



## Risk Management Practices among Private Equity Funds in South Africa

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### ABSTRACT

Effective risk management is essential for private equity (PE) funds to navigate economic, market, and operational challenges while maximizing investor returns. This study aims to evaluate the risk management practices employed by private equity funds in South Africa, focusing on the tools used for pre-investment risk assessment and the strategies implemented throughout the investment process. A quantitative approach was adopted, using a semi-structured questionnaire administered to 31 private equity fund managers in South Africa's Gauteng province. The Mann-Whitney U test, a non-parametric statistical method, was applied to assess the independence of smaller and larger fund groups, given their distinct nature and the non-normal distribution of the dependent variable. The findings indicate that traditional pre-screening risk assessment methods are commonly used by South African private equity funds. Additionally, larger funds tend to co-invest with trusted partners as a key strategy for mitigating risk. The results also reveal that these larger funds more frequently utilize the enterprise value/earnings before interest and tax (EV/EBIT) ratio in their evaluation process. This study supports the Basel II recommendation, which suggests that adopting an audit and risk planning framework can help private equity firms identify the most critical risks and concentrate their risk management efforts accordingly. The survey's overall results show that cash flow-volatility-based models and stress testing are the most widely utilized tools among the funds studied. This research contributes to the ongoing discourse on risk management in private equity, particularly in the context of South Africa's emerging economy, offering new insights into a relatively underexplored area.

**Keywords:** Risk, Risk Management, Investors, Investment, Private Equity Funds, South Africa

**JEL Classifications:** G23, G30, G32, O55

### 1. INTRODUCTION

The amount of private equity (PE) investment in Africa has increased significantly. Private equity investment is mainly focused on growth capital, assisting investors in improving governance and policy, expanding their presence, and in some cases, positively contributing to the region's broader commercial ecosystem (Kaplan and Schoar, 2005; Tao and Hutchinson, 2013; The Economist Corporate Network Africa, 2017; AVCA, 2024). According to Donahue and Timmerman (2021: 64), in Africa, private equity investing provides access to a more specific source of growth and investment returns than what is usually seen in institutional portfolios (Soni, 2017).

South Africa has one of the most sophisticated private equity industries among emerging and established markets, with funds ranging from start-up ventures to late-stage and buyout funds (KPMG, 2013). South Africa attracts more than half of the continent's private equity transactional operations. It remains the only country in the top 40 of the Venture Capital and Private Equity Country Attractiveness Index (Groh et al., 2018: 219). In South Africa, private equity funds are subject to unique risks due to the country's socio-political environment, regulatory landscape, and economic conditions (Augustyn, et al., 2024). Private equity industry in South Africa is an essential sector within the overall financial services industry and an attractive asset class in the

broader capital market. It offers diverse investment opportunities, and South African investors increasingly turn to the market (SAVCA, 2019: 6). The industry allows investors to gain access to the private sector through private or unlisted firms, allowing them to penetrate markets that were difficult to access previously. The local private equity industry significantly contributes to the country's economic development, as shown by various indicators (SAVCA, 2019: 6).

The motivation for this study stems from the scant studies assessing the risk management practices used among private equity funds in the South African context in the Gauteng Province of South Africa. In addition, theoretical and realistic aspects of private equity portfolio management have gained little attention in the literature and are poorly understood. Furthermore, private equity funds are known to be illiquid, and data is scarce. As a result, traditional risk measures maybe inadequate for measuring the risk and return of private equity (Boido and Fasano, 2016). Therefore, this study assesses the risk management practices employed among private equity funds in the Gauteng Province of South Africa. The risk management framework in this study includes pre-screening risk management tools and a quantitative risk management analysis. This study is based on major theories in financial economics, such as the Modern portfolio theory developed by Markowitz (1952) and the Capital Asset Pricing Model (CAPM) developed by Sharpe (1964) and Lintner (1965), the Agency theory, and the Arbitrage Pricing theory.

This study used quantitative analysis through a questionnaire survey from 31 available Private Equity firms in the Gauteng Province of South Africa. Consistent with previous studies (Olayinka et al., 2020), the findings of this study are vital for managers of private equity investment firms to grasp the most effective risk management processes specific to a given asset class and their implications for fund performance. The empirical findings in this study can assist government financial institutions to effectively formulate policies that can essentially guide private equity fund managers in selecting appropriate risk management techniques. The novelty of this study lies in its contribution to the ongoing debates and underexplored aspects of risk management within private equity funds, particularly from the perspective of South Africa's emerging economy.

This paper is organised as follows. The first section presented the introduction of the study, section two presents the literatures reviewed in various themes, section three deals with data and methodology, section four deals with data analysis, interpretation of results, and further discussions. The last section discusses summary, conclusion, and policy implications deduced from this study.

## 2. LITERATURE REVIEW

### 2.1. Private Equity Industry in South Africa

The private equity (PE) industry in South Africa is an important sector within the overall financial services industry and an appealing asset class in the broader capital market (Portmann, and Mlambo, 2013). PE offers a wide variety of investment

opportunities in the sector, and South African investors are rapidly turning to private equity. It gives investors access to the private sector through private or unlisted firms, and it allows them to penetrate markets that were previously difficult to enter. Various indicators show that the local private equity industry dramatically contributes to the country's economic growth (SAVCA, 2019: 6; AVCA, 2024).

South Africa has one of the most sophisticated private equity industries among emerging and established markets, with funds ranging from start-up ventures to late-stage and buy-out funds (KPMG, 2014). South Africa's private equity sector is classified as advanced alongside Brazil, Russia, India, China, Poland, and Nigeria (Groh et al., 2018: 219). Near relations with the United Kingdom (UK), such as the development of a similar legal and capital market-oriented culture, are said to be contributing factors to the country's status as an advanced emerging private equity market compared to Brazil, China, India, and Turkey (Groh et al., 2018: 219). South Africa attracts more than half of the continent's private equity transactional operations and remains the only country listed in the top 40 of the Venture Capital and Private Equity Country Attractiveness Index (Smolarski & Vega, 2013; Groh et al., 2018: 219).

The impact of the COVID-19 pandemic on the market and asset prices is evident in the performance of both public and private markets. Many private equity investors replaced management teams with business operating models to ensure more efficient operations and enable growth and expansion through and after a COVID-19 lockdown environment. In 2021, as economic conditions slowly improved and investors became more willing to invest capital in private equity as an asset class, many fund managers started focusing on fundraising again (Hofmeyr, 2021). According to SAVCA (2021), private equity industry fundraising this year saw a sharp uptick in investment activity. In the private equity industry, the new normal after COVID-19 meant that investors and fund managers were increasing fundraising efforts again (Murray and Gillmer, 2021). In terms of investment, most investments were made in established businesses through buyouts and similar transactions. The South African market has experienced a steady increase in private equity transactions. However, the general activity level has remained somewhat depressed (Westwood et al., 2021).

### 2.2. Risks in the Private Equity Industry

Private equity firms face several significant investment risks, including non-compliance with their investment guideline and strategy, lack of diligence and process on the part of the board and investment committee when making investment decisions (Hamman et al., 2021; Rahman, 2025; Reis et al., 2025). In addition, lack of investment opportunities and activities, concentration risk, and smaller funds sizes as a result of complex fund-raising markets and a lack of interest from foreign investors, and conflict of interests and valuation risk are among the major bottlenecks in the industry (Ethos Capital, 2019; Pech and Vrchota, 2020). According to Wei (2016: 93), private equity firms may experience investment partners' risk during the project selection stage. Private equity must select a suitable project based on limited information. In the investment management stage, private equity

firms are primarily exposed to agency risk after investing in a financing enterprise. In the final exit stage, PE firms may fail to exit due to improper timing. The top risk management issues are technology risk, third-party risk, fraud and misconduct risk, cyber risk, compliance risk, and crisis management (Shah, 2017). On the other hand, Diller and Jackel (2015) consider market, liquidity, capital, and funding risks as the most important risks that private equity firms are exposed to.

Theoretical and realistic aspects of private equity portfolio management have gained little attention in the literature and are poorly understood (Brown et al., 2023). There are valid explanations from a historical viewpoint. Private equity investments are known to be illiquid, and data is scarce (Nadauld et al., 2016). As a result, traditional risk measures may be inadequate for measuring the risk and return of private equity investments (Ilmanen et al., 2020). Ljungqvist et al. (2003) discovered that portfolio companies' underlying systematic or unsystematic risk is unlikely to explain fund returns. Some authors, on the other hand, were able to define a risk management framework for private equity. Smolarski et al. (2005: 470) argued that to efficiently manage risk, funds build risk management systems and mitigation strategies to address identified risks. The concept of asymmetry of information and the principal-agent relationship can be used to extract the most significant private equity-related risks.

### 2.3. Conceptual Framework of the Study

In this study, private equity (PE) is defined as “the entire asset class of private equity investments that are not quoted on stock markets, encompassing everything from venture capital to large buyouts” (Hamman et al., 2021). The business model of a private equity firm involves raising capital from external sources, investing that capital in various private equity deals, and eventually selling or “exiting” these investments—often years later. The proceeds from these exits are returned to the external capital partners, with 20% of the total profits retained for the private equity firm's partners. This 20% share is known as “carried interest,” which serves as the central motivator in the private equity industry. Additionally, general partners generate significant income from other sources, including management and transaction fees (Buchner, 2017).

Private equity firms manage investment risk in two stages: the pre-investment stage and the post-investment stage (Buchner, 2017; Hamman et al., 2021). To unpack these two stages this

study employed the following simplified conceptual framework depicted in Figure 1.

As depicted in Figure 1, each stage involves distinct strategies and tools to mitigate potential risks and maximize returns of PE funds.

#### 2.3.1. Pre-Investment Stage

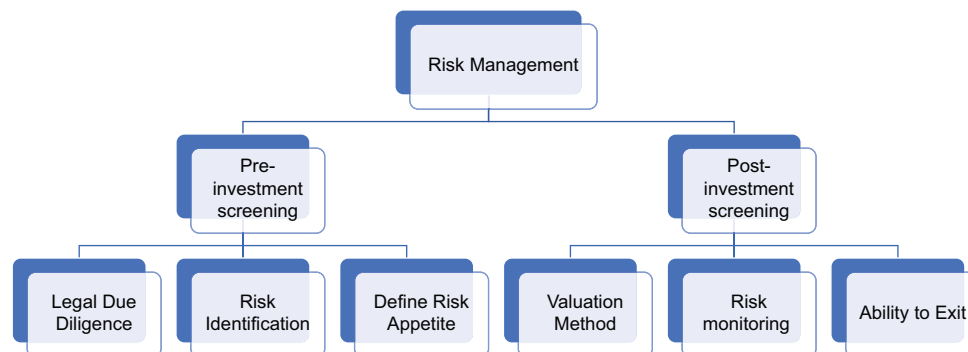
**Due Diligence:** This is the most critical phase where PE firms thoroughly assess potential investments. They conduct extensive research and analysis on the target company's financial health, market position, management team, operations, legal standing, and industry trends.

**Risk Identification:** At this stage, firms identify risks such as market volatility, competitive pressures, regulatory challenges, and operational weaknesses. The goal is to understand potential threats before committing capital. **Risk Mitigation Strategies:** To mitigate risks, PE firms may structure the investment deal with protective measures such as warranties, covenants, and performance-based incentives. They may also diversify the investment across sectors or geographies to reduce exposure to single-risk factors. **Valuation and Return Projections:** At this stage, PE firms also assess the valuation of the target company and forecast potential returns. They look for opportunities to improve the company's value post-investment, thus increasing returns. **Exit Strategy Planning:** At this stage, the PE firm often outlines potential exit strategies (e.g., IPO, sale to a strategic buyer, or merger) to ensure that they can exit the investment profitably.

#### 2.3.2. Post-Investment Stage

**Active Management:** After acquiring the investment, PE firms actively engage with the portfolio company's management. They help optimize operations, streamline processes, and drive growth. In some cases, they bring in new leadership to guide the company's strategy. **Monitoring Performance:** throughout the investment period, PE firms continuously monitor the performance of the portfolio company. This includes tracking financial metrics, key performance indicators (KPIs), and other operational data to ensure the company is on track to meet growth and profitability targets. **Mitigating Operational Risks:** in this stage, PE firms often take steps to address operational risks such as inefficiencies, poor management practices, or over-leverage. They may implement cost-cutting measures, enhance governance structures, and drive strategic changes to ensure the company remains competitive and

**Figure 1:** Simplified conceptual framework of the study



Source: Authors

resilient (Manigart, Meuleman, & Beernaert, 2022). Exit Execution: as the investment matures and market conditions evolve, private equity firms execute their exit strategy, selling the business or taking it public. Timing and execution are crucial to maximizing returns while minimizing any market risks associated with the exit. Overall, managing risk in PE firms is about balancing thorough upfront analysis (pre-investment) with continuous monitoring and active management (post-investment) to ensure a positive outcome for investors (Buchner, 2017; Hamman, et al., 2021).

### 3. RESEARCH METHODOLOGY

#### 3.1. Research Design

The present study used quantitative data analysis. A survey method was used to collect generalised data using a survey questionnaire from all the 31 private equity funds in the Gauteng Province. The questionnaire has (24) questions split into two sections: demographic information of the respondent and quantitative analysis of risk management. The participants were informed that their participation was on a voluntary basis and not financially compensated for participation in the research study. The participants were guaranteed confidentiality and anonymity and informed not to disclose their names. They were also informed that there is no risk of physical discomfort annoyance to them or their family as a result of the study or procedure.

The survey in this study used different types of questions which provided more details and enriched the study. This includes the new investment project assessment risk management tools used in private equity firms, the valuation methods, the risk measurement tools employed in private equity firms, the risk management organisational structure of firms, and the risk management practices in place (Rasid, et al., 2017). Most questions require the respondents to select their answers from a Likert scale. As an additional analysis point in this study, age and gender are considered to measure the relation between risk and these variables. This assertion is acceptable from a gender mainstreaming point of view. Age is included to see risk diversification as the experience of venture capitalists increases. In this study, age is a proxy for industry experience. An online survey was conducted with a semi-structured questionnaire. Phone calls were also made to remind managers and ensure the questionnaire was completed correctly. In addition to descriptive statistics employed in this study empirical models are also used to perform quantitative analysis on risk management practices among the private equity funds in the study area as discussed below.

#### 3.2. Mathematical Formulation of Exploratory Factor Analysis (EFA) using Varimax Rotation and Mann U Whitney Test

Following the work of Dash (2017), in equation (1) “ $k$ ” is considered independent variable while  $x_1, x_2, \dots, x_k$  are the observed data for each of these variables. The objective is to identify “ $m$ ” factors ranging  $y_1, y_2, \dots, y_m$ , preferably with  $m \leq k$  as small as possible, that explain the observed data more succinctly. Therefore, three factors analysis were performed using Varimax rotation. As

observed in rotation, thus  $m \times m$  orthogonal rotation is  $U = [U_{ij}]$  of the factor matrix such that the rows represent the new factors. The Varimax maximizes the differences between the loading factors while maintaining orthogonal axes. Varimax attempts to maximize the value  $V$  where:

$$V = \frac{1}{k} \sum_{j=1}^m \left[ \sum_{i=1}^k \left( \frac{b_{ij}^2}{\phi_i} \right)^2 - \left( \frac{1}{k} \sum_{i=1}^k \left( \frac{b_{ij}^2}{\phi_i} \right) \right)^2 \right] \quad (1)$$

The Mann U Whitney test is used to test for independent samples. Define the following test statistics for samples 1 and 2 where  $n_1$  denotes the size of sample 1 and  $n_2$  denotes the size of sample 2, and  $R_1$  denotes the adjusted rank-sum for sample 1 and  $R_2$  denotes the adjusted rank-sum of sample 2. It makes no difference when sample is bigger.

$$U_1 = n_1 n_2 + \frac{n_1(n_1 + 1)}{2} - R_1 \quad U_2 = n_1 n_2 + \frac{n_2(n_2 + 1)}{2} - R_2 \quad (2)$$

$$U = \min(U_1, U_2)$$

If the observed value  $U < U_{crit}$  then the test is significant (at the  $\alpha$  level), that's to say we reject the null hypothesis. The values of  $U_{crit}$  for  $\alpha = 0.05$  (two tailed) are given in the Mann Whitney tables.

#### 3.3. Mathematical Formulation of Cronbach's Alpha Test

Following the works of Bonett and Wright (2014), Cronbach's Alpha is used to test for the reliability of the scales. Given variable  $x_1, x_2, \dots, x_k$  and  $x_0 = \sum_{j=1}^k \Sigma x_k$  and Cronbach's alpha is defined to be:

$$\frac{k}{k-1} \left( \frac{\sum_{i \neq j}^k cov(x_i, x_j)}{var(x_0)} \right) = \frac{k}{k-1} \left( 1 - \frac{\sum_{j=1}^k var(x_j)}{var(x_0)} \right) \quad (3)$$

Reliability refers to the ability of the scales to measure consistently. Cronbach's Alpha indicates internal consistency of the scales, which is expressed as a number between zero and one (Tavakol and Dennick, 2011). Depending on the scales different result could be obtained. For instance, according to Taber (2018) argued that whilst a value of 0.8 is appropriate for an intelligence test, value of 0.7 is acceptable for ability test.

### 4. DATA ANALYSIS, INTERPRETATIONS AND DISCUSSION

This section presents the data analysis in line with the objective of the study. The data used in the analysis was collected from survey conducted from all the private equity funds in Gauteng province of South Africa. The results are presented in summary tables and graphs to answer the research questions. This section reports the demographic information of the respondents, the descriptive statistics, the Mann U Whitney test, Cronbach's Alpha Reliability of



Scales Test and Exploratory Factor Analysis (EFA) using Varimax rotation, respectively.

#### 4.1. Demographic Analysis and Descriptive Statistics

40% of the participants represent females and 60% of the participants represent males. This implies that men contribute more to risk management in private equity firms than women. This result is confirmed by Zarya (2018) who argued those females are significantly underrepresented among the investment decision-makers in private equity firms. Table 1 below presents the descriptive statistics of continuous variables of the study. The mean, std. deviation, skewness, Kurtosis, minimum and maximum are included in the analysis.

Table 2 illustrates in the pre-investment risk management tools used in private equity firms in the risk assessment of new investment projects. When we highlight one of the insightful findings is that the mean rank of co-invest with reliable partners, verify track record of the management team and carry out legal due diligence on the firm is relatively low with an equal mean score of 12. Wei (2016) corroborated this finding in the literature. In addition, Kut et al. (2007) and Smolarski et al. (2005) all came to the same conclusion.

In addition, private equity firms place significant value on asymmetric information, which is reflected in their extensive use of project appraisal tools and methods. To assess the risks associated with new investment projects, these firms commonly utilize a wide range of the suggested tools. Furthermore, the data analysis reveals a Cronbach's Alpha reliability test value approaching 0.8, indicating that the scales employed in this study are highly reliable.

As shown in Table 3, three factors with eigenvalues greater than 1 were identified through Exploratory Factor Analysis (EFA) using Varimax rotation, which explained a total cumulative variance of 74% of the original variance. The first factor accounts for 41.797% of the total variance and is characterized by variables such as "checking the management team's track record," "using audited financial statements," "performing product due diligence," "conducting product market analysis," "performing customer due diligence," "carrying out competitor analysis," and "conducting criminal background checks." This factor is negatively correlated with the variable "investing in companies where the management team has prior knowledge."

The second factor 2 explains 19.771% of the total cumulated variance. It is correlated with the variables "Verify track record of the management team", "carry out legal due diligence on the firm", "Taking into account risk appetites of the fund's investors" "consider any synergy with a current portfolio company", "carry out competitor analysis". It appears to represent the principal-agent relationship. The third factor 3 is highly correlated with the variables "Invest in companies where the management team has prior knowledge", "Co-invest with reliable partners". The proportion of total variance explained by the factor 3 is 12.43%. It appears to represent syndication strategy. Such result was confirmed by Kut et al. (2007).

With reference to valuation techniques used by the private equity funds the result of Mann Whitney U test provide the result depicted in Table 4.

Table 4 shows the results regarding the valuation tools used in private equity firms. For all the questions the respondents

**Table 1: Descriptive statistics of continuous variables**

Variable description	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Work experience	22.92	7.604	-0.197	0.327	4	36
Age	47.96	6.985	0.101	-1.415	38	60
Operational years	12.12	8.652	1.179	0.9	2	35
Number of employees	59.4	125.504	2.53	5.263	3	450

Source: Authors

**Table 2: Mann Whitney U test result**

Project assessment	Total		Size <10		Size >10		Mann Whitney
	n	Mean	n	Mean	n	Mean	P-value
Invest in companies where the management team has prior knowledge	24	12.75	14	11.93	10	13.9	0.584
Co-invest with reliable partners	23	12.00	13	9.54	10	15.2	0.023**
Verify track record of the management team	23	12.00	14	11.04	9	13.5	0.145
Carry out legal due diligence on the firm	23	12.00	14	11.5	9	12.78	0.504
Use audited financial statements	24	12.50	14	11.89	10	13.35	0.442
Perform product due diligence	24	11.50	13	12.15	10	11.8	0.883
Carry out a product market analysis	24	12.50	14	12.29	10	12.8	0.832
Perform customer due diligence	24	12.50	14	12.64	10	12.3	0.894
Carry out competitor analysis	24	12.50	14	11.82	10	13.45	0.486
Take into account any synergy with a current portfolio company	24	12.50	14	11	10	14.6	0.170
Taking into account risk appetites of the fund's investors	24	12.50	14	12.75	10	12.15	0.811
Perform criminal background checks	25	13.00	14	15.25	11	10.14	0.067**

Source: Authors \*\* ---shows significant at 5% level of significance

answered by ranking each alternative. The overall results show that Enterprise Value/Earnings Before Interest, Tax, Depreciation, And Amortization, Enterprise Value/Earnings Before Interest and Tax (EV/EBIT), Enterprise Value/Earnings Before Interest, Tax and Amortization (EV/EBITA), Price Earnings Ratio (P/E), Discounted Cash flow-techniques and Net Assets are frequently used by private equity firms with equal mean 13, 00 followed by the times-revenue method and Price-to sales with an equal mean of 12, 50. In comparing the two groups we found a significant difference in using Enterprise value/Earnings Before Interest and Tax (EV/EBIT) with  $P = 0.038$  significant at the level of 5%. The results indicate that the private equity firms with size >10 employees used Enterprise value/Earnings Before Interest and Tax (EV/EBIT) more frequently than the private equity firms with size <10 employees. There were no statistical others significant results regarding the comparison of the two groups for the rest of results. Such finding is in line with the International Private Equity Guideline IPEV (2018) which recommends the use those techniques to evaluate a new investments project. Palnitkar (2021) also corroborated the result and found that private equity firms make use of Enterprise Value and Earning before Income Tax, Depreciation and Amortization (EV/EBITDA). The main factors justifying the recommendation of these techniques are that they are industry wide acceptance and the nature of information and more applicable to established businesses (Shad and Lai, 2019;

Palnitkar 2021). Besides, these valuations techniques are likely to be appropriate for an investment in an established business with an identifiable stream of continuing earnings or revenue that is considered to be maintainable (IPEV, 2018).

Figure 2 presents risk management organizational structure of private equity firms in the study area. It also displays the risk management organizational structure of private equity firms. The overall results indicate that 88% of private equity firms have risk management committees, whereas 92% of respondents stated that they do not have separate risk management department. On the other hand, 76% of respondents indicate that they have Auditor (Risk Planner) in the firms only 24% of firms have no Auditor (Risk Planner) and 72% of private equity firms indicated have no Risk Chief Offer available in the firms. Only 28% of firms indicated that they have available Risk Chief Officer. All respondents indicated that they have Board of Director available in the firms. These findings are consistent with those of Malik et al. (2020).

Finally, we present a graphical illustration of the risk measurement tools employed by private equity firms. As shown in Figure 3 below, the survey results indicate that the Cash Flow-Volatility-Based Model and Stress Testing, used to address data quality issues and the lack of data, are the most frequently utilized risk measurement tools, each accounting for 80% of responses. In contrast, only 32% of firms report using Value-at-Risk, 28% use Net Asset Value-time-based methods,

**Table 3: Exploratory factor analysis (EFA) using varimax rotation**

Variables	Factors		
	1	2	3
Invest in companies where the management team has prior knowledge	-0.68	0.007	0.872
Co-invest with reliable partners	-0.24	0.152	0.871
Verify track record of the management team	0.86	0.859	0.328
Carry out legal due diligence on the firm	0.49	0.744	0.349
Use audited financial statements	0.8	0.293	-0.025
Perform product due diligence	0.876	0.294	0.071
Carry out a product market analysis	0.902	0.119	-0.183
Perform customer due diligence	0.898	0.183	-0.226
Carry out competitor analysis	0.536	0.571	-0.295
Consider any synergy with a current portfolio company	0.488	0.548	-0.462
Considering risk appetites of the fund's investors	0.149	0.746	-0.202
Perform criminal background checks	0.588	-0.195	0.113

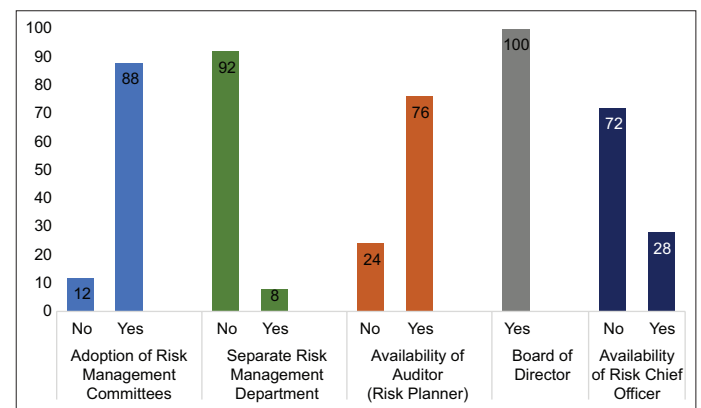
Source: Authors

**Table 4: Mann Whitney U test**

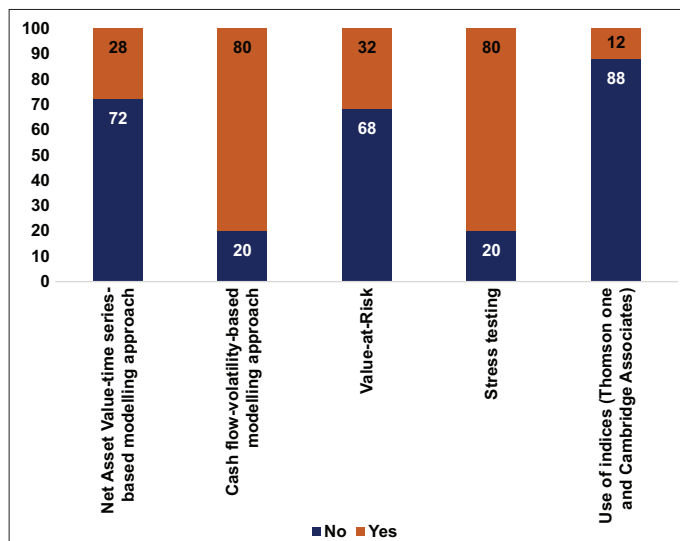
Valuations techniques	Total		Size <10		Size >10		Mann Whitney P-value
	n	Mean	n	Mean	n	Mean	
Enterprise Value/earnings before interest, tax, depreciation, and amortization	25	1300	14	1207	11	1418	0367
Enterprise value/earnings before interest and tax (EV/EBIT)	25	1300	14	10.64	11	16	0.038**
Enterprise value/earnings before interest, tax and amortization (EV/EBITA)	25	13.00	14	11.71	11	14.64	0.281
Price earnings ratio (P/E)	25	13.00	14	11.61	11	14.77	0.234
The times-revenue method	24	12.50	14	14.71	10	9.4	0.056**
Discounted Cash flow-techniques	25	13.00	14	14.07	11	11.64	0.335
Net assets	25	13.00	14	13.46	11	12.41	0.708
Price-to sales ratio (P/S)	24	12.50	13	12.65	11	12.32	0.901

Source: Own estimation

**Figure 2: Organizational structures**



Source: Own

**Figure 3:** Risk measurement tools

Source: Authors

and 12% rely on indices such as Thomson One and Cambridge Associates (AVCA, 2016).

## 5. CONCLUSION AND FINAL REMARKS

The objective of this study was to evaluate the risk management practices employed by private equity firms in Gauteng Province, South Africa. Specifically, the study focused on the pre-investment risk management tools used by these firms and the risk management practices they adopt. The findings show that private equity funds frequently rely on traditional pre-screening risk assessment methods, including criminal background checks, investing in companies where the management team has prior knowledge, conducting product market analyses, and considering synergies with existing portfolio companies. Additionally, assessing the risk appetite of investors, co-investing with reliable partners, verifying the track record of management teams, and conducting legal due diligence are high priorities for most private equity firms when evaluating new investment projects. Larger private equity firms are more likely to co-invest with trusted partners (syndication), a key strategy to mitigate risks. Factor analysis revealed three main components in the pre-investment risk management tools: asymmetric information, principal-agent relationships, and syndication. Another significant finding was the use of various valuation techniques by private equity firms during the evaluation of new investments. The survey revealed that techniques such as Enterprise Value/Earnings Before Interest, Tax, Depreciation, and Amortization (EV/EBITDA), Enterprise Value/Earnings Before Interest and Tax (EV/EBIT), Enterprise Value/Earnings Before Interest, Tax, and Amortization (EV/EBITA), and Discounted Cash Flow (DCF) are the most commonly applied. Larger private equity firms tend to use EV/EBIT more frequently in their valuation assessments.

In addition, the study examined the risk management practices within private equity firms. The results show that most firms have established risk management processes, with a high level

of scope and depth in these practices. Regular risk identification and assessment are carried out on a quarterly basis, and most firms adopt risk monitoring and control systems. Regarding the organizational structure of risk management in these firms, the study indicates that while private equity firms recognize the importance of risk management committees, they often overlook the need for a separate risk management department. However, they do understand the value of auditors (risk planners) in the risk management process. This finding aligns with the Basel II recommendations, which suggest that adopting audit and risk planning strategies can help private equity firms identify critical risks and focus their risk management efforts accordingly. Despite acknowledging the importance of a structured risk management approach, private equity firms have appointed Chief Risk Officers, as the survey results indicated. In terms of risk measurement tools, the study found that the cash flow-volatility-based model and stress testing are the most widely used tools among the private equity funds surveyed.

While this study offers valuable insights into empirical research, it also has limitations. It was conducted exclusively in Gauteng Province, South Africa, with a relatively small sample size. As such, the findings may not be generalizable to risk management practices across the broader South African private equity industry.

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