

Gordon Institute of Business Science University of Pretoria

Management of foreign exchange risks exposure by SMEs in South Africa

Ramatlakana Realeboga Mahapa 26379164

A research report submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirement for the degree of Master of Business Administration.

7 November 2016

© University of Pretoria

© University of Pretoria



Abstract

This research report explores the strategies used by small and medium enterprises (SMEs) in managing the risks associated with foreign-exchange exposure. The research also seeks to discover the reasons why SMEs use these strategies and whether or not they have been effective in managing the risk of foreign exchange exposure. The abandonment of the Bretton Woods system brought a new era of floating foreign exchange rates that led to volatility in the global currency market. Studies have found that SMEs are more vulnerable to fluctuations in the exchange rate than their larger counterparts, which can hedge or absorb the shock.

Exploratory research design was used to answer the research questions. A total of ten participants were interviewed for this study and a thematic analysis was carried out on the transcripts. The study found that SMEs use a hybrid method of combining hedging instruments and spot rates to manage the risks associated with foreign exchange. The reason for participants using this strategy is that they have no knowledge of alternatives, as they regard their competitors as in the same situation as they are, and therefore have a reason to investigate alternative strategies.

Keywords

foreign exchange rate; forex; volatility; exposure; small and medium enterprises; hedge; foreign exchange contracts.



Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirement for the degree of Masters of business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

RAMATLAKANA MAHAPA

7 NOVEMBER 2016



TABLE OF CONTENTS

Abstı	ract		i
Keyw	vords.		i
Decla	aratior	١	ii
1 I	NTRO	DUCTION AND RESEARCH PROBLEM	1
1.1	IN	TRODUCTION	1
1.2	. PU	IRPOSE OF THE RESEARCH	2
1.3	SC	COPE OF THE STUDY	2
1.4	RE	SEARCH AIM	3
1.5	SIC	GNIFICANCE OF THE STUDY	3
1.6	CC	DNCLUSION	4
2 L	_ITER#	ATURE REVIEW	5
2.1	IN	TRODUCTION	5
2.2	: FC	REIGN EXCHANGE EXPOSURE	5
2.3	i IM	PACT OF TRANSACTIONAL RISK EXPOSURE	7
2.4		REIGN EXCHANGE RISK MANAGEMENT	
2.5	FC	REIGN EXCHANGE EXPOSURE RISK STRATEGIES	
2	2.5.1	Hedging Strategies	
2	2.5.2	Non-Hedging strategies	
2.6		FINITION OF SMEs	
2.7		'S CURRENCY PERFORMANCE	
2.8		DNCLUSION	
3 F		LEM STATEMENT AND RESEARCH QUESTION	
3.1		OBLEM STATEMENT	
3.2	? RE	SEARCH QUESTIONS	
3	3.2.1	Research question 1	
3	3.2.2	Research question 2	
3	3.2.3	Research question 3	
3.3		DNCLUSION	
4 F		ARCH METHODOLOGY	
4.1		TRODUCTION	
4.2		SEARCH DESIGN	
4.3	PC	PULATION, SAMPLE AND UNIT OF ANALYSIS	24



	4.3	.1	Population	24
	4.3	.2	Sampling technique	25
	4.3	.3	Sample size	25
	4.3	.4	Sampling criteria	26
	4.3	.5	Unit of analysis	26
	4.4	DA	TA COLLECTION PROCEDURE	27
	4.5	DA ⁻	TA ANALYSIS AND INTERPRETATION	28
	4.6	VAI	LIDITY, RELIABILITY AND OBJECTIVITY	30
	4.7	AV	OIDANCE OF BIAS	31
	4.8	ETI	HICAL CONSIDERATIONS	32
	4.9	СО	NCLUSION	33
5	RE	SUL	TS	33
	5.1	INT	RODUCTION	33
	5.2	DE	MOGRAPHIC BACKGROUND OF THE PARTICIPANTS	33
	5.3	RE:	SEARCH QUESTIONS	35
	5.3	.1	Research Question 1	35
	5.3	.2	Research Question 2	46
	5.3	.3	Research Question 3	54
	5.4	AD'	VICE TO OTHER SMES	62
	5.5	CO	NCLUSION	64
6	DIS	CUS	SSION OF RESULTS	66
	6.1	INT	RODUCTION	66
	6.2	DIS	CUSSION OF RESULTS FOR RESEARCH QUESTION 1	67
	6.2	.1	Research Question 1	67
	6.2	.2	Understanding of foreign exchange exposure	67
	6.2	.3	Identifying the most commonly used strategy	69
	6.2	.4	Conclusive results for research question 1	71
	6.3	DIS	CUSSION OF RESULTS FOR RESEARCH QUESTION 2	72
	6.3	.1	Research question 2	72
	6.3	.2	Reasons for choosing particular strategies	72
	6.3	.3	Haven't researched other strategies	73
	6.3	.4	Behaviour of competitors	74
	6.3	.5	Willingness to explore new strategies	74



	6.3	.6	Conclusive results for research question 2	75
	6.4	DIS	CUSSION OF RESEARCH QUESTION 3	76
	6.4	.1	Effectiveness of the chosen strategies	76
	6.4	.2	Cost-effective strategies	78
	6.4	.3	Conclusive results for research question 3	79
	6.5	COI	NCLUSION	79
7	RE	COM	MENDATIONS AND CONCLUSION	81
	7.1	INT	RODUCTION	81
	7.2	SUN	MMARY OF KEY FINDINGS	81
	7.2	.1	The stepping mechanism	82
	7.2	.2	Competitors are in the same boat	83
	7.2	.3	Easy and cost effective	84
	7.3	REC	COMMENDATION FOR BUSINESS	85
	7.3	.1	Research alternative method	85
	7.3	.2	Cash sales over credit sale	85
	7.3	.3	Use forward exchange contract to protect margins	86
	7.3	.4	Use hybrid strategies	86
	7.3	.5	Have a foreign exchange management strategy	86
	7.3	.6	Know your industry and always be informed	87
	7.4	LIM	ITATION OF THIS STUDY	87
	7.5	REC	COMMENDATIONS FOR FUTURE RESEARCH	88
	7.6	COI	NCLUSION	88
8	RE	FERE	ENCES	90
A	PPEN	DICE	S	95
	APPE	(IDN	(A: INTERVIEW CONSENT FORM	95
	APPE	(IDN	K B: CLASSIFICATION OF SMME PER SECTOR	96
	APPE	(IDN	C: INTERVIEW SCHEDULE	98
	APPE	(IDN	(D: ETHICS APPROVAL1	03



TABLE OF FIGURES

Figure 2.7.1: ZAR to USD Exchange Rate Graph	19
Figure 5.2.1: Demographics of the study	34
Figure 5.3.1.1: Business impact of the South African currency	36
Figure 5.3.1.2: Future outlook of the SA currency	38
Figure 5.3.1.3: Foreign exchange risk exposure	40
Figure 5.3.1.4: Foreign exchange risk exposure management strategy	43
Figure 5.3.2.1: Reason for choice of strategy	47
Figure 5.3.2.2: Knowledge of alternative strategies	49
Figure 5.3.2.3: Consideration of other strategies	51
Figure 5.3.2.4: Competitors influence	52
Figure 5.3.3.1: Ease of implementing strategy	55
Figure 5.3.3.2: Effectiveness of Strategy	58
Figure 5.3.3.3: Effectiveness cost effectiveness of strategy	60
Figure 5.6.1: Advice to other SMEs	63



1 INTRODUCTION AND RESEARCH PROBLEM

1.1 INTRODUCTION

The Bretton Woods system of the 1950s introduced the American dollar as the reserve currency used throughout the world at a fixed but adjustable foreign exchange rate (Bruce, Jaeger, Houck, & Aca- 2016; Dooley, Folkerts-Landau, & Garber, 2003; Newton, 2013)..This was done to allow Europe and Japan to rebuild their economies after the Second World War (Dooley et al., 2003).

After Europe and Japan restored their financial institutions, there was no longer a need for a fixed foreign-exchange rate system (Dooley et al., 2003) so the fixed-rate system ended in the 1970s (Muller & Verschoor, 2006). The abandonment of the Bretton Woods system brought about a new era of floating foreign exchange rates, which has led to volatility in the global currency market (Muller & Verschoor, 2006).

It is widely accepted that foreign exchange risk affects firms' cash flows and ultimately their value (Choi, 2012; Kula, 2005). Given the difficulty in predicting the direction of foreign exchange movements, fluctuations in the forex market can be disastrous for an organisation's financial performance (Dong, Kouvelis, & Su, 2014).

Exposed firms have devised strategies such as "operational strategies" and "financial hedging strategies" to reduce the risk of exposure (Aabo, Høg, & Kuhn, 2010; Choi, 2012; Muller & Verschoor, 2006). However, small entities tend to be more vulnerable to foreign-exchange fluctuations than larger entities, as they have fewer risk-hedging abilities than their larger counterparts (Choi, 2012; McCarthy, 1999). These small firms, commonly known as small medium enterprises (SMEs) (Gibson & Vaart, 2008), often lack the sophistication to deal with foreign exchange exposure and might therefore find themselves at risk in volatile markets.

In recent times, the financial community has increasingly focused on the extensive devaluation of emerging market currencies which has ranged from 20% to 50% (Johnson, 2015), highlighting the extensive foreign exchange risk faced by businesses in emerging markets. This is a global issue for emerging markets, but it is particularly pertinent in South Africa, as the local currency depreciated by 25.4% in 2015 alone, making it the third-worst-performing emerging market currency in the world in that year (Lings, 2016).



The challenge of managing foreign-exchange risk has posed difficulties for both importers and exporters (Derby, 2014). While the business models are fundamentally different for these two types of entities, the challenge of foreign exchange management has been central to both industries (Wasseman, 2010). Internationally, the role of SMEs has been recognised as an economic driver, with the World Bank citing SME development as an approach to boosting growth in the economy, increasing employment and reducing poverty (Ayyagari, Beck, & Demirguc-Kunt, 2007). As a country, South Africa has adopted a policy of increasing employment through the creation of SMEs (Statistics South Africa, 2016).

With regard to the current academic literature, it is a challenge to find research focused on the management of foreign exchange issues facing SMEs (Choi, 2012; McCarthy, 1999). Given the importance of SMEs to the economy, it is imperative that research is conducted to investigate the practices of SMEs in managing problems resulting from exposure to foreign exchange.

1.2 PURPOSE OF THE RESEARCH

The development of SMEs in the local and global economy is vital to both economic growth and poverty alleviation (Acs, Morck, Shaver, & Yeung, 1997; Ayyagari et al., 2007; Gibson & Vaart, 2008). SMEs find themselves more exposed to volatility in the exchange rates than larger firms (Choi, 2012; McCarthy, 1999).

Previous studies in the field have concentrated mainly on larger firms, with small firms given less attention (Choi, 2012; Kula, 2005; McCarthy, 1999). This study will explore the management of foreign exchange exposure risk by SMEs in South Africa.

1.3 SCOPE OF THE STUDY

This study focuses on the strategies that SMEs employ in managing the risks associated with foreign exchange fluctuations. Although there are a number of such risks, including translation, and transactional and operational risk (Dong et al., 2014; Hagelin, 2003; Kula, 2005; Muller & Verschoor, 2006). Translational risk applies mainly to businesses with foreign operations, which seldom include SMEs (Kula, 2005; McCarthy, 1999).



Since the operational risk does not form part of the scope of this study, as it is difficult to quantify without knowledge of a firm's future net present value (McCarthy, 1999). Since transactional risk is generally agreed to be the forex risk that is most relevant to SMEs (McCarthy, 1999), it is the main focus of this study.

Recently, the South African currency has been the third most volatile currency in emerging markets globally. It has plummeted 25.4 % in the past year (Lings, 2016). This makes South Africa the ideal geographical site in which to explore the practices of SMEs in this volatile market.

1.4 RESEARCH AIM

While the strategies used by large firms have been widely published, and their strategies for managing foreign exchange such as operational and financial hedging are known (Aabo, Høg, & Kuhn, 2010; Choi, 2012; Muller & Verschoor, 2006), the challenge in the current academic literature is to find research focused on the management of foreign exchange issues facing SMEs (Choi, 2012; McCarthy, 1999).

The intention of this study was to explore the strategies that SMEs use to manage the risk of foreign exchange exposure. This study further seeks to explore the reasons for SMEs' use of these strategies and to find out if they have been effective in managing the risks involved in of foreign exchange exposure.

1.5 SIGNIFICANCE OF THE STUDY

Foreign exchange exposure is an inherent risk for any export or import firm, irrespective of their size (Kula, 2005). Given the difficulty of predicting the direction of foreign exchange movements, forex market fluctuations tend to have drastic consequences for the financial performance of any entity (Dong et al., 2014).

Recently, the currencies of emerging markets have come under the focus of the financial community, as they have been the most volatile (Johnson, 2015) and their fluctuations have been the hardest to predict. South Africa, as an emerging market, had the thirdworst performing currency (Lings, 2016), and this put businesses in this market at increased risk of foreign exchange exposure.



It is a challenge to find academic literature that centres on SMEs' management of forex exposure (Choi, 2012; McCarthy, 1999), in spite of the fact that the importance of SMEs in any economy has been cited by institutions such as the World Bank and their contribution to employment is one that cannot be ignored (Ayyagari et al., 2007).

This study is an important contribution towards understanding the available strategies that can be used by small and medium entities to manage the risks associated with forex exposure. This study also gives insight on why they are used and how effective they are in managing the risks to which South African SMEs are exposed.

The study used exploratory research design to answer the research question in what strategies the SMEs in South Africa use to manage the risk of forex exposure and the reason and effectiveness of these strategies. As part of the study, ten participants were interviewed and their responses were used to find answers the research questions.

1.6 CONCLUSION

The issue of fluctuating exchange rates poses a challenge for firm with import and export interest. Large firms have been able to manage this risk by having strategies in place to protect their interests. Literature is abundant with these strategies that are used by large firms to manage the exposure risk, however little can be said for literature on small and medium firms.

Due to the limitation in the literature on the management of forex risk management by SMEs, this study offers valuable exploratory insights into the strategies that SMEs use to manage foreign exchange risk. South Africa has had a turbulent year when it comes to exchange rates with the local currency depreciating more than 25 % in the previous year and thus makes it an ideal geographical location to base the study.

The results of the study can be used to assist other SMEs in the import and export market to formulate their own forex management strategy.



2 LITERATURE REVIEW

2.1 INTRODUCTION

This chapter details the current literature that is available in the field of foreign exchange exposure, setting out the preliminary areas of investigation for this study and offering a review of the different types of foreign exchange risks and their impact on business.

To begin with, the concept of foreign exchange exposure will be explored, specifically, as it is experienced by firms in the export and import markets, with a focus on small and medium enterprises (SMEs). This is followed by a review of the literature relating to the management of foreign exchange risk from the point of view of different authors, focusing on the various strategies that are available in the market and are commonly used by SMEs to manage their foreign exposure risk. To provide a context for the literature, the international and locally accepted definition of SMEs is also examined, followed by an account of the volatility of the South African currency over the past five years, and its future outlook.

Since literature in the field of SME forex risk mitigation strategies is so limited, (Choi, 2012; Kula, 2005; McCarthy, 1999), this study aims to use the existing literature on larger businesses as a basis for the development of a more thorough understanding of a practical strategy with which SMEs can manage forex exposure risk.

2.2 FOREIGN EXCHANGE EXPOSURE

In an increasingly global world, most firms have their transactions denominated in numerous foreign currencies; the settlement of these transactions usually requires firms to purchase foreign currency (Bogicevic, Dmitrovic-Saponja, & Pantelic, 2016).

The majority of these firms are export-oriented firms that engage in many cross-border transactions and have cross-currency cash flows from using the currencies of different countries (Maniar, 2016). Other firms that use multiple currencies are multinational companies that operate in numerous territories internationally and have multiple income sources in various foreign currencies.



Entities are exposed to forex risks if their liabilities or earnings are in a foreign currency (McCarthy, 1999) and, as a result, have a business dependency on the prevailing rate of exchange. The concept of foreign exchange exposure is one that has been explored by several authors (Dominguez & Tesar, 2006; Dong, Kouvelis, & Su, 2014; Muller & Verschoor, 2006). There are two common types of foreign exchange exposure, namely transactional and translational exposure (Hagelin, 2003; Muller & Verschoor, 2006). Other authors, such as Dong et al. (2014); Kula (2005); and McCarthy (1999) argue that there are three types of risks rather than two, with the third being operational/economic exposure risk.

Translational exposure refers to firms that have foreign operations and have to restate their financials in the local currency of the parent company when their financial statements have to be combined (McCarthy, 1999). However, the predominant view presented in the literature is that translation risk is only valid for businesses with foreign interests, and it would be highly unlikely for an SME to fall into this category (Kula, 2005; McCarthy, 1999).

Transactional risk refers to firms that trade or have contractual obligations in a foreign currency, and this can happen whether firms are using spot prices or contract prices to purchase goods in a foreign currency (McCarthy, 1999). This can also be expressed as the change in future profits instigated by the movement in the forex rate (Hagelin, 2003). Given that most firms, irrespective of whether they are in the export or import business, will have to transact in foreign currency and thus will be affected by the associated risk, it is clear that SMEs in these lines of businesses will use the same transacting method and face the same risk (Kula, 2005; McCarthy, 1999; Muller & Verschoor, 2006).

Operational risk exposure refers to the effect of competition and prices that change as exchange rates fluctuate, affecting the company's cash flow and, ultimately, its net present value (NPV) (Dong et al., 2014; McCarthy, 1999). This type of exposure is difficult to quantify and managers would be expected to have knowledge of the firm's future NPV if there were a change in the exchange rates (McCarthy, 1999).

Most firms do not know the extent of their foreign exchange exposure; the reason for this is that firms do not have an understanding of nominal and economic currency exposure. Nominal exposure is the difference in the translation of revenue and expense in different currencies, while the economic exposure is understanding the effects of currency



movement on the firm's performance (Lamarre & Pergler, 2008), for example, a petrol price increase, competitors changing prices, or a loss of customers.

Taking into consideration that most SMEs do not experience a translational risk as they are only based in one domicile, this study will focus on transactional risk, as it is the most likely risk that small and medium enterprises face when doing international business.

2.3 IMPACT OF TRANSACTIONAL RISK EXPOSURE

In recent times, the extent of foreign exchange exposure has increased at an exponential rate. Exchange rate fluctuation occurs in the time it takes from entering into a contract to the final settlement; it is during this time that a firm is most exposed (Goel, Gupta, & Goel, 2011).

These fluctuations can be favourable or unfavourable, depending on the swing of the market. The longer the gap between contracting and closing, the bigger the risk of the fluctuation being unfavourable (Goel et al., 2011). Forex rates act in an impartial manner, in response to fresh data in the market and this means that the reaction may be favourable to one contracting party and unfavourable to another. It is the random and uncontrollable nature of the market that poses a risk for a firm that is exposed (Sivakumar & Sarkar, 2008).

Transactional risk exposure affects a firm's future cash flow and profitability (Bogicevic et al., 2016), so that it loses most or all of its profits and experiences a reduction in its firm value and consequent limitations in financing profitable investment opportunities (Bartram, Brown, & Minton, 2010). Even a minor adjustment in the forex rate can have a substantial influence on the cash-flow of a firm (Soenen, 1987). Volatility in foreign exchange also results in lower margins if competition in the market does not allow for the prices to follow the movement of the fluctuation, especially in a depreciating trend (Goel et al., 2011).

Firms that have foreign exchange exposure have the objective of reducing the risk of foreign exchange volatility, as this makes it impossible for them to predict their cash-flow to finance future operations, which could result in financial distress (Goldberg & Drogt,



2007). The impact of foreign exchange exposure might be viewed by most firms as a short-term problem; the reason for this is that in the short-term, foreign exchange exposure will impact the firm's liquidity. However, its impact on the firm's sustainability can be seen in the long term (Kula, 2005)

The risk of foreign exchange exposure on business is one that can make or break a firm, since a movement in the forex rate may be the difference between profit or loss for the business (Boroaca & Anttila, 2014). Ehrlich & Anandarajan (2008) suggest that a 10% fluctuation in the exchange rate can lead to 100% loss of their margin. Most firms that have most of their business dominated by a foreign currency find themselves at risk of being in unfavourable contracts that are detrimental to them.

In highly volatile markets, even high-performance firms with reasonable profit margin projections can make a loss on the exchange rate (Kazaz, 2014). If firms do not exercise oversight and control over their foreign exchange risk management practices, they are likely to suffer substantial losses (Goldberg & Drogt, 2007).

2.4 FOREIGN EXCHANGE RISK MANAGEMENT

Forex risk exposed firms have a number of strategies that they can use to mitigate the risk of exposure, namely "hedging" and "non-hedging" strategies (McCarthy, 2003; Morey & Simpson, 2001). Hedging strategies include forward contracts, future contracts, swaps, options and natural hedges (Goldberg & Drogt, 2007). Non-hedging strategies include pricing mechanisms (Yang, 1997), operational strategies (Bartram, 2008) and doing nothing (Goldberg & Drogt, 2007)

Before firms can choose which strategy is most suitable for them, they need to know how to assess the risk. Goldberg and Drogt (2007) have suggested a six-step methodology for firms use to manage their risk to foreign exchange exposure. This consists of "foreign exchange risk management objectives", "define a view of the future exchange rate", "measure the foreign exchange risk exposure", "determine strategy", "establish and maintain internal controls" and "evaluate foreign exchange risk management performance".



Foreign risk management objectives

For a firm to be able to manage their foreign exchange risk, they need to establish objectives and have a policy geared towards achieving those objectives (Goel et al., 2011). Goldberg and Drogt (2007) suggested that the objective of most firms was to minimise the unpredictability of their profits by predicting any future swing in the currency. This view was shared by Ehrlich & Anandarajan (2008), who added that the objective of firms was to reduce risk and eradicate the cost associated with foreign exchanges risk.

In a study on the management of forex risk, Goel et al., (2011) found that the objective of 35% of the companies they studied was to selectively eliminate their foreign exchange exposure, while 11% of the firms just wanted to minimise their risk.

Defining a view of future exchange rates

Firms should hold a view of the future performance of their base currency against the foreign currencies of countries where they have foreign interests. This will assist them in forecasting their cash flow and budgets, and enable them to manage their exposure. Holding a view also assists firms in determining what strategy they will employ to manage their risk, i.e using spot rates or forward rates (Goldberg & Drogt, 2007). Morey & Simpson (2001), suggested that an exchange rate is hard to predict in the short term and that the available literature has fared poorly in forecasting its movements.

Other authors such as McCarthy (1999), argued that, in the long run, the volatility of forward rate is similar to that of spot rates, and no benefit can be gained from using both.

Measuring the FX risk exposure

Goldberg and Drogt (2007), maintained that firms should sum up all their transaction in the foreign currency that they want to measure. These authors further suggested considering the "maximum level of acceptable losses", "frequency of exposure", "time



required to reposition hedges" and "expectation of worst-case exchange-rate movements".

Goel et al., (2011) and (Maniar, 2016) stated that most firms have a policy in place for the management of foreign exchange risk, but the problem with policies, according to these authors, is that one needs to find a balance between uncertainty and loss of opportunity (Goel et al., 2011).

Determine strategy

Firms use can use a "natural hedges" or "derivatives" as strategies to limit the risk of foreign exchange exposure. The choice of strategy is not entirely up to the firm, as completive pressures often dictate the choice (Goldberg & Drogt, 2007).

Establish and maintain internal controls

Goldberg & Drogt (2007), suggest that firms should have internal controls to monitor their foreign exchange risk programme. The lack of such controls may render the programmes insignificant.

• Evaluate FX risk management performance

Firms should always evaluate the effectiveness of their strategies to ensure that they achieve the company objective. One method of doing this is by comparing the actual balance gains or losses from hedging strategies to the forecasted figures.

In his research on the foreign exchange exposure perception, Choi (2012), concludes that firms should not only focus on the daily movement of their gains or losses but also evaluate their expected return. What was found in this study is that managers consider their own performance against currency performance and not the performance of the currency itself.



Foreign exchange management practices for SMEs

Most firms find it difficult to establish a foreign exchange management policy (Maniar, 2016). This exposes them to unsustainable forex management practices, as their policies lack consistency and vary over time (Muller & Verschoor, 2006). The size of the firm has a bearing on a firm's hedging policy, SMEs, just like their multinational counterparts, must have a policy in place (McCarthy, 1999).

However, the literature shows that SMEs are more reluctant to have forex management strategies than their larger counterparts. This can be seen by the fact that most SMEs do not have a hedging policy (McCarthy, 1999). The reasons given for this are varied; they include: "Hedging does not make a difference to the performance of the firm", "Hedging is not the objective of the firm", "We do not understand the difference between hedging and speculating" and "We are satisfied with their current strategy". The minority of the firms in McCarthy's study stated their reason as "Hedging is too expensive", "Too difficult" or "We do not have time" (McCarthy, 1999).

2.5 FOREIGN EXCHANGE EXPOSURE RISK STRATEGIES

2.5.1 Hedging Strategies

Hedging can be defined as "an action taken, whether by entering into a foreign currency contract or otherwise, with the objective of avoiding or minimising possible adverse financial effects of movements in exchange rates" (McCarthy, 1999, p. 31). Firms use hedging to minimise or offset the risk of losses they may suffer as a result of price changes in either its assets, liabilities, commitments or accruals (South African Reserve Bank, 2010). The most common form of hedging is by using a financial instrument to minimise the risk of forex exposure (Aabo et al., 2010).

Most companies use financial hedging to manage their forex risk; this is seen as the most effective strategy for mitigating foreign exchange risk exposure as it is easy and low-cost. However, this strategy can only be used in the short term because if it is used for a longer period it can lock the firm into an unfavourable contract (Lamarre & Pergler, 2008).



Other reasons why a firm may choose to hedge their foreign exchange exposure are to maximise shareholder value, to reduce the probability of financial distress, to take advantage of an investment opportunity, to reduce expected tax liability or to increase managerial wealth while being risk averse (Hagelin, 2003). Literature suggests that small firms employ financial hedging more often than their larger counterparts. Empirical evidence, however, indicates that hedging often requires huge fixed costs, which can be a difficulty for smaller firms (Hagelin, 2003). This makes smaller firms more vulnerable to foreign exchange than larger firms, as they usually have less risk hedging capacity than their larger counterparts (Choi, 2012; McCarthy, 1999).

There are a number of financial derivatives available for firms to hedge their risk, namely "forward contracts", "future contracts", "swaps" and "options" (Ehrlich & Anandarajan, 2008; Goldberg & Drogt, 2007). 2.5.2

Forward Contracts

Forward contracts, or forward cover, as it is more commonly known, is a contract for the future purchase of foreign currency at a fixed rate (Ehrlich & Anandarajan, 2008). These contracts allow firms to trade forex at a definite rate at a specific date in the future (Goldberg & Drogt, 2007).

Although this is the most common hedging strategy (Ehrlich & Anandarajan, 2008; Goldberg & Drogt, 2007), it does have its pitfalls. Forward contracts can be rendered ineffective if there is a mismatch between the maturity date and the payment date. Forward window contracts, which allow for payments to be made during a specific period, can be used to counter this pitfall (Goldberg & Drogt, 2007).

Forward contracts have an advantage as they mitigate risk, having a fixed rate and date of payment. On the other hand, they require vast deposits, and if the firm defaults they will have to pay hefty penalties (Ehrlich & Anandarajan, 2008).



Future Contracts

Future contracts, or currency futures as they are called, are similar to forward contracts in that they offer to purchase as the sale of foreign currency at a future date. The difference between the two is the standardisation of future contracts for a fixed amount and time, usually at the end of a quarter, and they are usually used to purchase smaller amounts of currency (Ehrlich & Anandarajan, 2008).

The advantage of future contracts is that they are liquid, can be acquired easily at low transaction costs and their contracts are not ambiguous. However, the disadvantage with them is that their premiums might be higher than their benefit, lack flexibility, have losses and gains daily and your counterpart in the other country must have a good reputation (Ehrlich & Anandarajan, 2008).

Swaps

Foreign exchange swaps assist when a firm has long-term debt in a foreign currency and swaps its debt with a counterpart in the country where the currency is based (Ehrlich & Anandarajan, 2008). Swaps are used by firms to convert local liabilities into foreign liabilities and vice versa; this is done to match foreign debt with foreign commitments, to reduce foreign exchange exposure (Clark & Judge, 2009).

Another reason for using swaps is that firms reduce the interest rate by changing the currency of borrowing (Goldberg & Drogt, 2007). The motive behind this is that debt is sensitive to currency volatility and swings in the currency will have an impact on the amount of interest a firm has to pay to its cross-border creditors (Ehrlich & Anandarajan, 2008).

Like most financial hedges, swaps need a financial intermediary to execute them and are mostly used by large firms that have international subsidiaries and transactions (McCarthy, 1999). Swaps are useful when the foreign exchange risk is known. They are flexible, issued by banks and useful for long-term hedging. However, they are not obtainable without a good credit record and they have long term transaction periods (Ehrlich & Anandarajan, 2008).



Options

These are considered an advantageous alternative for purchasing foreign currency, as they give the firms an option, not an obligation, to purchase foreign currency at a forthcoming date and at a specific price (Ehrlich & Anandarajan, 2008; Goldberg & Drogt, 2007). The advantage that a firm gains from using options is that they can let them expire if the foreign exchange turns out to be a disadvantage. This flexibility allows them to take advantage of the upside and hedge against the downside, and this is what makes options expensive (McCarthy, 2000) The pitfall is that the firms have to pay a deposit and might never utilise the option (Goldberg & Drogt, 2007).

The advantage of options are similar with those of swaps, but they have different disadvantages in that they have variable premiums which might offset the gains and have high premiums that might not make their purchase worthwhile (Ehrlich & Anandarajan, 2008).

Natural Hedges

Firms create a natural hedge by basing their operations in the same country where sales occur, and in so doing they are able to finance operations with the same currency as their sales. This makes it possible for firms to match cash inflows and outflows in the foreign currency (Goldberg & Drogt, 2007). Taking into consideration the cost of setting up operations in different geographical areas, natural hedges are most relevant and used by multinational companies (Gleason, Kim, & Mathur, 2005)

Natural hedges require extensive research by the organisation and have a considerable cost associated with them (McCarthy, 2000). In a study of hedging instruments used by firms, natural hedges were found to be the least understood (McCarthy, 1999).



2.5.2 Non-Hedging strategies

Price mechanisms

There are three price mechanisms that firms can use when it has foreign exchange exposure, namely "pass-through", "partial pass-through" and "no pass-through" (Yang, 1997). Pass-through is explained as the passing of currency movements to the firm's customers through its price. No pass-through implies that the firm opts to absorb the exchange rate fluctuations, while partial pass-through is somewhere in between both strategies (Yang, 1997). Pricing mechanisms are the easiest and most evident foreign exchange management strategy and work well if other competitors in the market are impacted by the movements in the currency market (Lamarre & Pergler, 2008). However, they depend on the rivalry in the market and are not instantly available to the management of firms (Bartram et al., 2010).

Operational strategies

Firms with foreign exchange exposure can use a number of operational strategies, namely passing the currency risk on to the customer, delocalising production to low-cost countries, diversifying their supply chain and revenues, moving their production to countries with lower costs, and improving their productivity (Lamarre & Pergler, 2008).

Passing the risk on to the customer

This is regarded as the simplest strategy, but it is not as easy to implement because your competitors have to be in the same position as you for the strategy to be successful. Market conditions sometimes prohibit a firm from implementing this strategy in full, and/or even partially (Lamarre & Pergler, 2008) as the amount of the risk that can be passed to the customer depends on whether the product has substitutes in the market (Bartram et al., 2010, p. 155).



· Realigning cost and revenue exposure

Although a bit more complex, this strategy involves matching the cost side to the revenue side of the exposure. Firms can match their foreign sales with domestic sales. Firms can also use more suppliers in their foreign market for final assembly to ensure that the foreign currency generated is used to settle the debts to suppliers, thus decreasing the burden and risk of purchasing foreign currency at a later stage (Lamarre & Pergler, 2008).

Diversifying supply chain and revenues

Firms can decrease their dependency on one currency by partnering with other firms that have a broader global reach, in this way diversifying their income streams to a number of currencies. This safeguards that the volatility of one of the currencies can be offset by another that is performing better (Lamarre & Pergler, 2008)

Moving production to countries with lower costs

This strategy involves moving the production to countries that have a weaker currency than yours, usually in the developing world. This allows the firm to build a 'profit cushion' that will shield it firm in turbulent times. This is not a typical risk mitigation strategy but it can also be effective (Lamarre & Pergler, 2008)

Improving productivity

Improving productivity is also seen one of the strategies that can assist in curbing the negative impact of foreign currency exposure, but it is a long-term solution. A firm should not rely solely on this strategy to decrease their risk of foreign currency exposure (Lamarre & Pergler, 2008). Operational strategies alone are not enough to manage the risk of foreign exposure, as setting up operations in foreign territories is costly and not easy to manage (Bartram, 2008).

These strategies are all commonly known as internal hedges; other internal hedges include "invoicing/paying in local currency" and "leading/lagging payment" and "cross-



border accounts", these are sometimes not possible for SMEs to implement as they require the firm to be dominant in the market (McCarthy, 1999).

Doing nothing

Firms can also opt not to hedge the risk of foreign exchange fluctuation and rather absorb it. This is known as "doing nothing" (Ehrlich & Anandarajan, 2008). This strategy is best used when minor fluctuations in foreign exchange are forecasted by the firm (Ehrlich & Anandarajan, 2008). Other reasons for firms doing nothing are that firms might believe that the real risk of foreign exchange exposure is non-existent. Known as purchase price parity, the notion states that exchange rate fluctuations are 'a zero sum game' as a change in prices will offset the change in the exchange rate (McCarthy, 1999).

Regular hedging may not provide the requisite benefit, as forward rate and spot rate hold the same unpredictability and forward rates is an average forecast of the spot rate, which means in the long-run no benefit will come from using forward contract, hence the decision to do nothing (McCarthy, 1999).

Doing nothing has the advantage of being the least costly foreign exchange management strategy but liabilities can be significant volatility in the forex market (Ehrlich & Anandarajan, 2008).

2.6 DEFINITION OF SMEs

The formal definition of an SME is a "small and medium enterprise" (Ayyagari et al., 2007). This only gives meaning to the acronym but does not give a classification of which firms fall into this category. There is consensus globally on the definition of SMEs, but some countries and institutions such as the IMF and World Bank classify it by a) number of employees and b) annual turnover. The challenge with this is that this measure also differs in these institutions (Gibson & Vaart, 2008). Table 1 gives the categorisation of SME's, as defined by multifaceted institutions.



Table 1: Defining small and medium enterprises in developing countries

<u>Institution</u>	Maximum # of Employees	Max. Revenues or Turnover (\$)	Maximum Assets (\$)
World Bank	300	15,000,000	15,000,000
MIF – IADB	100	3,000,000	(none)
African Development Bank	50	(none)	(none)
Asian Development Bank	No official definition. Uses only definitions of individual national governments.		
UNDP	200	(none)	(none)

Note. Retrieved from A less imperfect way of defining small and medium enterprises in developing countries by Gibson, T., & Vaart, H. J. Van der Vaart, 2008, Brookings Global Economy and Development (September), 1–29. Copyright 2008 by Brookings Global Economy and Development. Reprinted with permission.

The National Small Business Act (1996) categorises SMEs according to their industry and according to a) the number of "full-time equivalent paid employees", b) "turnover" and c) "gross asset value". The breakdown of the classification of firms in each sector is given in Table 2: Appendix B. The challenge in using the classification given by the Act is that if the turnover and the number of employees of the firm do not fall into a certain category, it will be difficult to correctly classify the firm size. For that reason, for purposes of this study, SMEs are considered to be small and medium enterprises as defined by the World Bank in Table 1 above.

2.7 SA'S CURRENCY PERFORMANCE SINCE THE GLOBAL FINANCIAL CRISIS

In recent years the exchange rate of the South African rand (ZAR) has been very volatile in relation to major currencies such as those of other emerging markets (Odhiambo, 2015). Figure 1 below shows the performance of the South African rand against the USA dollar (USD) in the past eight years.



The figure illustrates that the ZAR has been in decline since the global financial crisis of 2008, even though it had an upswing in 2009, just before the hosting of the FIFA World Cup. The ZAR depreciated by 25.4% in 2015 alone, making it the third-worst performing emerging market currency in the world in that year (Lings, 2016).

On closer inspection, one can observe that the movement of the ZAR from year to year has become very volatile, making it difficult for firms to forecast its movement in a financial year. The difficulty with the local currency is its depreciation, coupled with volatility, making it difficult for firms with forex exposure to managing the risk of transacting in this currency.



Figure 2.7.1: ZAR to USD Exchange Rate Graph - Mar 31, 2008, to Mar 24, 2016

Figure 1. ZAR to USD Exchange Rate Graph - Mar 31, 2008, to Mar 24, 2016. Copyright 2015 by Indexmundi.com. Reprinted with Permission

The ZAR performed well towards the second quarter of 2016, with the local currency retrieving its 2015 losses and even appreciating by 11% against the USA dollar during this time. However, the local currency remains very volatile and is sensitive to possible global scenarios such as expectations of change in the USA monetary policy and domestic concerns, including the possibility of rating downgrades later on in the year (South African Reserve Bank, 2016)



2.8 CONCLUSION

This literature review explored a number of aspects of foreign exchange risk exposure. The review started by unfolding how firms become exposed to foreign exchange risk, how it impacts on business and how it can be managed.

Different authors indicated that most firms involved in international trade will have some kind of foreign exchange exposure risk, with transactional risk being the most common against all firms. It is the most likely to impact on small and medium enterprises.

The authors made it clear that firms need to have strategies in place that involve policy formation and evaluation, in order to control their foreign exchange risk to meet their risk-management objectives.

Out of the different hedging risk management strategies, it was found that forward contract was the most common strategy against SMEs. This could be due to the relative ease of obtaining a forward contract, as they are traded over the counter (OTC). As the country with the third most volatile currency, South Africa has a number of OTC products that can be obtained from the major banks for businesses to hedge their foreign exchange risk (Standard Bank, 2008). "Doing nothing" was also found to be the most common non-hedging strategy, as it is the least costly but can have drastic consequences if a currency devaluates dramatically.

This chapter also offered a synopsis of the past performance of the South African ZAR, which has been the most vulnerable currency in its emerging market basket. The future outlook of the ZAR is also negative, with the South African reserve bank holding the view that the ZAR is still vulnerable to external market forces.

SMEs that operate in the South African import and export sectors need to be aware of the risks that they are exposed to in terms of the rate and formulate a measurable strategy around the future outlook of the domestic currency against other major currencies.



3 PROBLEM STATEMENT AND RESEARCH QUESTION

3.1 PROBLEM STATEMENT

SMEs are more vulnerable to foreign exchange risk, and knowledge of this field is rare, particularly in South Africa, as previous studies have concentrated on large firms. Internationally, studies on SMEs' forex exposure risk have been in developed countries and literature about emerging markets is scarce.

The effects of adverse foreign exchange movements on SMEs are clear, posing significant risks to businesses in import and export markets. As such, this study aims to explore the strategies in use by SMEs to mitigate these risks. The established theory base provides a great depth of knowledge in this field; however, it focuses on large, established firms and multinationals. This study addresses the problem specifically from the perspective of SMEs in the South African economy.

From a business perspective, the problem is clear: SMEs in emerging markets are exposed to some of the most volatile currencies in the wold economy. Understanding what strategies are available to them to mitigate this risk could prove to be a significant factor in increasing the sustainability and profitability of SMEs in emerging markets. Foreign exchange management by SMEs in emerging markets needs to be given more attention, as these countries' currencies have been volatile in recent years, making SMEs in these markets at risk to foreign exchange exposure.

How a firm manages its foreign exchange exposure can make the difference between profit and loss. If the firm operates at a 10% margin and the foreign exchange market fluctuates by 10%, then this could lead to the loss of its margin (Ehrlich & Anandarajan, 2008)



3.2 RESEARCH QUESTIONS

3.2.1 Research question 1

What strategies do SME's in South Africa use to manage the risk of foreign exchange exposure?

This question seeks, firstly, to uncover whether SMEs are aware of the risk posed to their business by their exposure to foreign exchange. The question also seeks to understand the various strategies, if any, used by SMEs in managing that risk. The different strategies are covered in Chapter 2. 5 of this report.

The participants were asked if they were aware of the risk posed to their business by the performance of the rand. The rationale for the question was to ascertain whether the participants were aware of the risk that they are managing.

3.2.2 Research question 2

Why have SMEs in South Africa chosen to use these strategies over other available strategies?

This question seeks to understand the reason behind the choice of foreign exchange exposure risk strategies by SMEs in South Africa. The question goes deeper, to find out if the choice of method is by design, lack of knowledge of alternatives, or influenced by market forces.

3.2.3 Research question 3

Have these strategies been effective in managing the risk of foreign exchange exposure?

It is clear from the literature review in section 2.5 that according to some authors, trying to manage foreign exchange exposure in the long run is a zero sum game, as the spot rate is used to determine the future forward rate. This question seeks to uncover whether the chosen strategy or strategies have been effective in curbing the negative



effect of foreign exchange volatility. The question will also seek to understand the ease of use of the chosen strategy or strategies and their cost-effectiveness.

3.3 CONCLUSION

In conclusion, the results gained through the interview process will be analysed by a method of thematic analysis in order to reveal robust insights into the management of forex risk by SMEs in a South African context. While this study aims to present these results in a South African context, it may also serve as a departure point for further studies into the broader topic in similar emerging market contexts.

4 RESEARCH METHODOLOGY

4.1 INTRODUCTION

The methodology selected for this research is arguably one of the most important facets of the study. It sets out the roadmap for the study and gives credibility to the results.

This section of the study outlines the methodology that the researcher used to obtain and analyse the data to answer the research questions outlined in Chapter 3.

This chapter describes the research design, sampling method, approach to data collection and analysis employed in this study. Furthermore, it will justify each aspect of the methodology by giving an outline of the theoretical reasoning behind the choices made by the author.

4.2 RESEARCH DESIGN

The research questions outlined in Chapter 3 seeks to understand the methods and choice used by SMEs in South Africa to manage foreign exchange exposure. McCusker and Gunaydin (2014) states that if a researcher wants to find out more than just the numbers in a field of study, it is best to use exploratory research to conduct it.



Exploratory research, also known as qualitative research, seeks to discover knowledge about a topic and add new insights (Saunders & Lewis, 2012). The aim of this method is to "discover rather than test variables" (Corbin and Strauss, 2008) about a topic that the researcher has limited knowledge of (Saunders & Lewis, 2012).

The field of management of foreign exchange exposure is one that has not been fully explored, with authors such as field (Choi, 2012; McCarthy, 1999) expressing that literature in this field is limited. This study used a qualitative research design with semi-structured interviews, to answer the research question.

4.3 POPULATION, SAMPLE AND UNIT OF ANALYSIS

4.3.1 Population

In qualitative research, the participants are chosen according to the contribution that they can make to the topic under study (Cleary, Horsfall, & Hayter, 2012). The population or unit of analysis is important to the input that this study will make to the body of knowledge. The concern when choosing and making inferences on the population is what the researcher wants to portray at the end of the study (Patton, 2001).

The authors should be able to clearly justify the inclusion and exclusion of participants in the study (Cleary et al., 2012). The literature reviewed argued that translation risk is only valid for businesses with foreign operations, and that, in most cases it is highly unlikely for SMEs to have foreign operations (Kula, 2005; McCarthy, 1999). The universe that was used in this study was that of small and medium enterprise (SMEs) in the South African market, that are at risk of transactional foreign exchange exposure.

Given that most firms in the export and import markets will have this kind of exposure, as they are more likely to use foreign currency in transacting, they were the most appropriate focus of SME exposure to foreign currency (McCarthy, 1999). This made SMEs in the import and export markets the ideal and most accessible population to identify, based on the scope of the study, as most of them transact in foreign currency. This reduced the search for participants that are subjected to foreign exchange exposure due to time and resource constraints.



The population was chosen from the list of companies registered with the South African export and import councils, industry councils, and joint action groups that are recognised by the Department of Trade and Industry. The list was used in two phases: firstly, to identify the importers and exporters, and secondly to identify the SMEs in that industry. The SMEs were identified according to the World Bank classification shown in Table 1.

4.3.2 Sampling technique

The key to qualitative research design is the sampling (Robinson, 2014). Collecting data from an entire population is somewhat difficult and in most cases impossible, given the time and financial constraints faced by the author, thus studies are done on a sample that represents the population (Saunders & Lewis, 2012). Given the difficulty in locating the participants in this study, the sampling method that was used was non-probability sampling. Although there are some disadvantages to non-probability sampling, it is useful in exploratory research to give insight on the variable under study (Wegner, 2012).

The sub-population that was selected for this study needed to be homogenous, according to role in the export/import market and the geographical location, thus a conventional sampling method was used to select the participants. Most of them were selected from the list of exporters and importers on the Johannesburg Chamber of Commerce register of members. The researcher "cold-called" the members and asked if they were willing to be interviewed. The researcher also called the members of other trade councils involved in the import and export industry but was not granted an interview.

4.3.3 Sample size

The sample size is also a matter of contention in most qualitative studies. If the sample size is too small it will not give enough depth and breadth, and if it is too big it may create artificial results (Cleary et al., 2012). On the other hand, a small sample allows for all participants' opinions to be heard and for the author to carry out an intensive analysis (Patton, 2001; Robinson, 2014).



Sample size should not be a definite number but should be set between ranges. The sample size for a qualitative study should be set between a range of 3 to 16, depending on whether it is a student-funded project or funded externally, with the lower range for the former and the upper range for the latter (Robinson, 2014). The researcher starts with the minimum set number of participants and carries on until he has reached saturation (Cleary et al., 2012; Robinson, 2014). Saturation is defined as achieving a state of redundancy when no new information or concepts will come by obtained from interviewing more participants (Cleary et al., 2012; Patton, 2001).

The size of the sample used in this study was ten participants: this was sufficient to provide enough depth and breadth to an investigation of managing foreign exchange exposure risk. The sample size also allowed the author to do a more intense analysis of the results.

4.3.4 Sampling criteria

The participants for this research were selected according to the following criteria:

- They were managers of small and medium enterprises
- They were in the import and export industry
- They were based in South Africa

The researcher ensured that there was diversity in the group by not selecting individuals in the same industry as participants.

4.3.5 Unit of analysis

This study was intended to understand the strategies that SMEs employ to manage the risk of foreign exchange exposure. The study also sought to understand if these methods had been effective in reducing the exposure risk.

The unit of analysis for the study was the methods that SMEs used to manage the risk of foreign exchange exposure.



4.4 DATA COLLECTION PROCEDURE

There are three methods that can be used to collect data in qualitative research: observation, interviews, and documents. Observations are fieldwork that is carried out to describe and document the behaviour of individuals and communities. Interviews are open-ended questions that investigate the knowledge of the participants. Documents are recorded company material that is reviewed by the researcher and add knowledge to the study (Patton, 2001).

Interviews in qualitative research can be either semi-structured or unstructured. Semi-structured interviews allow a topic to be randomly asked and answered. The interviewer does not need to ask all the questions if they are not relevant to the individual participant. Unstructured interviews are informal and are used to obtain depth on a general topic that the author seeks to explore (Saunders & Lewis, 2012). When conducting an interview, the author needs to be prepared and have knowledge of the topic beforehand, to enable him to engage with the participant. The author also needs to be able to take notes and record the interview while listening to the participant (Saunders & Lewis, 2012).

This study utilised semi-structured interviews to collect data for the study. Interviews were scheduled with participants, using telephonic and email communication. The author offered to visit the participants at their places of work to conduct the interviews.

Before an interview began, the author informed the participants of the conditions outlined in the consent form, noting the most important clauses: that the participants were not coerced to be interviewed and that the interview would be recorded. The participants were asked to read and sign the consent form.

The author then informed the participants that the recording has commenced and the interview has started. During the interview, the author also took notes to assist with the transcribing.

Not all the interviews were done in person; two of the interviews had to be done telephonically as the participants were no available to meet the interviewer in person. For these interviews, the researcher sent a consent form via email to each participant and asked them to return it before the interview took place. One of the interviews was done over skype: it followed the same route as the telephonic interviews.



4.5 DATA ANALYSIS AND INTERPRETATION

Analysing qualitative data can be like solving a puzzle (LeCompte, 2010; Saunders & Lewis, 2012), but puzzles cannot be completed unless all the pieces are there (LeCompte, 2010). This piece of research was a puzzle because of the facts that qualitative research is ambiguous and those using this methodology need to have a lot of a patience in their approach (Patton, 2001).

According to Saunders and Lewis, (2012) analysing qualitative data can be done in two ways, by inductive or deductive approach. The deductive approach starts with developing research propositions or questions from the literature review and using qualitative data to test these propositions. An inductive approach, on the other hand, the researcher starts without a theoretical framework and develops theories that can be tested. For this study, deductive reasoning was used in order to come up with themes and patterns in the data with the purpose of answering the research questions.

Researchers can use software to analyse data that they have recorded in interviews. This requires that data is prepared in the correct format before it can be analysed (Saunders & Lewis, 2012). For this study, the researcher used the Atlas.ti software to organize and analyse the collected data.

LeCompte (2010) suggests five steps in organising the analysis of qualitative data: "tidying up" the data, "finding items" using codes by the researcher, "creating stable sets of items", "creating patterns" and "assembling structures".

Tidying up the data

According to LeCompte (2010), this is the preliminary step before coding can commence. In this case, it involved copying the data and making sure that it was indexed and easily retrievable. The researcher then compared the data with the research question and see if there were gaps in the data that had been collected.

For this study, copies of the recordings were made and stored digitally. The files were indexed according to the dates of the interviews. If more than one interview was done on



the same day, they were automatically given different files names, according to the time of the interview. The consent forms were stored in the same way. Before transcribing, the notes that had been made during the interview were also analysed to identify any gaps in the data.

Coding the data

Coding involves "finding items": it is the process of finding a set of data to count or assemble. This was done by identifying items that were repeated, omitted or declared by the participants in order to find data that was relevant to the research questions (Le Compte, 2010).

For this study, the author used manual coding on Atlas.ti by going through the data to find the items that were relevant. The researcher first went through the recordings and noted the main topics that were mentioned by the participants. This allowed the researcher to become familiar with the data, and took about five hours.

Because of the time constraints involved, a professional transcriber was employed to make transcripts of the interview recordings. The transcripts were then analysed to find codes.

Creating a stable set of items

LeCompte (2010) suggested that after the initial items have been found, it is necessary to go through the items again to group the codes, eliminating some of them to create a smaller set of codes. This was done by comparing and contrasting items and selecting the most relevant ones while ensuring that items were not repeated in a different form.

To create stable sets of items for this study, codes were grouped together if they were closely paired. The codes were then analysed according to which of them were most relevant to the study. These were then subjected to further analysis.



Creating patterns

This process involved assembling items in a way that made sense. Once this was done, a pattern started to emerge (LeCompte, 2010).

From this pattern more stable codes could be identified that represent the views of most of the respondents and could be used to formulate an explanation of the topic being studied.

Assembling structures

After creating patterns, the qualitative approach requires that it is necessary to transfer the patterns into the structure, which helps to give a better understanding of the subject and makes it possible to build up a description of the problem and draw a conclusion from the data (LeCompte, 2010).

Lastly, the patterns or codes in the study were used to create themes. These themes were then used to create a family of codes that could be used to analyse and draw conclusions regarding the themes.

4.6 VALIDITY, RELIABILITY AND OBJECTIVITY

In qualitative research, the integrity of the researcher is more relevant than it is in quantitative studies, as the researcher is responsible for interpreting data and the quality of the research will therefore be based solely on their discretion (McCusker & Gunaydin, 2014).

According to Saunders & Lewis, (2012) reliability and validity are critical to the design of the study as both are related to the credibility of the findings and conclusion. Validity is concerned with whether or not the results of the study accurately represent the concept of the research (Lub, 2015; Saunders & Lewis, 2012).

Saunders & Lewis, (2012) also maintain that there are two aspects to validity, internal and external validity. Internal validity relates to the facets that are inherent to the study,



such as subject selection, while external validity relates to the relevance of the study outside its context.

There are a number of factors that can threaten the validity of a study, including subject selection, the history of the project, testing, the mortality of subjects and ambiguity about casual direction.

Reliability relates to the consistency of the procedures used to collect and analyse the data and produce results (Saunders & Lewis, 2012). These authors list other factors that may threaten the reliability of the research, including "subject error", "subject bias", "observer error" and "observer bias".

For this study, a research design was used that was recommended by a number of authors for this type of study. This ensured that the results of the study would be relevant to the topic of the research.

To collect the data, the researcher used semi-structured interviews as a research instrument. This is generally a reliable and replicable method, in that it can be repeated by other researchers who want to conduct a similar study. The interview schedule can be seen in Appendix A of this report.

4.7 AVOIDANCE OF BIAS

Research cannot provide a complete picture or solution if the information is incomplete or biased, therefore, the first step in any research is to remove the bias (LeCompte, 2010). Qualitative research is often associated with emotional and subjective bias (McCusker & Gunaydin, 2014). The bias in qualitative research stems from the fact that the researcher may have preconceived perceptions that lead to selective bias (LeCompte, 2010). LeCompte (2010) suggested that to avoid bias the researcher needs to be aware of the tacit and formative theory that guides everyday thinking; achieving this requires acknowledgement and discipline from the researcher.

The other bias that might exist in conducting research is in the selection of the sample. Non-probability sampling, which was employed as the sampling method in this study, is known to sometimes harbour bias in the selection of the sample (Wegner, 2012).



For this study, the researcher was aware of the possibility of bias in selecting the sample and consciously sought to avoid it by selecting the sample from the web-based sources of different trade councils.

4.8 ETHICAL CONSIDERATIONS

Using primary data for research involves interaction with participants, and ethical aspects need to be considered when dealing with human subjects (Saunders & Lewis, 2012). Some of these aspects include the need to obtain the consent of interview respondents, to be aware of their vulnerability and protect their confidentiality, to conduct data collection honesty and to observe data storage regulation (Saunders & Lewis, 2012). The researcher is responsible for collecting and interpreting the attained data, thus the quality of the research will be based solely on the researcher's discretion (McCusker & Gunaydin, 2014). It is this discretion that places ethical accountability solely in the hands of the researcher.

In this case, the author conducted all the interviews in a professional manner, ensured that the views of all the participants were respected and did not force his own views on the participants. This study followed the ethics guidelines prescribed by the University of Pretoria. Ethical clearance was obtained before the study can be carried out (Appendix D).

The researcher also ensured the following requirements were observed:

- Consent was obtained from participants by asking them to sign the consent form
- Confidentiality was ensured when sharing the information with third parties,
- Participants' anonymity was maintained by not including the names of the participants or their companies in the final report
- The views of all the participants were respected
- The results were analysed and reported in a fair and objective manner by removing preconceived concepts from the study.



4.9 CONCLUSION

This section outlined the methodology of this study and the reasoning behind the selection of each facet of the methodology, including the sampling method and the approach to data analysis.

Qualitative research, using semi-structured interviews, was selected as the most suitable method for data collection, as the researcher sought depth into the topic. Non-probability sampling was also employed, as this is mostly associated with exploratory research methods (Wegner, 2012).

Furthermore, the researcher acknowledged some of the limitations that may arise from the selected research design and sampling, and attempted to identify possible biases which, if they could not be avoided, should be accepted as limitations to the study.

5 RESULTS

5.1 INTRODUCTION

This chapter outlines the analysis of the results from the interviews on the management of foreign exchange exposure risk by small and medium enterprises (SMEs) in South Africa. The results will be discussed in line with the research question as defined in Chapter 3. The layout of the section will give a brief description of the data that was obtained, how it was analysed and used in the analysis.

A conclusion of the section will be given at the end the chapter to give a holistic view of the results and any inferences that can be made at this stage.

5.2 DEMOGRAPHIC BACKGROUND OF THE PARTICIPANTS

The section below gives the demographics of the participants as obtained in the first section of the interview schedule. The data obtained is mainly about the participant firm rather than individuals in the organisation. This was to determine whether the participants met the criteria for being classified as SMEs, as outlined in section 2.6 of the



literature review. The study had a total of ten participants, all based in South Africa and actively involved in the import and export market.

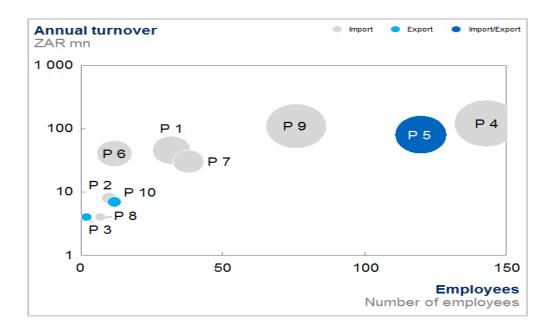


Figure 5.2.1: Demographics of the study

From figure 5.2.1 above, it can be seen that the highest percentage, namely 50% of the participants, are in the construction industry; however, the participants were all from different sub-sectors, except for plumbing, which was represented in the study by two participants. The sectors with the second-highest representation were industries and mining respectively, both having two participants each in the study, giving them 20% representation each. The industry with the lowest representation was manufacturing, with 10 % representation.

The sample that was obtained represented a good diversity of the population, which assisted in giving a well-rounded response to the research question. All the participants had an annual turnover of less than \$15 million USD, and less than 200 employees, thereby meeting the criterion of being classified as an SME, as discussed in section 2.6 of the literature review, and therefore being eligible to participate in this study.



5.3 RESEARCH QUESTIONS

The following section will report on the results obtained during the interviews. The layout of the section is such that each of the research questions will be reported on individually within in the subsections of the section. A discussion of the results will follow in the next chapter of the study.

5.3.1 Research Question 1

What strategies do SMEs in South Africa use to manage the risk of foreign exchange exposure?

Lamarre & Pergler (2008) argued that most firms do not know the extent of their foreign exchange exposure. The first question seeks, firstly, to uncover whether SMEs are aware of the risks posed to their businesses by their exposure to foreign exchange, and if so, what strategies they use to manage this risk.

Theme 1: Rand performance has impacted margins

It emerged from the findings of the study that the perception of most of the participants was that their business had done well during the past year. Only two participants indicated that their business performance was not good in the current as compared to the previous year.

Two of the participants commented as follows:

"Well obviously, we've been taking a lot of strain because of the exchange rate but — so our revenue is up but our margins are down because we can't adjust, you know, to the exchange rate level" (Participant 8).

"Slightly downward compared to the previous year" (Participant 9).

Participant 8's business struggled over the previous year due to fluctuations in the exchange rate; even though the revenue was up, the margins were low. Figure 5.3.1.1



below presents a graphic representation of the participants' perception of the impact of the South African currency on their businesses.

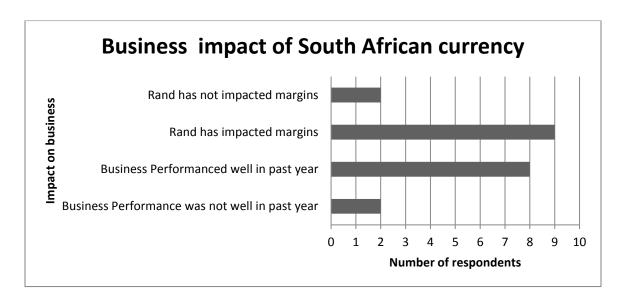


Figure 5.3.1.1: Business impact of the South African currency

The figure shows a contrast in the participants' perception from that of Participants 8 and 9 above, as most of the participants were of the opinion that their businesses had done well in the previous year. However, the performance of the rand had impacted on their profit margins, which meant that business could have been better if the rand had not fluctuated as much as it did.

"Yes, it may have and it may have affected our margins quite severely" (Participant 5).

"About 16% to 18% of our goods are imported and even the stuff we buy locally is affected through imports. So Rand fluctuation affects our cost price and our margins because unfortunately our industry's got limited growth so we can't pass the cost on directly otherwise we will just sell less (sic) and the mine will shut down" (Participant 7).

One of the participants (Participant 3) was of the opinion that the rand had not impacted their business in the past year.



"Does that make sense? So when the Rand falls and it's terrible, I do very well. If it goes the other way, I don't do so well. So for me, it's good" (Participant 3).

When probed about the reason for this, Participant 3 mentioned that it was because of the fact that they are in exports, and the negative performance of the rand was good for their business.

One of the participants (Participant 1) had a mixed reaction to the question, mentioning that their business was affected like all other businesses, but that the niche nature of their business assisted in curbing the negative impact of the currency.

"I'll be honest with you it's a very tricky question; yes, and no.....Yes, and the reason obviously...eh...in certain like...aspects like our domestic side it affects us because that...hat we servicing to the retail market and as we know consumers are very conscious about spending and no like I said earlier is because we in a very niche market in the other side of our business, the industrial commercial side" (participant 1).

The different views of the participants came through in the data. However with regard to their divergent views on the performance of their businesses and the impact of the South Africa's currency on them, the general pattern that emerged from the data was that the even if business did well in the past year, and it could have even been better, if the performance of the rand had not impacted on their margins.

Theme 2: Negative sentiment on rand future performance

The participants were probed further on their perception of the future outlook of the South African currency. Figure 5.3.1.2 below provides a graphical representation of the results:



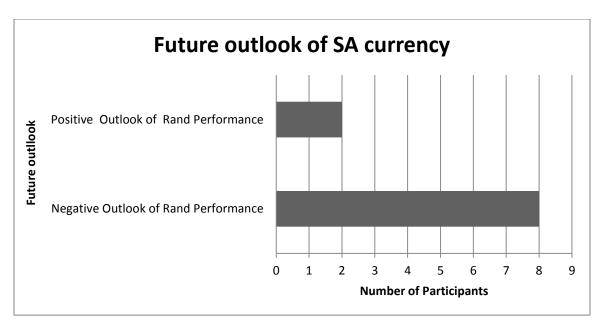


Figure 5.3.1.2: Future outlook of the SA currency

Most of the participants had a negative perception of the future performance of the South African currency. As expressed by Participant 5 below, most of the participants are of the opinion that the rand will continue to be volatile because of domestic and internal factors that impact the rand.

"Well, we're now getting in crystal ball stuff (laughter) because; I think in the foreseeable future, I think the rand will probably still be very volatile. I do have a belief, should the commodity market get better, in other words, China starting to perform again that the rand will strengthen on the back of that. Because, I think, we are a commodity based country and we do a lot of exports to China. And, I think, the mere fact that the, China is going through a, sort of a recession and the commodity markets being down, I think that has certainly had a big influence on the performance of the rand" (Participant 5).

The domestic issue that came out strongest as a factor that impacted the performance of the rand was the politics in the country:

"We would...put it that way yeah...the way that its currently going, especially what's happening with...in the finance department with the ministry...eh...if I go in I tend to agree with it I think the rate is going for a bit of a snowball toward the



latter parts of this year. I reckon we're going to see again close to 15 to the Dollar" (Participant 1).

"When Zuma opens his mouth, the Rand's going to down the toilet" (Participant 2).

Most of the participants shared the view that political instability in the country impacted the performance of the rand. The participants held a strong view that our politics can make or break the rand, and given the current political situation in the country, the rand will not perform well.

Only two participants were of the view that the rand will perform better in future.

"I expect a slight recovery" (Participant 9).

"It's a complex question, because the Rand is highly dependent on policy measures that are taken within the country. It's also affected by the performance of other major economies where South Africa is conduct — which South Africans conduct business, and this will be China, this will be the UK. This will be the United States of America. So it's a mix bag, it's a little bit difficult to predict but I assume the best case scenario is if the political future of South Africa is stable, if policies are clearly defined, the rand is set to strengthen against major currencies in particularly the dollar and that should be good news for local people" (Participant 10).

Participants 9 and 10 mentioned that they expected the rand to recover in future, however Participant 10 was of the view that the performance of major economies will determine if the rand's performance is better or worse in future.

There were two divergent views that were held by the participants on the future performance of the rand. Most of the participants expected the rand to be volatile and have a downward trend in the future, while those who were of the view that the rand would perform well were in the minority. However, the consensus among all the participant except one was that the future performance of the rand depended on the political situation in the country. Hence the general trend for this question was that the rand would not perform well in the future if the country's political situation was anything to go by.



Theme 3: Basic understanding of foreign exchange exposure

Lamarre & Pergler (2008), argued that most firms are not aware of the extent of their exposure and thus cannot put into place a proper strategy to manage the risk. As suggested by the authors in Chapter 2, there are three main types of foreign exchange risk: transactional, translational and operational risk (Dong, Kouvelis, & Su, 2014; Kula, 2005; McCarthy, 1999). The interview schedule probed the participants on their understanding of foreign exchange exposure and the extent of that knowledge. The question was sought to find out if the participants knew of the different types of exposure risks that they were faced with on a daily basis.

The findings of the study were that all of the participants were aware of their exposure to foreign exchange risk. Figure 5.3.1.3 below is a graphic representation of the participants' responses concerning their knowledge of foreign exchange risk exposure.

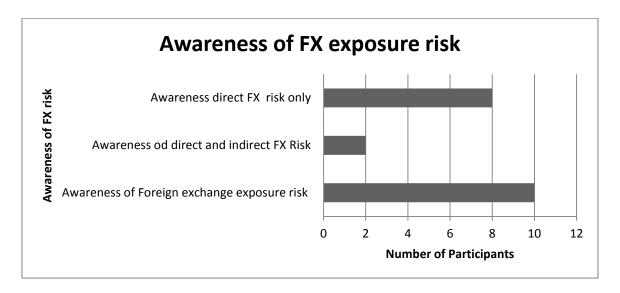


Figure 5.3.1.3: Foreign exchange risk exposure

"Very much so...... Well, it makes our product much more expensive than what it should be. It also makes it very worrying that some people will not be able to afford our product. So it makes our product less desirable, less affordable even though it's a desirable product. We have some products that are commodities



and others that are design products, and the design products become harder and harder to sell when people cannot afford them" Participant 2).

"Absolutely...... Well, obviously if, I mean we import a product that's US Dollar based, so the moment the US Dollar becomes stronger, obviously our buying power becomes useless...... So that's where our exposure lies. So we're selling at a loss basically. I suppose like any importer, we get affected by it. You set a price based on a rate and if that rate moves out as it has done so aggressively then you basically find yourself in trouble. That's what's happening" (Participant 6).

The most prominent theme that emerged from the findings was that the participants were aware of the foreign exchange exposure risk mainly when it impacted on their buying power and their selling price. Participant 6 was of the opinion that prices were set using the current exchange rate, and if the rate moved, you found yourself in a situation where you were selling at a loss. The same applied to the view of Participant 2, who was of the view that as the exchange rate went up, so the selling price of the products also had to increase, and this increased the risk of customers not being able to afford the products, resulting in a loss of customers. Both these views were common among the majority of the participants.

The participants were asked to elaborate on their understanding of foreign exchange exposure risk. The finding of the study was that most of the participants were only aware of the direct risk that they were exposed to, as it affected their selling price, profit margin and buying power. However, when probed on the indirect risk, most of the participants gave hesitant responses. The response of Participants 5 and 9 expressed a commonly-held view amongst the participants.

"I think - also on the direct and the indirect, indirect obviously we are aware of it to a degree. But then again, having said that, the indirect is fairly difficult to ascertain or contemplate" (Participant 5).

"From an indirect point of view, the economy as a whole and other certain capital project tend to be stagnated and shelved. On the direct side, I have the risk of my costs



increasing on projects that I'm importing and I often have to give some form of fixed selling price" (Participant 9).

Both participants' responses represented the best explanation that came out of the study on the direct and indirect risk. Their basic knowledge is shown by their emphasis on price increase and not on other factors such as inflation, transport cost increases, and so on.

Thus the theme of the basic understanding of the foreign exchange exposure emerged as one of the themes of the study. The participant's knowledge of their foreign exchange exposure risk was mostly basic and related to transaction risks, as that is what the participants were exposed to in their daily operations.

Theme 4: Stepping mechanism is the commonly-used strategy to manage foreign exchange exposure risk.

There are a number of strategies that SMEs can use to manage the risk of foreign exchange exposure. Some of these strategies include hedging strategies such as forward contracts, future contracts, swaps, options and natural hedges (Ehrlich & Anandarajan, 2008; Goldberg & Drogt, 2007), and other non-hedging strategies such as pricing mechanisms (Yang, 1997), operational strategies (Lamarre & Pergler, 2008) and "Do Nothing" (Ehrlich & Anandarajan, 2008; McCarthy, 2000).

The participants were also asked which method they used to manage the risk of foreign exchange exposure. The question was open-ended to give the participants a chance to elaborate on their responses.

The findings of the study indicated that forward cover was the most common strategy used by the participants to manage the risk of foreign exchange exposure. Figure 5.3.1.4 below gives a graphic representation of the finding.



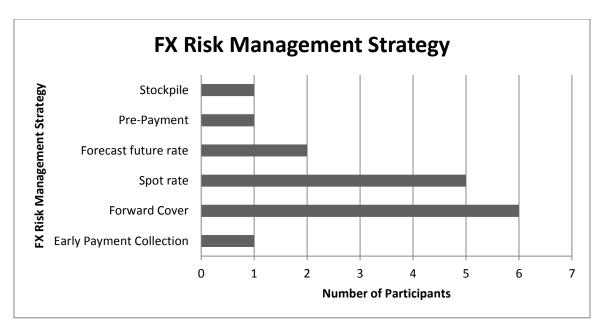


Figure 5.3.1.4: Foreign exchange risk exposure management strategy

"We make use of foreign exchange contracts and we also employ the services of foreign exchange experts with which, or with whom we have regular meetings to discuss all the factors affecting the rand, be it negatively or positively. And then based upon those discussions, you know, we have a policy in relation to how much foreign exchange cover we take forward" (Participant 5).

"We try and take out FECs when we can and we think the rate's good. That's the only control we do have. We place orders, try and place them in advance at certain levels. If the Rand hits it hits it. If we can pay suppliers earlier if it means a favourable exchange rate as well" (Participant 7).

As represented by Participants 4 and 5, most of the participants used forward cover or forward exchange contracts, as they are also known, and that was the most prominent theme that came from the data. Interestingly, Participant 5 disclosed that their firm had a foreign-exchange policy that they used to determine how much cover to take at any given time. Even with a foreign exchange expert advising them, Participant 5's firm still used the most common hedging strategy, in the form of forward exchange contracts.



And although forward cover was the most prominent strategy, the same participants indicated that they also used spot rates to manage their risk, making spot rates the second most common strategy.

"Well we use forward exchange contracts where we can. But sometimes the Rand deteriorates so quickly that it's not even possible" (Participant 4).

"Yeah. It depends on, you know, what our cash flow situation is at the time as well. And then, you know, just depending on what the sentiment is" (Participant 8).

The most common reasons that the participants gave for using a mix of forward exchange contracts and spot rates, as presented by Participants 4 and 8, were that South Africa's currency was so volatile that even though the firm had taken out forward cover, they had to use spot rates to settle their commitments. The other reason was that the decision depended on the firm's cash-flow at the time. This was common amongst the participants who used both forward cover and spot rates.

"I use a stepping mechanism whereby I try and hedge before exchange contracts and closer to the time I decide whether I'm going to be going forward of if I'm going to be buying [spot?] for the balance of my foreign exchange commitments" (Participant 9).

Participant 9 called the strategy of using both forward cover and spot rates a "stepping mechanism", which was the best way to explain this strategy of managing foreign exchange risk. As the participant explained it, the "stepping mechanism" meant that the firm hedged the currency and when the time to settle its commitments, a decision was made about whether to use the cover or to use the spot rate.

There were other, non-hedging strategies that were also used by the participants to manage the risk of foreign exchange exposure. These included pre-payment, early collection, stockpiling and forecasting.

Forecasting, which was the most common non-hedging strategy, was used by participants to manage the risk of foreign exchange exposure. As presented by Participants 1 and 3, the strategy involved trying to find a mid-point of the currency, using historical data.



"So if you actually look at the Rand/Dollar fluctuation over the years the most its increased is basically 12% give or take, so we utilise that ratio of between 10 and 15% which we add on top of quotes that we do which we know it's only going to happen in 12, 18 whatever case might be; months...so we got that bit of a cushion. So if the Rand is gone up yes we lose a bit, if it comes down yes we win again" (Participant 1).

"I try and work it over the last three months. When I do my costings, I take the last three months into account and see where the rate exchange was so three months ago as opposed to current. And then I try and find middle, in between so that if it does drop, I haven't lost too much. And if it gains, I still earn some money. So somewhere in between the two, I would find a quote based on that" (Participant 3).

Participant 1 indicated that the firm also adds a margin to the forecasted rate to give extra protection against currency shocks, so if the forecast was R16 to the USA dollar, the firms added one rand the forecasted rate and used that to work out the quote that they gave to the client.

The other non-hedging method, which was less common, was pre-payment, explained by Participant 3, who is in the export market, as a method of collecting the payment before the goods are shipped to the client. This method ensures that the time between contracting and collection is reduced to protect the firms from sudden shocks in the foreign exchange market.

"Yeah. I manage my risk hundred percent, because I don't let my goods go until I've actually physically got the money. The money must be in my back account before I...The goods leave the shores" (Participant 3).

However, this strategy was not always possible and needed the firm to have a good relationship with the client. If it was not feasible, the best alternative in the export market was to use early collection of credit sales from clients. as suggested by Participant 10:

"Well, it depends. Essentially on an accounting and management perspective, we are trying to the diminish the duration of – like on credit sales we're trying to diminish the collections, length. I don't know how to put that in good English" (Participant 10).



The strategy of early collection or closing accounts early assisted the firms with reducing their risk, as the longer the account was open, the more vulnerable the firms was to foreign exchange exposure.

Stockpiling was the least common strategy; as explained by Participant 2 it entailed importing goods when the exchange rate was at a favourable rate.

"I buy as much stock as I possibly can. Because the Rand is so volatile, it's often not worth taking forward cover because it moves up or down very quickly. So I don't take forward cover, but I've made a decision to buy as much stock and keep as much stock as my Rand hedge as possible. And also having more stock here is a better solution than having a Rand hedge solution for my business" (Participant 2).

The participant indicated that building up stock works out better than taking out forward cover again, adding that the volatility of the local currency was a challenge to determine the level of cover. The timing of the decision to buy stock was based on the exchange rate at the time, and on the amount of cash that the firm had at its disposal.

There were a number of foreign exchange exposure risk strategies that emerged from the findings. The most common of the hedging strategies was forward cover followed by using the spot rate. These two strategies were also used in combination by a number of participants, and the term "stepping mechanism" was coined by one of the participants; this was the most common theme and the most popular strategy. Where other non-hedging strategies were used, forecasting was the most favoured non-hedging strategy. The least common one were stockpiling, early payment and early collection. Even though these methods were not favoured amongst the participants, they offered alternatives to the traditional risk management strategies.

5.3.2 Research Question 2

Why have SMEs in South Africa chosen to use these strategies over other available strategies?

This aim of this question is to understand the reason behind the choice of foreign exchange exposure risk strategy by SMEs in South Africa. The questions go deeper and



seeks to find out if the choice of method is by design, lack of knowledge of alternatives, or influenced by market forces.

Theme 1: No knowledge of alternatives

There are a number of advantages to using each of the hedging and non-hedging foreign exchange risk management strategies. For instance, forward exchange contracts have the advantage of being liquid and can be acquired quickly, at low transaction cost, with easily understandable contracts (Ehrlich & Anandarajan, 2008). On the other hand, they can also present the disadvantage of lacking flexibility and requiring the payment of higher premiums (Ehrlich & Anandarajan, 2008).

These can be the reason for SMEs to either opt for or not to use forward contracts as their risk management strategy over other strategies. The other reason could be that other strategies, such as swaps, are less known to SMEs than others such as forward contracts, which is the most commonly-known strategy (Ehrlich & Anandarajan, 2008; Goldberg & Drogt, 2007). The finding of the study revealed that the most common reason for SMEs to choose their current strategy over other available strategies was that they did not know of alternative strategies. Figure 5.3.2.1 provides a graphic presentation of the findings of the study.

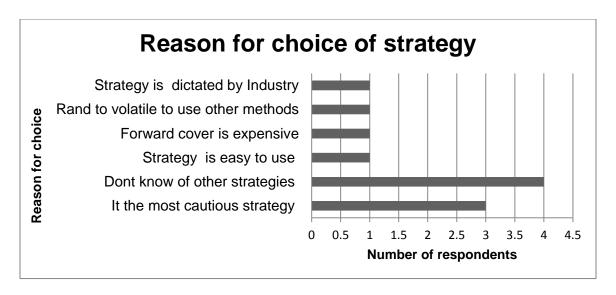


Figure 5.3.2.1: Reason for choice of strategy



"Well I'm not really aware of any other methods, quite honestly, to protect yourself against rand fluctuation other than foreign exchange contracts. There's probably other options within foreign exchange contracts, be it options etcetera. But, I think, that's the acceptable norm to cover fluctuations, is to take out foreign contract" (Participant 5).

"Because there's nothing else that I'm aware of. Is there something else?" (Participant 9).

The most common reason, as can be seen in the figure above, and as expressed by Participants 5 and 9, is that there were no other alternatives that they knew of for managing their risk. The interesting thing was that the respondents that had this view were the respondents that used hedging strategies such as forward cover and forward exchange contracts.

The second most common reason given by the respondents was that the strategy that they were using was the most cautious strategy to manage their risk.

"Well (laughter) it's just to be safe. You really have to look at everything. You have to take everything into consideration because, you know, with the Rand being as volatile as what it is, everything changes" (Participant 3).

"It just seems to work. It's a little cautious. Sometimes you leave it for the last minute and the Rand's the other wat, we have like – we have to pay a premium. Forex has become like playing the horses now" (Participant 7).

Participant 3 expressed the view that this strategy was safe, given the volatility of the local currency, a view that was shared by Participant 7, who further stated that the foreign exchange market was like playing the horses. Interesting to note is that Participant 3 is in the export market and uses non-hedging strategies and Participant 7 is in the import market and uses a hedging strategy, but they share a common reason for using the strategies that they use in order to manage their risk.

Other minority reasons that the participants gave for choosing their current strategies included the view that the strategy is easy to use, that the strategy is dictated by the industry, that the local currency is too volatile to use other strategies, and that forward cover is expensive. Although these opinions were not as popular, they did provide an opportunity for the participants who did not follow the trend to express themselves.



Theme 2: Have not researched other strategies

Following the respondents' reasons for their choice of strategy, the study aims to find out if the respondents knew of any alternative strategies that they can use to manage their risk of foreign exchange exposure. As mentioned before, there are a number of strategies that SMEs can use to do so, including but limited to forward contracts, future contracts, swaps, options and natural hedges (Ehrlich & Anandarajan, 2008; Goldberg & Drogt, 2007) pricing mechanisms (Yang, 1997), operational strategies (Lamarre & Pergler, 2008) and "Do Nothing" (Ehrlich & Anandarajan, 2008; McCarthy, 2000). Figure 5.3.2.2 gives the graphic representation of the findings.

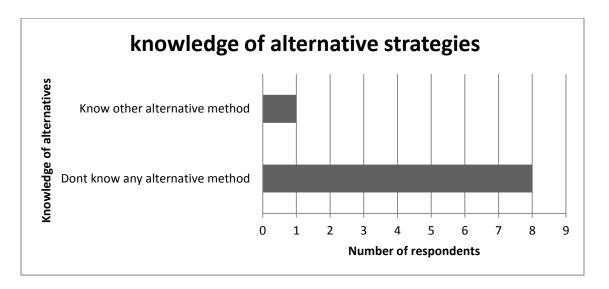


Figure 5.3.2.2: Knowledge of alternative strategies

The finding of the study, as presented in figure 5, is that the majority of the respondents do not know much about alternative foreign exchange exposure risk management strategies apart from the one that they are currently using, even though there are more than five other strategies that are available in the market.

"I don't – I haven't researched them particularly well, because I've never had the spare cash to research them. Or I've never had the spare cash to be able to do them" (Participant 2).

"There could be others, we haven't really investigated it. As I said earlier, we haven't really done a thorough impact assessment analysis on how this has affected our



business but we can see the figures because we record the figures on a month to month basis, and we can fairly with accuracy say, well this is the effect of the fluctuations into our business" (Participant 10).

The responses from the participants echoed the previous question of why the question of why they have chosen their current strategy. As presented by participant 2 and 10, the participants haven't given themselves enough time to research other alternative strategies and this common thread amongst the entire participant that did not know of alternatives.

Only one of the participants knew of other alternatives, and that was Participant 10, who is in both the import and export market. This participant noted that, with the export customers, he tried to quote in USA dollars as an alternative to quoting in the local currency.

"Yes. It is very difficult, but on the exports, I do always quote on the dollar to try and smooth out the volatility on the Rand" (Participant 2).

Even though the participant said that they knew of alternative strategies, their explanation of these strategies seemed to be more of the same strategy of using spot rates, just in a different currency base. So the common theme remained that the participants had not done their research when it came to alternative strategies for managing their risk.

Theme 3: Willing to explore new strategies

Another theme that was explored during the study was the participants' willingness to use other strategies if they were given to them. The findings of the study were that that majority of the participants would be willing to use other strategies. Only a few respondents were satisfied with their current strategies and would not be willing to use alternative methods. Figure 5.3.2.3 below gives a graphic of the findings:



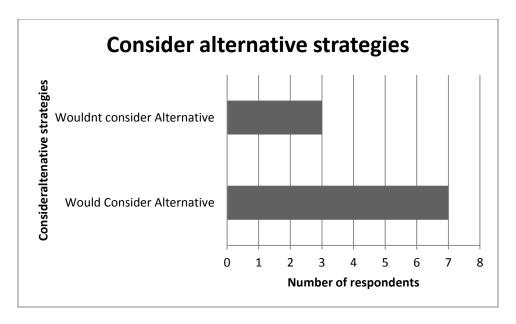


Figure 5.3.2.3: Consideration of other strategies

"Well anything is negotiable.......(laughs)........... It can be looked at the end of the day, its...everybody is open for suggestions and alternatives...because one individual to another individual everybody looks at something differently" (Participant 1).

"Yeah. I think we would, but certainly we would, you know. If we can reduce our risk, and protect our bottom line" (Participant 5).

As was the case with Participant 5, the majority of the participants commented that they would explore alternative strategies if the strategies could protect their bottom line. This was the sentiment that was shared by most of the participants

"No. I'm happy with – yeah. No, I'm happy with how it works. So, no" (Participant 3).

"No. What other methods?.....they don't want to know...it does not work for us

They want Dollars. Yeah, that method doesn't work. Unfortunately the suppliers want direct payment in their currency" (Participant 7).

"The bank has come to us with other proposals of looking at trying to protect ourselves. But we found that in the long term it generally has cost us more using those, sort of, options" (Participant 9).



The remaining participants commented that they were not willing to explore other strategies as they were satisfied with their current strategies and other methods did not seem to work for them. Participant 9 even went so far as to say they were offered alternative strategies by the bank but found that they do not work for them in the long run.

Theme 4: Competitors are in the same boat

Some foreign exchange management strategies, such as pricing mechanisms, depend on the market structure and behaviour of competitors. These strategies work well if the competitors are impacted by the same fluctuation in the market (Lamarre & Pergler, 2008) and depend on the rivalry in the market (Bartram, Brown, & Minton, 2010).

The study also explored whether the reason the SMEs chose their strategy had anything to do with the influence of competitors. The finding of the study was that the majority of the participants thought that their competitors' behaviour had no influence on their choice of strategy. Figure 5.3.2.4 below provides a graphic presentation of the data:

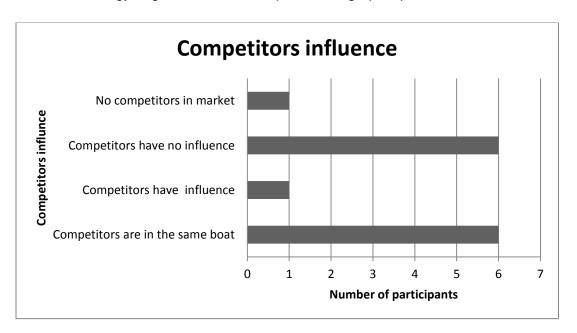


Figure 5.3.2.4: Competitors influence

"No.....We try and run our business as we see fit, not...from a — obviously if there's something that's working and we can see it, we try and..." (Participant 7).



This participant was of the opinion that they did not look at the strategies that the competitors are implementing to managing their risk. They did what works for their firm.

"No. My competitors are pretty much in the same boat as we are. The only thing for some of the bigger players, you know, so we compete with companies like [inaudible 00:10:31] and [inaudible 00:10:32] and stuff like that" (Participant 8).

"No. I believe we all generally approach our foreign exchange in the same method (Participant 9)."

An interesting view that came with the findings of the study was that the participants believed that their competitors were in the same boat as they were when it came to foreign exchange exposure risk, and thus would probably implement the same strategy as the rest of the industry. This was a major theme that emerged from the study.

"For our industry which is, affects piping industry, we don't really have that hassle because we're all basically evenly matched when it comes to pricing. It's just about your marketing strategy. So it doesn't impact anything at all" (Participant 6).

One of the participants took it further, saying that their strategy was influenced by industry and that all their competitor were still evenly matched, and that success over competitors depended mainly on marketing strategy.

"No, I don't look at what they're doing. No, no. At the moment, I think my biggest competitor is the company I used to work for, and they have actually slowly, actually just done away with the exports. They're now concentrating on the local market" (Participant 3).

Another interesting point was expressed by one of the participants who had said that that the competitors did not influence their choice of strategy. He commented that they had no competitors in the market and the last remaining competitor was exiting the market.

"Yes, because it all comes down to the financial capabilities of an entity and it - every – each entity has different financial muscles. In the market where we are performing, you find there are other companies that are smaller and others are bigger than us and their abilities to absorb the shocks, the exchange rate shocks, it differs from ours. How do we



face with that particular challenge? It will differ. So therefore the policy measures that we're adopting in order to try and mitigate the dangers, differ by virtue of us being of different sizes, adopting different method and so on. So it is affecting us, because whenever we speak to customers, for instance, the end users for the product that we're selling, we tell them look we cannot give you 60 days collection period. We need 30 days. And then now what is come out, often they'll say, well we really like you guys but there is this other company that is able to give us 60. And unfortunately we cannot have the luxury to go for 60 days. We won't survive in this business. So there are businesses that we have lost as a direct result of that because we cannot simply afford to bill and wait on 60 days. We know the impact of the rand, the value of the rand will change within the 60 day period. So try to cut that by half and I don't think a 30 day period for collecting the money, but you found bigger companies are able to give 60 day terms and they are grabbing the business as a result. It's negatively affecting us" (Participant 10).

Only one of the participants said that the behaviour of competitors influenced their behaviour. That participant maintained that the strategies differed from firm to firm, depending on the firm's financial capabilities; other companies were able to absorb the shocks in the foreign exchange market. So when you were competing for the same clients, it would impact your strategy and the terms that you gave the client for the contract.

5.3.3 Research Question 3

Have these strategies been effective in managing the risk of foreign exchange exposure?

This question sought to discover whether the chosen strategy or strategies were effective in curbing the negative effects of foreign exchange volatility. The question also sought to understand the ease of use of the chosen strategy or strategies, and whether they were cost-effective.

The question of the effectiveness of foreign exchange risk management strategies was covered in terms of three aspects: ease of implementation, effectiveness of strategy and cost-effectiveness of the strategies.



Theme 1: Bank facilities make strategy easy to implement

Strategies such as foreign exchange option contracts are known for their over-the-counter nature and the relative ease with which they can be obtained from a reputable bank. Other strategies such as future contracts have the advantage that they are liquid and can be acquired easily at low transaction cost (Ehrlich & Anandarajan, 2008).

The ease of obtaining instruments and implementing strategies could impact their effectiveness, as they require fewer resources to be committed to executing. The study sought to find out the relative ease of implementing the strategies that the SMEs had chosen to manage their foreign exchange risk.

The findings of the study were that from the participants' point of view, their strategies were easy to implement. Figure 5.3.3.1 below provides a graphical representation of the findings:

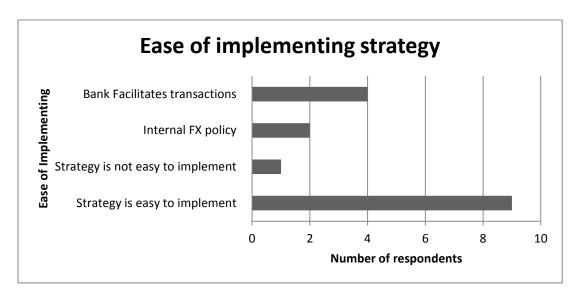


Figure 5.3.3.1: Ease of implementing strategy

"Well put it this way, I've been doing it so long...it's actually...once you got your own system in place. Like I said to you with the way that we do our industrial commercial forecasting, the system is there, it's very easy to use, it's literally by push of a button and you can see ok I've quoted this client in January 2015, they sending the order that gets transferred to the next spreadsheet for execution and then once the execution has been done it gets transferred to the history so it's actually very easy" (Participant 1).



"Yeah. I don't have a – yeah, I don't have a problem. I get the money coming in, in forex exchange. You know, the foreign currency and what happens it goes into my CFC account. Once it goes into the CFC account, you got to then move it from your either dollar or euro account into your Rand account" (Participant 3).

"Well it fairly easy because although there's a risk of loss of business or strain relations with long-standing business partners, because clients prefer to have longer payment terms, however, for us it's easier because it's over a phone call, over tea or coffee or breakfast, over lunch we can discuss this with the purchase managers" (Participant 10).

The majority of the participants expressed the view that the strategies were easy to implement, with one of the participants noting that they have being implementing their strategy for so long that it has become second nature to them. The other participant mentioned that having a longstanding relationship with the client also assisted in implementing their strategy, as the negotiation could be done over a phone call.

"Very easy, actually. We use Standard Bank's forward contracts, so we have a portal that we can log into which is quite easy to use" (Participant 4).

"It's fairly simple. I mean, we contact our bank and we say to them, give us forward cover and they give us a rate and we pay a percentage, you know as a conduit. So it's not difficult at all. And that's just with reference to that one method of doing forward cover" (Participant 6). .

"Oh, it's relatively easy. I bank with Nedbank so they – I think all banks are a pain anyway but it's not as easy as when you're doing a private transaction" (Participant 8).

Most of the participants that mentioned that their strategy was easy to implement also mentioned that this was because of the relationship that they have with their respective banks. This was mainly the participants that used the financial hedging instruments that are obtainable, mostly forward cover.

"And then we also have a policy in relation to our foreign exchange contracts. You know, how far forward you book. What percentage of our exposure do we cover? So we have all those things in place" (Participant 5).



Some of the participants mentioned that they have an internal foreign exchange policy that assists them in determining the amount of cover they need at any given time, which made it easy to implement their strategy.

"It requires quite a bit of daily work whereby we have to watch the exchange rate. Calculate what is coming up. Try and calculate the cost of time in taking up the cover. Thought it does take up about two hours of my day" (Participant 9).

One of the participants who used the "stepping mechanism" stated that the strategy was not easy to implement as it took time to determine the rates and decide on whether to use forward cover or take the spot rate. This decision took up to two hours of the day to research and implement.

Theme 2: Ineffective strategies

Foreign exchange exposure risk management strategies are supposed to assist firms in curbing the negative impact of foreign exchange shocks. Some strategies, such as hedging, are known for not always being effective, as in the long term, forward rate can be just as unpredictable as spot rate (McCarthy, 1999).

The study sought to find out if the strategies used by SMEs to manage their foreign exchange had been effective in assisting firms in curbing the negative impact of the foreign exchange shocks. The findings of the study were that all the participants were of the view that their strategies had assisted them in curbing the negative impact of foreign exchange market shocks. Figure 5.3.3.2 below provides a graphical representation of the findings of the study.



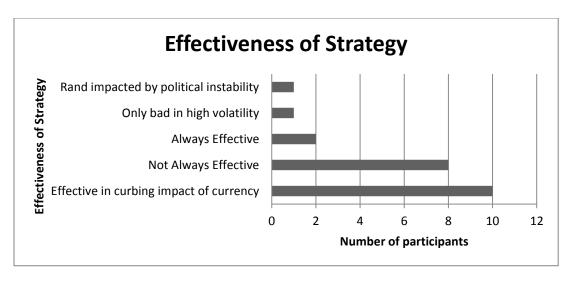


Figure 5.3.3.2: Effectiveness of Strategy

"Ultimately the trend is negative performance on the Rand. It's always going to filter through to your business. I've managed to curb the effect by having enough stock that my stock value grows faster than the cost of the overdraft and the cost of forward cover" (Participant 2).

"It has helped me keep it to a minimum. In other words, I haven't bought currencies at the worst possible rates" (Participant 9).

The participants expressed the view that their current strategies have assisted with keeping the impact of the foreign exchange shocks to minimum. However, most of the same participants also admitted that their strategies were not always effective.

"That's also a doubled edged, kind of, question because for the past two years, from our company's perspective, we made a foreign gain, and obviously that's based upon the accounting method of accounting for foreign exchange. So you'll still bring those stock in at, on the day at which you take ownership but then when you pay, you may pay a lot less for it and that causes a gain or a loss. So we've made a gain in the last two years but the year before that, we made a loss. Not a huge loss. I think our profits, at least from a foreign exchange perspective is more so than the loss that we would have had" (Participant 5).

"Sometimes, yes, sometimes, no. That's the nature this whole thing. You know what happens, you buy then it drops. You don't buy then it goes up" (Participant 6). .



"Yes, and no. Only good thing is if we hedge you know what we're going to pay, we know what the cost is. Unfortunately sometimes you hedge and then you get a good rate and that goes the other way. Sometimes it works in your favour, but at least you know you're paying or that your cost I should say" (Participant 6).

The participants also commented that there were times when their strategies did not work, but for most of the time they did assist them in curbing the negative impacts of the foreign exchange market shocks. The participants also mentioned that the unpredictable nature of the market meant that you were not always on the right side of rate, such as when the spot rate was better than the hedged rate.

"We're always on the upside.... It's always been effective" (Participant 21).

"Yeah. I talk to my customer. I'm open cards with the customer. He tells me what he wants. I'll tell him what I can do. It's a win-win for both of us, you know. And I don't say I can supply something when I can't supply it" (Participant 3).

The two participants quoted above mentioned that their strategies are always effective in managing the risk of foreign exchange market shocks. It is interesting to note that both of these participants used non-hedging strategies to manage their risk.

"The only time when we will be on the down side, let's say if the Rand goes from 14 to 16, 17 for instance" (Participant 3).

"When you do, yeah. When our esteemed politicians open their mouths, the Rand dives badly and you don't know where you are" (Participant 1).

However, on further probing, both these speakers conceded that the only time their strategies were not effective was when there was political instability in the country and the exchange rate became highly volatile. Again, the issue of political instability came up. It was seen as creating foreign exchange market shocks, which have an adverse effect on businesses.



Theme 3: Strategies are cost effective

The issue of the cost-effectiveness of foreign exchange risk management strategies is one that has been discussed at length in the literature review. Authors have argued that hedging is the most cost-effective strategy, but it can be costly if the firm is stuck in an unfavourable contract (Lamarre & Pergler, 2008), while others have argued that the use of financial instruments is not affordable for small firms (Hagelin, 2003) who need them more than their larger counterparts to protect them from financial distress (Choi, 2012; McCarthy, 1999). Each strategy comes with its own cost; even natural hedges, which are purported to be very cost intensive, (McCarthy, 2000) and thus almost unattainable for small firms.

The study sought to find out the cost-effectiveness of the strategies used by SMEs to manage their risk of foreign exchange exposure. The findings of the study were that most of the participants perceived their strategies to be cost-effective. Figure 5.3.3.3 below provides a graphic representation of the data.



Figure 5.3.3.3: Effectiveness cost effectiveness of strategy

"It's cost effective...eh...is it because it's an in-house system or is it because of the bank fees?" (Participant 1).



"It's quite cheap compared to trying to – it costs me probably less than buying forward cover and it gives me the opportunity to fix my price totally one hundred percent when I do it" (Participant 1).

"It doesn't cost a lot at the moment and I can't say that it's cheap but it's not exceptionally expensive" (Participant 6).

"It's – I think it's not even R200.00 a transaction. R95.00 when you buy and R95.00 when you pay. And I think there's a small fee for the value. Plus it just depends as well on your, the value that, or the time frame that you're hedging as because when now you're paying the US interest rate plus the South African interest rate, or borrowing, that's what they call it" (Participant 7).

The participants expressed the view that the strategies are cost effective and are low cost. One of the participants even mentioned that, from his point of view, the strategy was cheaper than using other strategies such as forward cover. It was interesting to note that both participants that used hedging and non-hedging strategies found that their strategies were cost-effective, with one of the non-hedging participants mentioning that the reason why their strategy was so affordable was the fact that they used an in-house system that did not attract a banking fee. This was in contrast to the participant who utilised hedging and expressed the opinion that even though the strategies were cost-effective, they still attracted bank fees, a sentiment that was shared by participants who represented their strategies as not cost effective.

"Yeah. The banks. The bank – let me tell you, the bank just to do the transaction with the funds coming in, is like really, they take their chop. Sometimes it costs me up to a R1 000.00 just to do that" (Participant 3).

"Well we end up paying about 2.2% on top of spot at the time of taking the forward contract into three months. So we think it's expensive but we're constantly reassured it's not" (Participant 4).

"It does cost a lot but you have no options, then just pay. You know, it's like we can shop around to – you know, it's – all the banks charge more or less the same" (Participant 8).



"It's not cost effective. Any adjustment or adjusting strategy has never been cost effective in my experience, because you need to allocate additional resources in trying to correct an existing problem. Therefore diverting us from the effort of finding new customers, now we have to manage the existing customers. It's an additional strain to the business, they say. It's not a hugely unmanageable cost but the - and it's not necessarily financial cost but..." (Participant 10).

Other participant expressed the opinion that their strategies were not cost-effective, and that the biggest cost was the banking fees that were incurred in implementing the strategy. One of the participants who used non-hedging strategies commented that for them it was more the cost of diverting resources that added to the cost of implementing their foreign exchange management strategy. It was interesting to note that both participants that were in the export market found their non-hedging strategies to be cost ineffective, while that only applied to a few in the participants that used hedging strategies.

5.4 ADVICE TO OTHER SMEs

Theme 1: Know your industry and be informed

At the end of the interview, the participants were asked if they had any advice for other SMEs that find themselves in the similar position of having exposure to foreign exchange risk.

The findings of the study indicated that most of the participants advised other SMEs to be informed and know the industry that they were in. Figure 5.3.4 below gives a graphic representation of the findings:



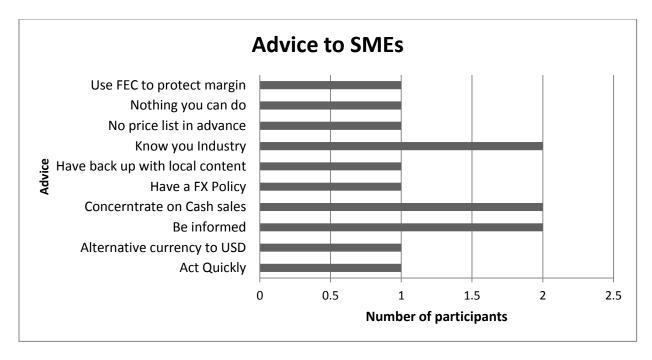


Figure 5.6.1: Advice to other SMEs

"It's just read, be informed and when things are volatile, try and – not to buy. Try and place your orders, and know what's happening in advance because as soon as, like the Fed Reserve's having an announcement, suddenly the Rand will take a knock or increase in value. And as soon as the news is over, it comes down again. But if you're unfortunate to have to buy, when there's speculation, you're in trouble" (Participant 7).

"And always be on the lookout for, you know, the future prospect, what the future lies, what lies ahead in the future in terms of the currency exchanging and so" (Participant 10).

"Well basically obviously outlet performs differently depending on their market, the biggest thing out here is you have to be up to date with the industry that you are in" (Participant 1).

"Adopt correcting measures that are appropriate to your industry, to your businesses" (Participant 10).

The participants urged the SME to be informed of the changes in the foreign exchange market such as developments in the financial world that can have an impact on the exchange rate. The participants also urged the SME to know their industry and keep to



date in order to apply appropriate risk management strategies that are relevant to the industry.

"If they were – if I started my business again now, I would concentrate on the cash sales rather than the account sales more. Because if you have money you buy – and you pay cash for product, you eliminate the risks. You can mitigate the risks dramatically by paying cash upfront for products" (Participant 2).

"(Laugher) Yeah, really that's – get the money before you ship the goods. You know what the problem is, is today people, you can't trust anybody today" (Participant 3).

Other participants who use non-hedging strategies advised SMEs to concentrate on cash sales rather than giving credit, as it opens them to the risk of foreign exchange fluctuation if the clients don't settle the account on time.

One of the participant's advice to SMEs that used foreign exchange contracts was that they should not use the contracts as speculative tools but to use them to protect their margins. If foreign exchange contracts were used in this way, they allowed the firm to price correctly and have a guaranteed fixed margin from the sale, rather than trying to maximise profits.

The advice from the minority of the participants for SMEs was to have a foreign exchange policy, not to issue price lists in advance, to have a backup with local content, to find an alternative currency to the USA dollar, and to act quickly.

5.5 CONCLUSION

This chapter concentrated on presenting the results of the study in a manner that provided answers to the research questions presented in Chapter 1.

Under each of the research questions, the results were presented under themes derived from the findings of the study and related to each question. The key themes that came from the findings are as follows:

- Rand performance has impacted margins;
- Negative sentiment on rand future performance;



- Basic understanding of foreign exchange exposure;
- Stepping mechanism is the commonly used strategy to manage foreign; exchange exposure risk;
- No knowledge of alternatives;
- Haven't researched other methods;
- Willing to explore new strategies;
- Competitors are in the same boat;
- Bank facilities make strategy easy to implement;
- Strategy not always effective;
- Strategies are cost effective and
- Know your industry and be informed.

A graphic representation of the findings was provided in the opening section of each theme. The author then provided key quotations that came from the findings to support the results. Furthermore, the authors gave an explanation of each of the themes and how they related to the quotations and the research question. To give depth to the study, the author ensured that the voices of all the participants were heard, even though they did not necessarily agree with the general trend.

The findings of the study indicated that the strategy that SMEs used to manage their foreign exchange risk was a stepping mechanism which involved taking out a foreign exchange contract or forward cover. When the time came to settle their commitments, the firm decided whether it was better to use a forex contract or a spot rate. The issue with this strategy, of course, was determining the amount and timing of the cover.

The study also found that the reason that SME chose their strategy had a lot to do with the fact that they did not have knowledge of the other strategies that are available in the market, neither do they give themselves time to research alternative strategies. However, the participants were willing to explore new strategies if they were given to them.

On the issue of the effectiveness of the strategies, the participants indicated that their strategies were effective in assisting them to curb the negative impact of foreign



exchange exposure. However, the participants conceded that their strategies were not always effective, especially in turbulent times. They also mentioned that their banks facilitated most of their transactions when it came to financial instruments and that their strategies were cost-effective to implement, answering the question of effectiveness by concurring that the strategies were effective.

The chapter concluded with closing remarks by participants to other SMEs to always be informed and to stay well-informed about their industry, and if they used financial instruments they should use them to protect their bottom line and not for speculative gain.

The next chapter will discuss the results: the findings of the study will be put into the contexts of their respective research questions and conclusions will be drawn on whether the findings add new information or simply confirm what is already known about the subject in relation to the available literature.

6 DISCUSSION OF RESULTS

6.1 INTRODUCTION

This section of the report discusses the findings from the study, which were presented in Chapter 5. The results will be evaluated and contrasted with the existing literature surveyed in Chapter 2, and a conclusion will be drawn on the extent to which this study has contributed new information to a generally under-researched area of investigation: the strategies with which South African SMEs manage forex risk.

Each research question and its findings will be discussed separately and the chapter will close with the synthesis of the discussions and a final conclusion.



6.2 DISCUSSION OF RESULTS FOR RESEARCH QUESTION 1

6.2.1 Research Question 1

What strategies do SMEs in South Africa use to manage the risk of foreign exchange exposure?

The first question seeks to discover whether SMEs are aware of the risk posed on their business by their exposure to foreign exchange and, if so, what strategies, they are using manage this risk.

The formulation of the results for this question was derived from the semi-structured interviews conducted with SME managers. Data from these interviews allowed the researcher to identify four themes that will be used to answer the research question.

6.2.2 Understanding of foreign exchange exposure

Bogicevic, Dmitrovic-Saponja, & Pantelic, (2016) maintain that as the world becomes more connected and international transactions increase, many firms have their transactions denominated in numerous foreign currencies. To settle these transactions, firms are usually required to purchase foreign currency (Bogicevic et al., 2016). The majority of these firms are export-oriented firms that engage in numerous cross-border transactions and have cross-currency cash flows from using currencies of different countries (Maniar, 2016). Given that most firms, irrespective of whether they are in the export or import business, will have to transact in foreign currency and will therefore be affected by the associated risk, it is clear that SMEs in these lines of business will use the same transaction method and face the same risk (McCarthy, 1999).

All the participants that were interviewed for this study, as indicated in the demographics in Chapter 5.2, operated in the import or export sector and thus, by default, would have been exposed to some form of risk with regard to foreign exchange. Their knowledge and the extent of their knowledge of their exposure risk was the central focus for finding answers to the research question. If the participants did not know the extent of their exposure, they would not be able to implement strategies that would assist them in managing their exposure.



The two most common types of foreign exchange exposure are transactional and translational exposure (Hagelin, 2003; Muller & Verschoor, 2006). However, as argued by Dong et al. (2014): Kula (2005); McCarthy, (1999) and other authors, there are three types of risks rather than two, with the third exposure being operational/economic exposure risk. Definitions of each of the risk are given in the literature review in Chapter 2.

The findings of the study suggest that SMEs have a basic understanding of foreign exchange risk exposure. Direct foreign exchange risk is indicative of transactional risk, which is defined by Hagelin, (2003) as a change in future cash flow caused by the movement of the forex rate. The participants were aware that fluctuations in foreign currencies impacted on their firms, but could only articulate the direct risk on the firm and not the indirect risk. This is supported by the findings presented in Figure 5.3.1.3 and by quotations from Participants 2 and 6, both of whom mentioned the impact on selling price of fluctuations in the exchange rate. This perception was further reinforced by Participant 5, who acknowledged that other, indirect risks were difficult to ascertain, and by Participant 9, who commented that they were aware of the indirect risk to a certain extent, but did not elaborate further.

The participants' knowledge of foreign exchange exposure was elaborated on when they responded to questions about the local currencies' impact on their business. The participants could only recognise the impact of the volatility of the currency on their profit margin, as can be seen in Figure 5.3.1.1 and the supporting quotations from Participants 5 and 7. These, again, indicate awareness of transactional/economic risk. This is predictable, and is supported by the literature; most authors agree that translational risk is only an issue for businesses with foreign operations, and in most cases it is highly unlikely that this would include SMEs (Kula, 2005; McCarthy, 1999), therefore transactional/economic exposure would be the most likely exposure that SMEs would be subjected to.

McCarthy, (1999) also argues that operational risk is difficult to quantify and managers would be expected to have knowledge of the firm's future NPV if there is a change in the exchange rates, and this would not apply to smaller firms. The participants had only a basic knowledge of foreign exchange exposure risk as they could only be aware of what their firms were exposed to on a daily basis, namely transactional risk. Translational and



operational risks are more relevant to larger and multinational concerns, and managers of SMEs would not be expected to know about them. The findings of the study supported the argument of other authors that SMEs are exposed mainly to transactional risk, and not the other types of risk.

Having established that the participants were aware of the risk posed by the exposure to foreign exchange market and knew that we were dealing with transactional risk, it was then possible to ask the participants how they managed their risk.

6.2.3 Identifying the most commonly used strategy

Firms that find themselves exposed to foreign exchange risk can use hedging and non-hedging strategies to manage their risk (McCarthy, 2003; Morey & Simpson, 2001). Ehrlich & Anandarajan, (2008); Goldberg & Drogt, (2007) indicate that there are a number of hedging strategies that firms can use to manage their risk of foreign exchange risk exposure; these include, but are not limited to forward contracts, future contracts, swaps, options and natural hedges. On the other hand, the non-hedging strategies that firms can use include pricing mechanisms (Yang, 1997), operational strategies (Lamarre & Pergler, 2008) and "do nothing" (Ehrlich & Anandarajan, 2008; McCarthy, 2000).

The findings of this study were that SMEs used a combination of forward exchange contracts (FEC) and the spot rate, otherwise known as a "stepping mechanism", to manage their foreign exchange risk. This was supported by the findings shown in figure 5.3.1.4 and the quotations from Participants 5, 7, 4 and 8.

The stepping mechanism was described by Participant 9 as "hedge before exchange contracts and closer to the time I decide whether I'm going to be going forward or if I'm going to be buying spot for the balance of my foreign exchange commitments".

The main reason for using this strategy, as expressed by Participants 4 and 8, is that sometimes the local currency deteriorates so fast that it is not worth using forward exchange contracts. This can be supported by the participants' opinions on the future outlook of the local currency; the participants were sceptical and had a negative outlook about its performance. This further necessitates the use of this strategy. Political instability was a major reason given for the negative outlook of the local currency.



The other reason given for the use of the strategy was that it also depends on the current cash flow of the firm, and if, at the time, the firm had cash to cover the forward purchase or if it could only afford to use the spot rate.

These findings are contrary to the current literature, which states that the most common foreign exchange management strategy amongst SMEs is forward exchange contracts (McCarthy, 1999). The literature does not mention a combination of strategies, which involves using forward exchange contracts and spot rate. The spot rate is more associated with the strategy of "do nothing" (Ehrlich & Anandarajan, 2008; McCarthy, 2000). So the "stepping mechanism" is a combination of a hedging and a non-hedging strategy, in the form of forward exchange contracts and spot rates (do nothing) respectively.

However, there is a reason to be sceptical about the use of the term "forward exchange contracts" by the participant: what the participant describes as a forward contract is more of an "option" (Ehrlich & Anandarajan, 2008; Goldberg & Drogt, 2007) than a forward contract.

Forward exchange contracts permit firms to transact in a foreign currency at a definite rate at a definite time in future (Goldberg & Drogt, 2007), "definite" being the operative word. On the other hand, options give the firms an option, not an obligation, to purchase foreign currency at a future date and at a specific amount (Ehrlich & Anandarajan, 2008; Goldberg & Drogt, 2007). This is closer to what is described by the participants in the study, as they decide at the time of settling the foreign commitments on whether or not to utilise their forward contract, which means that they have an option and not an obligation to use the instrument.

So the strategy that is used by SMEs in South Africa to manage the risk of foreign exchange exposure is a combination of "options" and "does nothing", which the participants refer to as a stepping mechanism. This is contrary to the literature review and does add new information to the body of knowledge.



6.2.4 Conclusive results for research question 1

The study discussed the concept of foreign exchange exposure (Dominguez & Tesar, 2006; Dong et al., 2014; Muller & Verschoor, 2006). When firms have financial commitments in foreign territories, they find themselves having to purchase foreign currency to settle those commitment (McCarthy, 1999) and that exposes them to foreign exchange risk.

Research question 1 sought to find out the strategies that SMEs used to manage the risk of foreign exchange exposure. Before the questions could be put to the participants, the researcher needed to find out if they were aware of the risk posed by foreign exchange exposure on their business.

The finding of the study was that the participants were aware of their risk, but only to a limited extent. They were aware that there was a transactional risk, and this confirmed the view expressed in the literature that transaction risk is the only risk that is relevant for SMEs as they do not have foreign interests, nor are they interested in computing net present value on a daily basis as the exchange rate moves.

Now that the awareness of the risk and type risk had been established, the researcher sought to find out from the participants which strategies they used to manage their risk. The findings of the study were that they participants use a blend of option and spot rates to do so. The preliminary reason for this, as suggested by the participants, had a lot do with the volatility of the local currency and cash flow of the firm. It was also found that this contradicted the literature that was reviewed by the researcher at the time of the study. So this does add new knowledge to the body of knowledge and is taken as an answer to research question 1;

To summarise the answer to the question on the strategies the SMEs in South Africa use to manage the risk of foreign exchange exposure, the SMEs use a strategy of combining options and spot rates, otherwise known as a 'stepping mechanism', to manage the risk of foreign exchange exposure.



6.3 DISCUSSION OF RESULTS FOR RESEARCH QUESTION 2

6.3.1 Research question 2

Why have SMEs in South Africa chosen to use these strategies over other available strategies?

This question sought to understand the reason behind the choice of foreign exchange exposure risk strategy by SMEs in South Africa. The question goes deeper, to find out if the choice of method is by design, lack of knowledge of alternatives, or influenced by market forces.

6.3.2 Reasons for choosing particular strategies

As outlined in the preceding section, there are a number of hedging strategies that SMEs can use to manage their risk of foreign exchange exposure. Each strategy has advantages and disadvantages, for instance, forward exchange contracts have the advantage of being liquid and can be acquired quickly at low transaction cost with easily understandable contracts (Ehrlich & Anandarajan, 2008). On the other hand, they can lack flexibility and have higher premiums (Ehrlich & Anandarajan, 2008). The benefit and challenges of each strategy need to be weighed against each other, and this could be the reason why SMEs choose one strategy over the other.

This sub-question sought to find out the reason why SMEs chose to use their current strategy rather than any of the other available strategies. The findings of the study were that the SMEs had no knowledge of alternative methods besides the one that they were currently using. This is supported by the findings shown in Figure 5.3.2.1 and the quotations from Participants 5 and 9. Participants 3 and 7 expressed the view that their current strategy provided a safety net, as it was the most cautious strategy.

The literature revealed that strategies such as hedging do not make a difference to the performance of the firm, that they are not in line with the objective of the firm, that the managers of SMEs do not understand the difference between hedging and speculating, and that they were satisfied with their current strategy. The minority of the firms in the



study stated as their reason that hedging was too expensive or too difficult, or that "they do not have time" (McCarthy, 1999).

The findings of this study partly concur with the literature reviewed, as the "safety net" mentioned by the participants could be indicative of the fact that they were satisfied with the security of their current strategy. The literature also referred to their satisfaction with the strategy they were using.

On the other hand, a major finding of this study was that the participants did not have knowledge of the alternative strategies. This was not found anywhere in the available literature reviewed for this study. Thus, the finding adds new insight to the existing body of knowledge.

6.3.3 Haven't researched other strategies

McCarthy, (1999) argued that the strategies that SMEs understood the most were forward contracts, overseas currency accounts and invoicing, while other strategies such as option and money market hedges were well understood. On the other hand, the least understood strategies were "swaps, leading and lagging, natural hedges and matching".

The research further sought to probe the participants on their reasons for their choice of strategy, prompting other suggestion in the form of questions. The participants were asked about their knowledge of alternative strategies, as the lack of such information could be an indication of why they had chosen their current strategy.

The findings of the research were that the SMEs had not researched other strategies for managing the risk of foreign exchange exposure. This was supported by the findings shown in figure 5.3.2.2, which indicated that a majority of participants had no knowledge of alternative strategies, in fact, only one participant knew of other strategies. A key quotation from the interview transcripts, included in this section, also supported this finding.

The finding of the study confirms the argument in the literature review proposed by McCarthy (1999), that most participants knew of common strategies such as forward exchange contracts and options, mentioning them more than other forex risk



management strategies, which indicates that SMEs do not do much research on other strategies, apart from the common ones.

6.3.4 Behaviour of competitors

The choice of strategy can also be influence by the structures of the industry the firm operate in and the competition it faces. Lamarre & Pergler (2008), argue that foreign exchange management strategy can work well if the firm's competitors are impacted by the movements in the currency market and are dependent on the rivalry in the market (Bartram et al., 2010).

The participants were probed on whether the behaviour of competitors influenced their choice of strategy. The findings of the research are that the behaviour of the competitors did not influence the choice of strategy. The chief reason for this is that in the view of the participants, the competitors are in the same situation as they are when it comes to foreign exchange exposure and would probably implement the same strategy. This finding is supported by the findings presented in figure 5.3.2.4 and the key quotation from Participant 7, who stated that their firm ran the business as they saw fit, and Participant 8 and 9's statement that the competitors are in the same market and use the same strategies to manage their risk.

The findings of the study both concur and conflict with the available literature. The finding that the SMEs are not influenced by the competitors in the market does not agree with the literature, which maintains that the competitors influence how well foreign exchange risk management work. On the other hand, the opinion by the SMEs that the competitors face the same problems might be what influenced their choice of strategy coincide with the view generally expressed in the literature that strategies are dependent on rivalry in the market. The SMEs are of the opinion that everyone is in the same boat, so they choose to implement the same strategy as the competitors.

6.3.5 Willingness to explore new strategies

The research also probed whether the participants were willing to explore alternative strategies if they were offered to them. The findings of the study, as presented in figure



5.3.2.3, are that the SMEs were willing to try alternative strategies if they were offered to them. This was supported by key quotations from Participants 1 and 5, who stated that they would be willing to explore alternatives if they would reduce their risk and protect their bottom line.

This study did not involve conducting a literature search on the subject of SMEs' willingness to explore alternative strategies. The findings of this sub-question will be used in conjunction with other findings.

6.3.6 Conclusive results for research question 2

This question sought to discover the reason behind the SMEs choosing the particular strategies that they have done for managing their risk. The question further seeks to explore whether knowledge of other strategies and competitors had an influence on their choice of strategy.

The two key findings of the research were that the choice of strategy was influenced by the SMEs' lack of knowledge of other strategies and that their current strategy was deemed to be safe. This first finding does not concur with the other findings in the study, and thus adds new knowledge to the body of knowledge. However, the second finding does concur with literature.

The study also found that SMEs have not researched other strategies, confirming the available argument in the reviewed literature, which is that they do not know of any other alternative strategies.

Furthermore, the study also found that competitors do not influence the choice of strategy. This is not in accordance with the literature. However, the sentiment that the competitors are in the same boat might have an influence on the choice of strategy, which does concur with the reviewed literature.

To conclude the question of why SMEs have chosen their current strategy over other available strategies, the answer is that SMEs choose their strategies because they have not done research and thus are unaware of alternatives. Also, they believe that the competitors are in the same boat as they are. However, the SMEs expressed their



willingness to change their strategies if the benefits of the alternative could be proved to them.

6.4 DISCUSSION OF RESEARCH QUESTION 3

Have these strategies been effective in managing the risk of foreign exchange exposure?

This question seeks to discover if the chosen strategy or strategies have been effective in curbing the negative effect of foreign exchange volatility. The question will further seek to understand the ease of use of the chosen strategy or strategies and whether they are cost-effective.

The question of the effectiveness of foreign exchange risk management strategies will be covered in three aspects: ease of implementation, effectiveness of strategy and cost-effectiveness of the strategies.

6.4.1 Effectiveness of the chosen strategies

The effectiveness of a strategy can depend on how easy it is to implement it. This subquestion sought to find out how easy it was for SMEs to implement their strategies. Most of the SMEs were of the opinion that their foreign exchange management strategies were difficult to implement. These findings was supported by the results shown in figure 5.3.3.1 and the quotation from Participant 1, who said that the firm had been practicing the strategy for a long time and it has become as easy as pushing a button. Participants 1 and 10 remarked that a good relationship with clients makes their strategy easy to implement.

These findings concur with the arguments in the existing literature as purported by McCarthy, (1999) at only a SMEs in his study did not implement any hedging strategies to manage the risk they thought that hedging was too difficult to implement.

What also emerged from the interviews was that the majority of the SMEs use their banks to facilitate their foreign exchange management strategy. This was not surprising, given that the most common strategy partly involves a financial hedging instrument that



is obtainable from their banks. The SMEs, represented by Participants 4, 6 and 8, stated that banks made their strategy easy to implement, as it could be set in motion on the telephone and using online portals at the banks.

This finding agrees with the literature: Ehrlich & Anandarajan, (2008) held that hedging instruments such as options, which the findings of the study found to be the predominant instruments used by SMEs, are easily obtained over the counter from banks.

The literature also suggested that passing the risk to the customer was the simplest strategy; however, it was not as easy to implement, as one's competitors had to be in the same position for the strategy to be successful (Lamarre & Pergler, 2008). Although passing the risk to the customer was seen as the simplest strategy, it was used by a minority of SMEs, even though the majority of them perceived their competitors to be in a similar position as them.

So, to answer the sub-question, the ease of obtaining currency hedging instruments from the bank makes it easy for SMEs to implement their strategies, as most of the SMEs use a strategy that partly involves using currency hedging instruments

Foreign exchange exposure risk management strategies are supposed to assist firms in curbing the negative impact of foreign exchange shocks. Some strategies, such as hedging, are known for not always being effective, as in the long run, forward rate can be just as unpredictable as spot rate (McCarthy, 1999).

The findings of the study are that the SMEs perceived that their strategies were effective in assisting them to manage the risk of foreign exchange exposure. This finding was supported by the results presented in figure 5.3.3.2 and the key quotations from Participants 2 and 9. The SMEs stated that their strategies assisted them in minimising the losses that they would have experienced if they had not implemented them.

However, as presented in the same figure, the SMEs conceded that their strategies were not always effective in assisting them to manage their risk. The SMEs commented that there were years when they experienced losses although they used the same strategy that had assisted in avoiding losses in other years. The spot rate was perceived by participants as being lower than the forward rate at the time of settling debts, which seldom occurs, was also indicative of a failure of the strategy.



This finding does agree with that expressed by McCarthy (1999), that some of the hedging strategies were known for not always being effective, as in the long run, forward rate can just be as unpredictable as spot rate. This argument is reinforced by Goldberg & Drogt, (2007) who state that forward contracts can be rendered ineffective if there is a mismatch between the maturity date and the payment date.

So, to answer the sub-question, the risk management strategies used by SMEs to manage their risk of foreign exchange exposure is not always effective, but does assist in minimising the risk of foreign exchange exposure.

6.4.2 Cost-effectiveness of chosen strategies

The issue of the cost of implementing foreign exchange strategies is one that had been explored by a number of authors. Both hedging and non-hedging strategies have costs associated with them. Authors have argued that hedging is the most cost-effective strategy, but can be costly if the firm is stuck in an unfavourable contract (Lamarre & Pergler, 2008), while others have argued that the use of financial instruments is not affordable for small firms (Hagelin, 2003).

The finding of the study was that the SMEs perceived the implementing of their foreign exchange management strategies as cost effective. This was supported by the results presented in figure 5.3.3.3 and the key quotation from both the SMEs that use hedging and non-hedging strategies. Only a minority of participants were of the view that their strategies were not cost effective.

This finding conflicts with the argument by Hagelin, (2003) that financial hedging is not affordable to SMEs. It therefore adds to the knowledge of this field of investigation. However, McCarthy, (1999) states that the minority of the SMEs in his study perceived hedging as being too expensive, which is in accordance with the view of the minority of the SMEs in this study.

Furthermore, as presented in the same figure and in the key quotations by participants, the study also revealed that the biggest impediment in implementing foreign exchange risk management strategies for both hedging firms was the bank fees involved. Only a



minor group of participants did not associate their strategies with high banking costs; this can be most due to the fact that they utilise in-house strategies.

This concurs with the literature on hedging, as Ehrlich & Anandarajan, (2008) suggest that the disadvantage of forward contracts is that they require upfront deposits, and if the buyer defaults on their obligation it can lead to hefty penalties. However, it contradicts the literature on "do nothing", which is the most common non-hedging strategy and is seen as having the advantage of being the least costly foreign exchange management strategy (Ehrlich & Anandarajan, 2008).

To answer the sub-question, SMEs do regard their strategies as cost effective but regard the high bank costs as a disadvantage in implementing their strategies.

6.4.3 Conclusive results for research question 3

This research question sought to find out the effectiveness of the strategies used by SMEs to manage the risk of foreign exchange. The effectiveness of the strategies was investigated under three sub-categories namely ease of implementing strategy, overall effectiveness and cost-effectiveness.

The findings of the study were that the SMEs perceived their strategies to be effective in minimising their risk, but conceded that they were not infallible. The other finding was that the strategies were easy to implement because they are easily obtainable from most banks. However, the banking fees were a disadvantage in implementing both hedging and non-hedging strategies.

The answer to the research question is therefore that the strategies are not always effective, but are effective in terms of ease of implementation and cost in minimising the risk of foreign exchange exposure. Their only disadvantage is the banking cost associated with implementing the strategies.

6.5 CONCLUSION

The objective of this study was to investigate the strategies used by SMEs to manage the risk associated with foreign exchange. The study also sought to find out the reason



why SMEs chose particular strategies over others that are available, and if these strategies were effective in assisting them to manage the risk of foreign exchange exposure.

Each of the research questions was dealt with separately in the chapter. The findings of the research, as presented in Chapter 5, were used to answer the research questions. The finding was also contrasted with the literature reviewed in Chapter 2 with the objective of discovering if they supported existing views or if they added new knowledge to the field.

The finding for first research question was that the most common strategy SMEs use is a combination of options and spot rates, otherwise known as a 'stepping mechanism', to manage the risk of foreign exchange exposure. This finding contradicted the current literature, which maintained that forward contracts are the most common strategy and do not acknowledge the use of a hybrid strategy. Thus this finding added new knowledge to the body of knowledge.

The findings of the study for second research question are that SMEs choose their strategy because they have no knowledge of alternative strategies and they believe that their competitors are in the same situation as they are. However, the SMEs were willing to change their strategies if the benefits of the alternative strategies could be proved. There were a number of contradictions and coincidences with the current literature. New knowledge was identified on various aspects, such as that of participants not having knowledge of alternative strategies, SMEs strategies not being influenced by competitors and SMEs being willing to explore new strategies. Most of the other findings concurred with the available literature.

The finding for the third research question was that the strategies were not always effective except in terms of ease of implementation and cost; the only disadvantage was the banking cost associated with implementing them. The finding that SMEs perceive that their strategies to be cost-effective conflicted the current literature, as it suggested that financial hedging instruments were not affordable to SMEs. This finding therefore also made a contribution to the body of knowledge in this field.



7 RECOMMENDATIONS AND CONCLUSION

7.1 INTRODUCTION

This chapter of the study will provide a conclusion on the research by giving a summary of the key finding and make inferences to find out if the study has met the objective of providing answers to the research questions, and contribute to the body of knowledge.

The chapter will also provide recommendations for business, making reference to the findings and conclusion on each of the research questions. After that, the limitations of the study will be discussed and recommendations made for future research. The concluding remarks will provide a summary of the key points of the research.

7.2 SUMMARY OF KEY FINDINGS

The finding of this study will contribute to the understanding of the strategies used by SMEs in the management of the risk of foreign exchange risk exposure. The findings will also assist by contributing to the knowledge of the reason the SMEs have chosen to use particular strategies over other available ones, and find out if the strategies have been effective in assisting the SMEs to manage their risk.

The findings of the study revealed a number of key themes that were used to answer the research questions. From the themes, three key findings were identified and will be used to discuss and draw conclusions based on the research questions.

The themes that came from the study were that the volatility of the local currency had an impact on SMEs' profit margins in the previous year. It was also established that the SMEs have a negative outlook on the future performance of the local currency. This has led them to adopt forex management strategies that address both short-term and long-term volatility. The strategies, the reasons for their choice and their effectiveness are discussed below.



7.2.1 The stepping mechanism

The objective of the study was to investigate the strategies that the SMEs use to manage the risk of foreign exchange exposure. As is agreed by a number of authors, there are various strategies that firms can use to manage the risk of foreign exchange exposure. These include hedging and non-hedging strategies (Ehrlich & Anandarajan, 2008; McCarthy, 2000). The literature suggests that the most common hedging strategy is forward cover (Ehrlich & Anandarajan, 2008; Goldberg & Drogt, 2007) whilst pricing mechanism is the most evident non-hedging strategy (Lamarre & Pergler, 2008). In the study on the foreign exchange transaction exposure practice of Australian SMEs, (McCarthy, 1999) found that forward contracts were the most common hedging strategies.

There are a number of forex management strategies that came from the study. Some of the SMEs pass the risk onto the customer, a strategy that seems to work if the product does not have substitutes as you are in a niche market or you don't have other competitors. For those that are in the markets that have substitutes find themselves not being able to pass the risk to the customer and having to find other ways of protecting their profit margins.

The findings of this research are that these SMEs in South African use a hybrid of hedging and non-hedging strategies to manage their risk of foreign exchange exposure. The strategy involves taking out a financial hedging instrument that allows for the firm to exercise its option to use the hedged rate or opt not to and use the spot rate depending on which rate is favourable at the time of transacting.

At first, the SMEs purported that the financial instrument that they use is forward exchange contracts (FECs) but on further analysis the author concluded that what was described was more an 'option' rather than a FEC. One of the participants coined the hybrid strategy as 'stepping mechanism' and that was used to the key theme and finding in the study. This contradicted the current literature as discussed above.

To conclude on this objective of the research, the study has managed to answer the research question and thus achieved the objective and contributed new knowledge.



7.2.2 Competitors are in the same boat

The other objective of the study was to investigate the reason for SMEs to use these strategies over other available strategies in the market. As stated by a number of authors there are various hedging and non-hedging strategies that firms can use to manage the risk of foreign exchange exposure. Some of the hedging strategies include foreign exchange exposure include but not limited to forward contracts, future contracts, swaps, options and natural hedges (Ehrlich & Anandarajan, 2008; Goldberg & Drogt, 2007). While non-hedging strategies include pricing mechanisms (Yang, 1997), operational strategies (Lamarre & Pergler, 2008) and "Do Nothing" (Ehrlich & Anandarajan, 2008; McCarthy, 2000).

McCarthy, (1999) suggested a number of reasons why SMEs in his study chose not to hedge their foreign exchange risk. The reasons that were given is that hedging does not make a difference to the performance of the firm, hedging is not the objective of the firm, firms did not understand the difference between hedging and speculating and they were satisfied with their current strategy. Minority of the firms in that study stated their reason as "hedging is too expensive", "too difficult" or "they do not have time"

The author further argues that the strategies that SMEs understood the most where "forward contracts, overseas currency accounts and invoicing", while other strategies such as option and money market hedges were well understood. On the other hand, the least understood strategies were "swaps, leading and lagging, natural hedges and matching".

The findings of this study were that the reason in why SMEs in South Africa chose their current forex management strategy is that they have no knowledge of alternative strategies. This concurs with the literature as purported by McCarthy, (1999) that SME have limited knowledge on other alternative hedging methods either than the common ones.

Key amongst the reason that was found in the study is that the SMEs were of the perception that their competitors are in the same boat as them when it came to the impact of foreign exchange exposure and are probably using the same methods to manage it. This perception was further reinforced by the SMEs as they stated that the competitor behaviour does not have an impact on them.



This made the South African SMEs reluctant to research other strategies of managing foreign exchange exposure risk. The lack of research by SMEs concurs with the current literature whilst the competitors not having an influence on the SMEs strategy does not concur with current literature.

To conclude on this objective of the study, the findings of the study have been able to respond to the research question on the reason for the SMEs' choice of strategy and thus research has achieved this objective.

7.2.3 Easy and cost effective

The third objective of the study was to investigate the effectiveness of the strategies that SMEs in South Africa use to manage their forex exposure risk. The effectiveness will be investigated in three categories, ease of use, overall effectiveness and cost effectiveness. Authors have argued that hedging is the most cost effective strategy but can be costly if the firm is stuck in an unfavourable contract (Lamarre & Pergler, 2008), while other have argued that the use of financial instrument is not affordable for small firms (Hagelin, 2003).

Ehrlich & Anandarajan, (2008) purports that the disadvantage of forward contracts is that they require upfront deposits and if the buyer defaults on their obligation it can lead to hefty penalties. The author also argues that "Do nothing" which is the most common non-hedging strategy is seen as having the advantage of being the least costly foreign exchange management strategy. On SMEs, McCarthy, (1999) purported SMEs in his study stated the reason for not hedging is that reason as "hedging is too expensive", "too difficult" or "they do not have time".

The findings of this study are that SMEs in South Africa perceived that there foreign management strategies have been effective in minimising the impact of foreign exchange exposure. However, the SMEs also stated that their strategies were not always effective in assisting in managing the risk of foreign exchange exposure.

The study also found that SMEs found it easy to implement their strategies as they were facilitated through a bank, this, of course, applies to the hedging strategy which is most common and one part of the hybrid strategy.



Lastly, the study found that the forex management used by SMEs were cost effective but the only drawback is the bank fees that they have to pay to implement their strategies. This applied to the majority of the hedging and non-hedging entities.

To conclude on this objective of the study, the finding of the study have been able to respond to the research question on the effectiveness of the strategies concluding that the strategies used by SME to manage their forex exposure risk are effective as they are easy to implement and are cost effective thus the research has achieved this objective.

7.3 RECOMMENDATION FOR BUSINESS

On conclusion of the interview, the researcher probed the SMEs on their advice to other SMEs in South Africa that find themselves in a similar position. The responses of the SMEs were captured in chapter 5 and will be used to provide insight on the recommendation for business taking into account the findings of the study.

7.3.1 Research alternative method

The study revealed that SMEs are not knowledgeable on the alternative forex risk management strategies that are available in the market. The SMEs knowledge is limited to the common strategies and those informal in- house strategies that they use to manage their risk.

Businesses should research and explore other strategies that will enable them to diversify their option and may come with some savings on bank fees. There were about two participants that did not have a problem with bank fees and this was due to them using non-hedging in-house strategies rather than hedge their risk.

7.3.2 Cash sales over credit sale

Foreign exchange exposure impacts firms the most when they have credit sales as the rate can fluctuate before the account is settled and this can lead to loss of profit. Especially in South Africa where the foreign exchange is impacted by political instability and can fluctuate as much as 20 % overnight. Cash sales ensure that accounts are



settled in real time at today's rate even though the product will be delivered in 6 months' time thus reducing the risk of exposure.

7.3.3 Use forward exchange contract to protect margins

However, If SMEs find themselves in a situation of high volatility such as we have had in the past they should use forward contract or option to protect their margin and bottom line and not to speculate. What was found in the study is a perceived loss of profit when the spot rate is better than the hedged rate at the time of transacting.

Hedging instrument should not be used to make a profit from the fluctuations in the market as this leads to speculation and perceived losses. Hedging should be used to have a guaranteed margin on imported or exported goods as this will work out better in assisting the firm to manage their risk.

7.3.4 Use hybrid strategies

Firms should not be rigid in their strategies that they have chosen to manage the risk. The use of hybrid strategies makes the firm flexible to adapt to a rapidly changing environment such as the one in South Africa.

SMEs can use a combination of non-hedging strategies or blend them with hedging strategies. They can also use a combination of hedging strategies but they must be cautious of the cost of implementing two hedging strategies.

7.3.5 Have a foreign exchange management strategy

The finding of the study was that only a minority of firm have a foreign exchange management policy in place. The chosen method be it one method or a hybrid method should be reduced to paper and followed when implementing the strategy.

Having a policy on hedging, for instance, will assist in informing how much of their commitment to hedge forward and by how long; this can be based on previous experience and can assist in managing cost and avert losses.



On the non-hedging side, it can assist with determining the amount of product to stockpile, the amount of margin to add on to the rate and the calculation of forecasting the rate using historic data.

7.3.6 Know your industry and always be informed

Lastly, SMEs should be informed about their industry and how it works. The SMEs assumption that their competitors are in the 'same boat' as them without doing market research can lead to them not being informed on the latest trends in the market.

SMEs should also get acquainted with financial publication and know the signal from the market that can indicate a forex market shock. This can assist in timing the market and not buying forex at the worst possible rate.

7.4 LIMITATION OF THIS STUDY

Research cannot provide a complete picture or solution if the information is incomplete or biased, therefore, the first step in any research is to remove the bias(LeCompte, 2010). Qualitative research is often associated with emotional and subjective bias (McCusker & Gunaydin, 2014)

The bias in the qualitative research comes from the fact that the study is carried out by humans who have preconceived perceptions and that may lead to selective bias when it comes to recording interviews (LeCompte, 2010).

LeCompte, (2010) suggests avoiding biases the researcher needs to be aware of tacit and formative theory that guide everyday thinking and to achieve this takes acknowledgement and discipline from the researcher.

The other bias that exists in doing research comes from the selection of the sample. Non-probability sampling which has been chosen as the sampling method in this study has been known to harbour some bias on the selection of the sample by the researcher (Wegner, 2012).

For this study, the author was aware of the bias of selecting the sample. The author tried to ensure that this bias is removed by having an open mind when selecting the sample



of the study. The researcher used a mix of personal contacts and web-based sources to select the sample for the study.

7.5 RECOMMENDATIONS FOR FUTURE RESEARCH

This study used exploratory research to explore to investigate the strategies that SMEs use to manage the risk of foreign exchange exposure. The researcher used a semi-structured interview schedule to gather data. The tool has is good as it allows the participants to express themselves and not limited to preconceived concepts by the author.

However, there is some limitation to the tool as these responses are limited to the opinion of the participants and that taken at face value without fact check. The author recommendation is a case study on the effectiveness of foreign exchange management strategies. The case study will allow the researcher to gather information from the firm's financial report and make a conclusion if the strategy that the firm has employed has assisted them minimising their loss.

7.6 CONCLUSION

This research was prompted by the business challenge of lack of literature on SME management of foreign exchange risk. There is an abundance of literature on the management of foreign exchange by large business and multinationals but limited literature on SMEs. The research sought to find out the strategies that SMEs in South Africa use to manage the risk of foreign exchange exposure. South Africa was chosen as a geographic location for the study as it has the most volatile currency out of all emerging market currencies in the past year.

The study gave a literature review in chapter 2 where the author started by building a theme on foreign exchange exposure, its risk and impact on business before exploring the different strategies that are available to manage such risk. Where possible the author gave the perceptive of SMEs on this topic.

Chapter 3 gave the formulation of the research question that was used to address the objectives of the study. The study had 3 main research questions.



Chapter 4 broke down the methodology that was used for the study, being a qualitative exploratory, the data collection instruments and procedure which were; interview schedule and interviews. The chapter also gave the data analysis procedure and methodology thereof. The researcher used a thematic analysis and Atlas.ti as the tool to analysis the data. Chapter 5 gave a presentation of the results were themes were formed from the findings of the study. These themes used in chapter (6) to discuss the results of the study.

This chapter covered the key finding that came out of the study. The findings were used to conclude on whether the research has been able to achieve the objective of the study. The author concluded that the findings were sufficient in answering the research question and thus the objective of the study was achieved. It was concluded that stepping mechanism was the most common strategy used by SME in South Africa to manage the risk of foreign exchange exposure.

The reason for SMEs to use this strategy was that they have no knowledge of alternative strategies and this is because they don't give themselves time to research other strategies as they have the perception that their strategy is an industry norm.

The study also concluded that the strategies that are used by SMEs are effective as they are easy to use and can be done at and an affordable cost even though some of the SMEs expressed that the bank fees were the main expense for them to implement their strategy. The chapter went on further to provide recommendations for business and future research. A number of recommendations were given to business including;

- research alternative method;
- cash sales over credit sales;
- use forward exchange contract to protect margins;
- use hybrid strategies have a foreign exchange management strategy;
- Know your industry and always be informed.

These methods are meant to assist business in improving their foreign exchange risk management practice and come from the participant's comments and findings from the study. The recommendations for future research are for the future researcher to use a case study methodology when investigating the effectiveness of forex management strategies



8 REFERENCES

- Aabo, T., Høg, E., & Kuhn, J. (2010). Journal of Multinational Financial Integrated foreign exchange risk management: The role of import in medium-sized manufacturing firms. *Journal of Multinational Financial Management*, 20(4–5), 235–250. http://doi.org/10.1016/j.mulfin.2010.08.002
- Acs, Z. J., Morck, R., Shaver, J. M., & Yeung, B. (1997). The Internationalization of Small and Medium-Sized Enterprises: A Policy Perspective. *Small Business Economics*, *9*(1), 7–20. http://doi.org/10.1023/A:1007991428526
- Ayyagari, M., Beck, T., & Demirguc-Kunt, A. (2007). Small and medium enterprises across the globe. *Small Business Economics*, *29*(4), 415–434. http://doi.org/10.1007/s11187-006-9002-5
- Bartram, S. M. (2008). What lies beneath: Foreign exchange rate exposure, hedging and cash flows. *Journal of Banking and Finance*, *32*(8), 1508–1521. http://doi.org/10.1016/j.jbankfin.2007.07.013
- Bartram, S. M., Brown, G. W., & Minton, B. A. (2010). Resolving the exposure puzzle:

 The many facets of exchange rate exposure. *Journal of Financial Economics*, *95*(2), 148–173. http://doi.org/10.1016/j.jfineco.2009.09.002
- Bogicevic, J., Dmitrovic-Saponja, L., & Pantelic, M. (2016). Foreign exchange transaction exposure of enterprises in Serbia. *Economic Annals*, *61*(209), 161–177. http://doi.org/10.2298/EKA1609161B
- Boroaca, L. R. and, & Anttila, C. (2014). Influences of Exchange Rates on Romanian Exports, 1(1), 5–13.
- Bruce, M. R. C., Jaeger, R. G., Houck, L. D., & Aca-, K. (2016). The Battle of Bretton Woods: John Maynard Keynes, Harry Dexter White, and the Making of a New World Order. *Historian*, 78(1), 183–184. http://doi.org/10.1111/hisn.12155.
- Choi, S. (2012). Exchange Risk Exposure of Korean SMEs: Issues in Firm Location, Exchange Rate Type, and Exchange Rate Changes Size. *Procedia Social and Behavioral Sciences*, *65*(ICIBSoS), 860–866.



- http://doi.org/10.1016/j.sbspro.2012.11.211
- Clark, E., & Judge, A. (2009). Foreign currency derivatives versus foreign currency debt and the hedging premium. *European Financial Management*, *15*(3), 606–642. http://doi.org/10.1111/j.1468-036X.2007.00431.x
- Cleary, M., Horsfall, J., & Hayter, M. (2012). Data collection and sampling in qualitative research: does size matter? *Journal of Advanced Nursing*, *70*(3), 473–475. http://doi.org/10.1111/jan.12163
- Derby, R. (2014). DERBY'S COUNTY: Hot money's hurting us | Derby's County | financialmail. Financial Mail. Retrieved from http://www.financialmail.co.za/opinion/derbyscounty/2014/09/04/derby-s-county-hot-moneys-hurting-us
- Dong, L., Kouvelis, P., & Su, P. (2014). Operational hedging strategies and competitive exposure to exchange rates. *International Journal of Production Economics*, *153*, 215–229. http://doi.org/10.1016/j.ijpe.2014.03.002
- Dooley, M. P., Folkerts-Landau, D., & Garber, P. (2003). *An essay on the revived Bretton Woods system* (techreport).
- Ehrlich, M., & Anandarajan, A. (2008). Managing financial risk. *Journal of Corporate Accounting and Finace*, 19(6), 25–34. http://doi.org/10.1002/jcaf.20430
- Gibson, T., & Vaart, H. J. Van de. (2008). Defining SMEs: A less imperfect way of defining small and medium enterprises in developing countries. *Brooking Global Economy And Development*, (September), 1–29.
- Gleason, K. C., Kim, Y. S., & Mathur, I. (2005). The Operational and Financial Hedging Strategies of U. S. High Technology Firms.
- Goel, M., Gupta, P. S. L., & Goel, L. (2011). An analysis of foreign exchange exposure management by MNCs in India. *International Journal of Multidiciplinary Research*, 1(5).
- Goldberg, S. and, & Drogt, E. (2007). Managing foreign exchange risk. *Journal of Corporate Accounting and Finace*, 19(2), 49–57. http://doi.org/10.1002/jcaf.20373



- Hagelin, N. (2003). Why firms hedge with currency derivatives: an examination of transaction and translation exposure. *Applied Financial Economics*, *13*(1), 55–69. http://doi.org/10.1080/09603100110094501
- Indexmundi. (2016). Rand to US Dollar Exchange Rate Graph Mar 31, 2006 to Mar 24, 2016. Retrieved March 28, 2016, from http://www.indexmundi.com/xrates/graph.aspx?c1=ZAR&c2=USD&days=3650
- Johnson, S. (2015). Global trade damaged by weakness in emerging market currencies.

 Retrieved March 27, 2016, from http://www.ft.com/intl/cms/s/3/6557aee0-4cc111e5-9b5d-89a026fda5c9.html#axzz448X1pETg
- Kazaz, B. (2014). 1 > 2? Less is more under volatile exchange rates in global supply chains. *Business Horizons*, *57*(4), 521–531. http://doi.org/10.1016/j.bushor.2014.03.007
- Kula, V. (2005). Foreign exchange exposure perception and management of Turkish SMEs. *Journal of Small Business and Entrepreneurship*, *18*(4), 437–452. http://doi.org/10.1080/08276331.2005.10593352
- Lamarre, E., & Pergler, M. (2008). Taming your dollar exposure: What Canadian companies can do to combat the rising dollar, (January).
- LeCompte, M. D. (2010). Analyzing Qualitative Data. *Theory into Practice*, *39*(25 Jun 2010), 124–130. http://doi.org/10.1207/s15430421tip3903
- Lings, K. (2016). South Africa 's National Budget 2016 / 2017.
- Lub, V. (2015). Validity in Qualitative Evaluation: Linking Purposes, Paradigms, and Perspectives. *International Journal of Qualitative Methods*, *14*(5), 1–8. http://doi.org/10.1177/1609406915621406
- Maniar, H. (2016). Hedging Practices Used by Indian Companies in Managing Foreign Exchange Risk, 41–63.
- McCarthy, S. (1999). Foreign exchange transaction exposure management practices of Australian SMEs: An exploratory analysis. *Small Enterprise Research*, 7(2), 29–42.



- http://doi.org/10.5172/ser.7.2.29
- McCarthy, S. (2000). Managing foreign exchange transaction exposure-the alternatives.
- Mccarthy, S. (2003). Hedging versus not hedging: strategies for managing foreign exchange transaction exposure. *Queensland University of Technology*, 1–12.
- McCusker, K., & Gunaydin, S. (2014). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*, 267659114559116. http://doi.org/10.1177/0267659114559116
- Morey, M. R., & Simpson, M. W. (2001). To hedge or not to hedge: The performance of simple strategies for hedging foreign exchange risk. *Journal of Multinational Financial Management*, 11(2), 213–223. http://doi.org/10.1016/S1042-444X(00)00050-5
- Muller, A., & Verschoor, W. F. C. (2006). Foreign exchange risk exposure: Survey and suggestions. *Journal of Multinational Financial Management*, *16*(4), 385–410. http://doi.org/10.1016/j.mulfin.2005.09.001
- Newton, S. (2013). Sterling, Bretton Woods, and Social Democracy, 1968–1970.Diplomacy & Statecraft, 24(3), 427–455.http://doi.org/10.1080/09592296.2013.817931
- Odhiambo, N. M. (2015). EXCHANGE RATE DYNAMICS IN SOUTH AFRICA: A REVIEW OF PAST AND PRESENT REGIMES. *Economics, Management, and Financial Markets*, 10(2), 77–95.
- Patton, M. (2001). Qualitative Research and Evaluation Methods. *US Patent 2,561,882 806 Pages*.
- Robinson, O. C. (2014). Sampling in Interview-Based Qualitative Research: A

 Theoretical and Practical Guide. *Qualitative Research in Psychology*, *11*(1), 25–41. http://doi.org/10.1080/14780887.2013.801543
- Saunders, M., & Lewis, P. (2012). Doing Research in Business & Management. An Essential Guide to Planning Your Project. Pearson Education Limited. Essex, England: Pearson Education Limited.



- Sivakumar, A., & Sarkar, R. (2008). Corporate Hedging for Foreign Exchange Risk in India. *IIT Kanpur*.
- Soenen, L. A. (1987). Foreign exchange exposure management. *Management International Review*, *19*(2), 183–186.
- South African Reserve Bank. Import Undertaking Dispensation Section D.1, South
 African Reserve Bank (2010). Retrieved from
 https://www.resbank.co.za/RegulationAndSupervision/FinancialSurveillanceAndExc
 hangeControl/Guidelines/Documents/D.1-Forward cover or hedging transactions
 between ADs and residents.pdf
- South African Reserve Bank. (2016). Statement of the Monetary Policy Committee.
- Standard bank. (2008). Global Markets The Forward Foreign Exchange Market The Forward Foreign Exchange Market What is the Forward Foreign Exchange Market? Types of FECs Application of FECs, (December).
- Wasseman, H. (2010). Ten rules for SA exporters | Fin24. Fin24. Retrieved from http://www.fin24.com/Money/My-Business/10-rules-for-SA-exporters-20100610
- Wegner, T. (2012). Applied Business Statistics: Methods and Excel-Based Applications. book, Juta Academic. Retrieved from https://books.google.co.za/books?id=W1ywuAAACAAJ
- Yang, J. (1997). EXCHANGE RATE PASS-THROUGH IN U.S. MANUFACTURING INDUSTRIES. *Review of Economics and Statistics*, *79*(1), 95–104.



APPENDICES

APPENDIX A: INTERVIEW CONSENT FORM

Title: Management of foreign exchange risk exposure by SME's in South Africa

I am conducting a study to explore the management of foreign exchange risk exposure by SME's in South Africa as a partial fulfilment of the requirement for the degree of Masters of Business Administration at the Gordon Institute of Business Science, University of Pretoria.

This interview will assist me to understand the methods that are used manage the volatility of foreign exchange by SME's and the reason for choosing these methods over others that are available. The interview is expected to last for about an hour and your participation in the interview is under the following conditions:

- I agree to voluntary participate in this study
- I can remove myself from this study at any time without penalty
- I have the right to refuse to answer any questions in this study
- I have not been coerced to take part in this study
- I give my consent to be audio recorded while I participate in a study
- My identity and responses will be kept confidential and not included in the final research report
- No information identifying me will be used in the transcripts or final research report
- All recordings and transcripts will be held in a safe place for the duration of the research process.

If you have any concerns, please contact me or my supervisor on the contact details below:

Researchers Name: Ramatlakana	Mahapa Supervisor Name : Jean-Claude Gelle
Email: lebo.mahapa@gmail.com	Email: jcgelle1@gmail.com
Cel: 071 887 856	Cel : 082 788 2948
Signature of Participant	Date
Signature of Researcher	Date



APPENDIX B: CLASSIFICATION OF SMME PER SECTOR

Table 2: Schedule of small business

Sector or subsector in accordance with the standard Industrial Classification	Size of class	The total full-time equivalent of paid employees	Total turnover	Total gross asset value (fixed property excluded)
Agriculture	Medium	100	R5m	R5m
	Small	50	R3m	R3m
	Very Small	10	R0.50m	R0.50m
	Micro	5	R0.20m	R0.10m
Mining and Quarrying	Medium	200	R39m	R23m
	Small	50	R10m	R6m
	Very Small	20	R4m	R2m
	Micro	5	R0.20m	R0.10m
Manufacturing	Medium	200	R51m	R19m
	Small	50	R13m	R5m
	Very Small	20	R5m	R2m
	Micro	5	R0.20m	R0.10m
Electricity, Gas and Water	Medium	200	R51m	R19m
	Small	50	R13m	R5m
	Very Small	20	R5.10m	R1.90m
	Micro	5	R0.20m	R0.10m
Construction	Medium	200	R26m	R5m
	Small	50	R6m	R1m
	Very Small	20	R3m	R0.50m
	Micro	5	R0.20m	R0.10m
Retail and Motor Trade and Repair Services	Medium	200	R39m	R6m
	Small	50	R19m	R3m
	Very Small	20	R4m	R0.60m
	Micro	5	R0.20m	R0.10m
Wholesale Trade, Commercial Agents and Allied Services	Medium	200	R64m	R10m



	Small	50	R32m	R5m
	Very Small	20	R6m	R0.60m
	Micro	5	R0.20m	R0.10m
Catering, Accommodation, and other Trade	Medium	200	R13m	R3m
	Small	50	R6m	R1m
	Very Small	20	R5.10m	R1.90m
	Micro	5	R0.20m	R0.10m
Transport, Storage, and communications	Medium	200	R26m	R6m
	Small	50	R13m	R3m
	Very Small	20	R3m	R0.60m
	Micro	5	R0.20m	R0.10m
Finance and Business Services	Medium	200	R26m	R5m
	Small	50	R13m	R3m
	Very Small	20	R3m	R0.50m
	Micro	5	R0.20m	R0.10m
Community, Social and Personal Services	Medium	200	R13m	R6m
	Small	50	R6m	R3m
	Very Small	20	R1m	R0.60m
	Micro	5	R0.20m	R0.10m

Note. Retrieved from National Small Business ACT 1–16.Copyright 1996 by the Republic of South Africa. Reprinted with permission



APPENDIX C: INTERVIEW SCHEDULE

MANAGEMENT OF FOREIGN EXCHANGE RISK EXPOSURE BY SME'S IN SOUTH AFRICA-INTERVIEW SCHEDULE

OPENING QUESTIONS
What industry are you in?
How many people do you employ?
What is your annual turnover?



RESEARCH QUESTION 1: WHAT STRATEGIES DO SME IN SA USE TO MANAGE THE RISK OF FX EXPOSURE?

How has your business been performing in the past year?
Has the performance of the rand affected your business in any way?
How do you think the rand will perform in future?
Are you aware of the direct and indirect risk posed by the performance of the rand on your business?



What methods are you using to ensure that the performance of the rand does not negatively affect your business?
RESEARCH QUESTION 2: WHY HAVE SME IN SA CHOSEN TO USE THESE STRATEGIES OVER OTHER AVAILABLE STRATEGIES?
Why have you chosen to use this method(s)?
Do you know any other methods that you can use to ensure that the performance of the rand does not affect your business negatively?
If you are given alternative methods, would you consider using them over the current method you are using?



Does the behaviour of your competitor's impact on the choice of the method you use?
RESEARCH QUESTION 3: HAVE THESE STRATEGIES BEEN EFFECTIVE IN MANAGING THE RISK OF FX EXPOSURE?
How easy is it to use the method(s) that you have chosen?
Is the chosen method cost effective? I.e. does it cost a lot to do?
Has the chosen method(s) been able to assist you curbing the negative effect of the rand performance?



Is this method(s) always effective?
CLOSING QUESTIONS
Do you have any other suggestions for other SME who find themselves in a similar position?
How was the interview?



APPENDIX D: ETHICS APPROVAL

Dear Mr Ramatlakana Mahapa

Protocol Number: Temp2016-01266

Title: Management of foreign exchange risk exposure by SME's in South Africa.

Please be advised that your application for Ethical Clearance has been APPROVED.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

Kind Regards,

Adele Bekker