THE EVALUATION OF INVESTMENT OPPORTUNITIES BY SOUTH AFRICAN VENTURE CAPITAL AND PRIVATE EQUITY INVESTORS

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Abstract

The financial performance of enterprises is relevant to all stakeholders. Business executives should therefore evaluate and select investment opportunities that will enhance the financial performance of enterprises to meet the expectations of enterprise stakeholders. The objective of this research paper focuses on the improvement of the evaluation process of investment opportunities. The empirical study included enterprises that invest venture capital and private equity as they should be experienced in the evaluation of financial and business risks of investment opportunities. Recommendations are based on the available literature and empirical results of the study and should be valuable to business executives as well as academics. The recommendations should inevitably lead to the improvement of the process according to which investment opportunities is evaluated.

Keywords: Cash flow, Labour relations, Labour skills, Liquidity, Profitability, Quality of top management, Solvency

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1. Introduction and objective of the study

The investment decision making process impacts on the financial performance of enterprises and is therefore relevant to all enterprise stakeholders. In order to enhance the financial performance of enterprises, business executives should evaluate and select investment opportunities which meet the financial expectations of enterprise stakeholders.

The objective of this research paper embodies the improvement of the evaluation process of investment opportunities by determining the importance of the various fundamental components of the relevant process. The empirical study focused on enterprises that invest venture capital and private equity as their business executives should be experienced in the evaluation of financial and business risks of investment opportunities.

The following tasks are necessary to meet the stated objective:

- A literature study should be undertaken by focusing on the relevant aspects.
- Empirical information should be obtained about the importance of the fundamental components of the investment evaluation process from business executives by using questionnaires.
- Suitable recommendations should be made based on the analysis of the literature study and empirical information obtained.

The three tasks are important as the business community will *only* pay attention to recommendations that are theoretically sound *and* which they can employ in practice.

2. Relevant literature

The relevant literature focused on the various *fundamental components* of the investment evaluation process. These components are as follows:

- The financial selection measures for evaluating the profitability of investment opportunities (Brigham & Houston, 2000: 511-526; Damoda-ran, 2001: 318-325; Hill, 1998: 38-41).
- The financial ratios for evaluating the solvency of investment opportunities (Brigham & Daves, 2004: 235-238; Rao, 1989: 219-221).
- The financial ratios for evaluating the liquidity of investment opportunities (Brealey et al., 2004: 36-37; Brigham & Daves, 2004: 231-235; Shapiro, 1991: 734-737).
- The financial ratios for evaluating the cash flow of investment oppor-tunities (Hill, 1998: 35-38; Firer et al., 2004: 32-38).
- The quality of top management (Thompson et al., 2005: 316-400).

- Labour skills and labour relations (Nel et al., 2004).

Each of these fundamental components has a number of relevant *sub-components* that should also play a vital role when evaluating investment opportunities. These various sub-components are depicted in Tables 2 to 7 and are discussed as part of the empirical results. Business executives should consider the fundamental components of the investment evaluation process *together with* the associated sub-components when assessing investment opportunities.

3. Research methodology

The objective of this research paper focuses on the improvement of the evaluation process of investment opportunities by determining the importance of the various fundamental components of the relevant process. Achieving this objective required designing a specific research methodology.

3.1 Sample

The survey focused on the full members of the Southern African Venture Capital and Private Equity Association (SAVCA). According to the *SAVCA Yearbook 2005*, 62 full members were registered. Two enterprises had head offices registered in foreign countries and they were therefore excluded from the survey. An overall description of the 60 enterprises was not possible, as only varying versions of the company details were available.

The survey was conducted by means of questionnaires that were compiled with reference to the literature study. The questionnaires were posted under covering letters that were addressed to contact persons at the 60 enterprises that were included in the survey. Fifteen enterprises returned completed questionnaires in response to the invitation to participate in the survey. This resulted in a response rate of 25 per cent.

The majority of the officials who completed the questionnaires had already achieved management status and their seniority provided a wealth of experience. This enabled them to respond with confidence about the evaluation of investment opportunities.

3.2 Measuring instrument

The survey was conducted by means of a questionnaire which made use of an ordinal scale ranging from:

"not important" denoted by 1,
"little important" denoted by 2,
"moderately important" denoted by 3,
"highly important" denoted by 4 and
"extremely important" denoted by 5.

The ordinal scale was used to determine the perceived importance of the relevant aspects. The numbers on the ordinal scale were used to calculate the statistics in respect of all aspects covered in the questionnaire. This practice is statistically acceptable as it was explicitly stated on the questionnaire that the ordinal scale forms a continuum (Albright et al., 2002:245).

3.3 Statistical analysis of data

The mean (as a measure of central tendency) and the range (as a measure of dispersion) were used to describe the data. The Bonferroni test was used to determine whether the observed differences between the means were significant. The five per cent level was selected as the level of significance.

4. Empirical results

The empirical results regarding the evaluation of investment opportunities by venture capital and private equity investors are presented in what follows.

4.1 The importance of the *fundamental components* of the investment evaluation process

The responses regarding the importance of the fundamental components of the investment evaluation process are summarised in Table 1.

Table 1. Importance of the fundamental components of the investment evaluation process

Component	Ranking based on means	Mean	Range	Minimum value	Maximum value	Count
Quality of top management	1	4,86[a]	1	4	5	14
Profitability	2,5	4,36[a]	2	3	5	14
Cash flow	2,5	4,36[ab]	3	2	5	14
Solvency	4,5	3,71[bc]	2	3	5	14
Liquidity	4,5	3,71[bc]	2	3	5	14
Labour skills and labour relations	6	3,50[c]	2	2	4	14

The ranking based on means, as highlighted in Table 1, indicates that "quality of top management" was regarded as the most important component of the investment evaluation process, while "labour skills and labour relations" was regarded as the least important component in this regard.

Bonferroni multiple testing was used to determine whether the observed differences between adjacent means were significant. The results are reported by using letters that are included in the above table alongside the mean responses. *Similar* letters are used in cases where the null hypothesis was not rejected, that is, when observed differences between the means were *not* significant at the five per cent level. Components with the letter "a" alongside the mean can be classified as the most important category of components of the investment evaluation process. Components with the letter "b" alongside the mean can be classified as the second most important category, and those with a "c" alongside the mean, as the third most important category of components of the investment evaluation process. Cases may occur where a component can be classified into two (or more) categories, depending on the significance of the observed difference between its mean and the mean of each of the other components. "Cash flow" is such a component as it fits into the most important category (category "a") and also into the second most important category (category "b"). This implies that the observed differences between the mean of this *particular* component and the mean of each of the other components in the most and second most important categories were not significant at the five per cent level.

The focus in the paper is on identifying the most important components of the investment evaluation process and, as a result thereof, all features with the letter "a" alongside the mean receive special attention. The Bonferroni testing indicated that the observed differences between the means were not always significant and that the following can be classified as the most important fundamental components of the investment evaluation process:

"Quality of top management" (mean of 4,86 indicating close to extremely important);

"Profitability" (mean of 4,36 indicating more than highly important); and

"Cash flow" (mean of 4,36 indicating more than highly important).

4.2 The importance of financial selection measures for evaluating the *profitability* of investment opportunities

Table 2 provides a summary of responses regarding the importance of financial selection measures that are used to evaluate the profitability of investment opportunities.

Table 2. Importance of financial selection measures for evaluating the profitability of investment opportunities

Financial selection measure	Ranking based on means	Mean	Range	Minimum value	Maximum value	Count
Internal rate of return in *monetary* terms	1	4,07[ab]	4	1	5	14
Internal rate of return in *real* terms	2	3,79[ac]	4	1	5	14
Net present value in *monetary* terms	3	3,50[cd]	4	1	5	14
The payback period	4,5	3,21[abc]	4	1	5	14
Net present value in *real* terms	4,5	3,21[bd]	4	1	5	14

The ranking based on means, as disclosed in the above table, indicates that the "internal rate of return in *monetary* terms" was regarded as the most important financial selection measure for evaluating the profitability of investment opportunities, while the "payback period" and the "net present value in *real* terms" were regarded as the least important financial selection measures.

The observed differences between the means were not always significant and the five financial measures mentioned can be classified as equally important for evaluating the profitability of investment opportunities.

4.3 The importance of financial ratios for evaluating the *solvency* of investment opportunities

The responses regarding the importance of financial ratios for evaluating the solvency of investment opportunities are summarised in Table 3.

Table 3. Importance of financial ratios for evaluating the solvency of investment opportunities

Financial ratio	Ranking based on means	Mean	Range	Minimum value	Maximum value	Count
Annual profit before interest and taxation / Gross annual interest obligation	1	3,80[a]	2	3	5	15
Total debt / Total value of assets	2	3,67[a]	2	3	5	15
Long-term debt / Total debt	3	3,53[a]	2	3	5	15

The ranking based on means, as disclosed in the above table, indicates that "annual profit before interest and taxation divided by gross annual interest obligation" was regarded as the most important financial ratio for evaluating the solvency of investment opportunities.

The observed differences between the means were not significant and all ratios in the table can be classified as equally important for evaluating the solvency of investment opportunities.

4.4 The importance of financial ratios for evaluating the liquidity of investment opportunities

Table 4 provides a summary of responses regarding the importance of financial ratios for evaluating the liquidity of investment opportunities.

Table 4. Importance of financial ratios for evaluating the liquidity of investment opportunities

Financial ratio	Ranking based on means	Mean	Range	Minimum value	Maximum value	Count
Current assets / Current liabilities	1	3,67[a]	3	2	5	15
Average debtors / Annual credit sales	2	3,60[a]	3	2	5	15
(Current assets – inventory) / Current liabilities	3,5	3,47[a]	3	2	5	15
Average inventory at cost / Annual cost of sales	3,5	3,47[a]	3	2	5	15

The ranking based on means, as disclosed in the above table, indicates that "current assets divided by current liabilities" was regarded as the most important financial ratio for evaluating the liquidity of investment opportunities.

The observed differences between the means were not significant and that all ratios in Table 4 can be classified as equally important for evaluating the liquidity of investment opportunities.

4.5 The importance of financial ratios for evaluating the *cash flow* of investment opportunities

The responses regarding the importance of financial ratios for evaluating the cash flow of investment opportunities are summarised in the next table.

Table 5. Importance of financial ratios for evaluating the cash flow of investment opportunities

Financial ratio	Ranking based on means	Mean	Range	Minimum value	Maximum value	Count
Annual cash flow from total activities / Annual interest paid	1	3,93[a]	2	3	5	15
(Annual cash flow from total activities – annual interest paid – annual taxation paid – annual dividends paid) / Replacement of and additions to fixed assets	2	3,27[b]	3	2	5	15
(Annual cash flow from total activities – annual interest paid – annual taxation paid – annual dividends paid) / Replacement of fixed assets	3	3,20[b]	3	2	5	15

The ranking based on means, as disclosed in the above table, indicates that "annual cash flow from total activities divided by annual interest paid" was regarded as the most important financial ratio for evaluating the cash flow of investment opportunities. This was confirmed by the Bonferroni testing.

4.6 The importance of selected aspects when evaluating the *quality of top management* of investment opportunities

Table 6 provides a summary of responses regarding the importance of selected aspects when evaluating the quality of top management of investment opportunities.

Table 6. Importance of selected aspects when evaluating the quality of top management of investment opportunities

Aspect	Ranking based on means	Mean	Range	Minimum value	Maximum value	Count
Competency of top management	1	4,93[a]	1	4	5	15
Innovation of top management	2	4,60[b]	1	4	5	15
Employment stability of top management	3	4,27[b]	2	3	5	15

The ranking based on means, as disclosed in the above table, indicates that the "competency of top management" was regarded as the most important aspect when evaluating the quality of top management of investment opportunities. This was confirmed by the Bonferroni testing.

4.7 The importance of selected aspects when evaluating the *labour skills and labour relations* of investment opportunities

The responses regarding the importance of selected aspects when evaluating the labour skills and labour relations of investment opportunities are summarised in Table 7.

Table 7. Importance of selected aspects when evaluating the *labour skills and labour relations* of investment opportunities

Aspect	Ranking based on means	Mean	Range	Minimum value	Maximum value	Count
Labour skills	1	3,93[a]	2	3	5	15
Labour relations	1	3,93[a]	2	3	5	15

"Labour skills" and "labour relations" are regarded as equally important aspects when the focus is on the labour force of investment opportunities. This was confirmed by the Bonferroni testing.

5. Conclusions

The conclusions of the research are summarised in what follows:

(1) The observed differences between the means were not always significant and the following can be classified as the most important *fundamental components* of the investment evaluation process:
"Quality of top management" (mean of 4,86 indicating close to extremely important);
"Profitability" (mean of 4,36 indicating more than highly important); and
"Cash flow" (mean of 4,36 indicating more than highly important).

(2) The observed differences between the means were not always significant and the following five financial measures can be classified as equally important for evaluating the *profitability* of investment opportunities: Internal rate of return in monetary terms, internal rate of return in real terms, net present value in monetary terms, the net present value in real terms and the payback period.

(3) The observed differences between the means were not significant and the three ratios mentioned in Table 3 can be classified as equally important for evaluating the *solvency* of investment opportunities.

(4) The observed differences between the means in Table 4 were not signifi-cant and the four ratios can be classified as equally important for evaluating the *liquidity* of investment opportunities.

(5) The ranking based on means indicates that "annual cash flow from total activities divided by annual interest paid" was regarded as the most important financial ratio for evaluating the *cash flow* of investment opportunities. This was confirmed by the Bonferroni testing.

(6) The ranking based on means indicates that the "competency of top management" was regarded as the most important aspect when evaluating the *quality of top management* of investment opportunities. This was confirmed by the Bonferroni testing.

(7) "Labour skills" and "labour relations" are regarded as equally important aspects when the focus is on the *labour force* of investment opportunities. This was confirmed by the Bonferroni testing.

6. Recommendations

Based on the conclusions regarding the experience of venture capital and private equity investors, business executives should in particular pay attention to the following *three most important* fundamental components of the evaluation process of investment opportunities:

(1) The *quality of top management*, focusing explicitly on the *competency* of top management concerned.

(2) The *profitability* of the investment opportunities, using *various* financial measures for evaluation purposes.

(3) The *cash flow* situation regarding investment opportunities with *special emphasis on* the "annual cash flow from total activities divided by annual interest paid".

In addition to the preceding three fundamental components, the following aspects should also be taken into account:

(4) *Various* financial ratios to evaluate the *solvency* and *liquidity* of investment opportunities.

(5) The *labour skills* and *labour relations* of the investment opportunities.

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