic and Management Sciences*, 7(2): 221-241.
14. SouthAfrica.info. 2011. *South Africa joins BRICS*. [Online]. Available: <http://www.southafrica.info/global/brics/brics-080411.htm> [Accessed on 22 July 2011].
15. Verhoef, G. 2009. Concentration and competition: The changing landscape of the banking sector in South Africa, 1970-2007. *South African Journal of Economic History*, 24(2): 157-197.