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The non-financial determinants of the financial derivatives' usage within SME businesses in Pakistan

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ABSTRACT

It had been recognized that the financial derivatives' usage enhanced the financial performance of the firms despite larger and smaller firms. Many studies had been conducted on larger firms but very none of the studies had been conducted on financial derivatives' usage within SMEs in the context of Pakistan. This space created thirst for the current research in exploring the non-financial determinants of the financial derivatives' usage within SMEs in Pakistan. This research was aimed at pursuing the research problem: "how and why the non-financial determinants of the financial derivatives' usage could be established within SMEs in Pakistan?" A qualitative research was conducted in order to investigate this research issue. Respondents of this research were identified by utilizing purposive snowballing sampling technique. Total nineteen (19) convergent interviews were conducted to establish the literature and to confirm the non-financial determinants of the financial derivatives' usage within SMEs. Thematic analysis technique was used to analyze the data. The findings of this research confirmed twelve (12) non-financial determinants of the financial derivatives' usage, i.e. growth opportunities, risk reduction, management incentives, corporate governance, risk attitude, risk perception, decision making unit, lack of awareness, lack of expertise, risk appetite, lack of established markets, time horizon. Three (3) newly discovered financial determinants of the financial derivatives' usage were risk appetite, lack of established market and time horizon, which revealed the current research contribution to the existing literature. This research built a revised theoretical framework, which provided ground for future research.

Keywords: financial derivatives, qualitative research, convergent interviews, snowball sampling, SMEs, Pakistan

INTRODUCTION

The importance of Small and Medium Sized Enterprises (SMEs) cannot be ignored in most of the countries around the world (Ayyagari *et al.*, 2007; Burgstaller and Wagner, 2015). For example in the Asian region, a large portion of the economic activities can be traced back to SMEs. On average, SMEs account for 63% of all jobs in the private sector, contribute 25% in export and 32% in GDP (Gross Domestic Product) of the countries in Asian region (Yoshino & Wignaraja, 2015). According to Small and Medium Enterprises Development Authority (SMEDA), SMEs constitute 90% of all the businesses in Pakistan. In addition SMEs in Pakistan, contribute 30% in GDP, 25% in export and 78% in employment of the country. Pakistan's

exports are decreasing from last few years due to which their foreign reserves are decreasing and the government is facing a deficit in its annual budget. The export performance of Pakistan decreased from 3.54% to -12.17% in last five years from 2012 to 2016. There are many reasons of poor performance of exports other than poor financing and expertise. The vision 2025 is formulated by the government of Pakistan to defeat the export low performance of the country and to bring foreign reserves in the country so that deficit gap could be filled. In vision 2025, it is decided by the Ministry of Planning, Development and Reforms (MPDR) to increase country's exports to US$ 150 billion from US$ 25 billion by considering all the sectors as well (MPDR, 2014).

After acknowledging the key role of SMEs and their contribution in export, employment and GDP of the countries, the government of Pakistan accentuated the significance of SMEs and took them in the vision 2025. What is the purpose of vision 2025? Its rationale is to envision Pakistan upper middle income country and among the top twenty five economies around the world till 2025. The contribution of SMEs is expected to increase to PKR 16 trillion in national GDP, PKR 5.4 trillion in export and 25 million in employment of the country by 2025. It needs to bring radical changes in SMEs' policies based on the importance of statistics given above. It is critical for the SMEs to focus on their expansion, competitiveness and performance both globally and domestically by using different financial instruments. Therefore, it is important for the SMEs to understand and identify the determinants of the usage of the financial derivatives for their improvement.

From the above discussion based on the SMEs' performance and evaluation regarding their contribution in GDP, employment and export, it is apparent that the current performance is not adequate to congregate the vision 2025. Therefore, it is a major challenge for SMEs to improve their performance and its constant growth, which identifies a gap to be filled.

LITERATURE REVIEW

In this globalized competitive financial environment, financial derivatives' contracts including futures, options, forwards and swaps are widely used by firms to alleviate exposure from fluctuations in interest rates, currency and commodity prices,. As firms activities regarding risk management become more complicated, the use of these financial derivatives' instruments also show perceptible signs of flexibility and creativity. Nevertheless, it is a huge improvement in the worth of transactions and the increasingly important task in managing risk that financial derivatives have established in the world financial markets. In 1994, the total value of derivatives' contracts outstanding around the world was about USD$ 18 trillion (McAnally 1996). However, this figure had increased significantly to USD$ 543 trillion by 2016 (Bank for International Settlement, 2016).

According to Modigliani and Miller (MM) approach the usage of financial derivatives do not add value if markets are perfect. On contrary, modern finance theorists added that hedging, using financial derivatives can add value in certain circumstances. Furthermore, Geczy, Minton and Schrand (1997) and Nance, Smith and Smithson (1993) asserted that generally hedging is value adding activity if there is presence of financial distress, agency cost, progressive tax codes and underinvestment costs. At a distance from the current disasters of derivatives, which imposed scrutiny upon the usage of financial derivatives, the empirical research studies outcomes show that a company can get significant results regarding risk management by using financial derivatives if these financial derivatives are used in a very lucid approach.

Usually it is seen that SMEs are very simple firms as compared to large firms, as a result, SMEs are rapid responding, acclimating to transformation and more flexible (Lavia Lopez and Hiebl,

2014). In the same way, SMEs are regularly confronting main challenges as compared to larger firms. In addition, SMEs very few have access to an extensive range of always earn less profit from economies of scale and resources (Burgstaller and Wagner, 2015; Lavia Lopez and Hiebl, 2014). Generally SMEs have low equity ratio, these firms are quite inclined to external incidents as compared to larger firms (Altman et al., 2010). This demonstrates that SMEs face various types of risks same as larger firms and these firms have more threat to their survival due to low level of financial and non-financial resources.

SMEs' Managers can recognize significant risks by using risk management practices, which could imperil the existence or success of the firm in time to cope with these risks efficiently (Miller, 1992; Brustbauer, 2014). Though, SMEs do not use risk management techniques adequately, mostly due to their constraints as they cannot afford to rededicate resources (Marcelino-Sádaba *et al.*, 2014). Even though in recent years, literature on risk management specific in SMEs is increasing but still it is inconsistent, and no organized literature review has been carried out on this topic.

Now the usage of financial derivatives is available and accessible to the SMEs and it is not limited to larger organizations. SMEs' performance is being improved by the usage of financial derivatives (Hrubosova & Kamenikova, 2007). Pakistan Mercantile Exchange (PMEX) deals in financial futures and commodity derivatives in Pakistan. SMEs in Pakistan which are involved in export and import at huge level, use Karachi Interbank Offer Rate (KIBOR) future contracts that PMEX deals (PMEX, 2016). Therefore, the scarcity of literature on the topic of financial derivatives' usage in SMEs businesses in Pakistan motivates the researcher to explore this issue widely.

The main purpose of this research is to investigate the determinants of the usage of the financial derivatives within SMEs in Pakistan. It is somewhat under explored area in the literature. We contribute in doing so to the existing body of knowledge in two ways. We make available qualitative evidence on the comparative importance of the determinants of the usage of the financial derivatives in SMEs. The data will be examined to check whether the outcomes are identical with the evidence and theories, which found in the existing literature

Definitions of Small and Medium Enterprises (SMEs)

It is important to define SME first and what makes up SME, even the researcher is fervent to know about the financial derivatives' usage in SMEs (Harif & Hoe, 2016). Therefore, it is decisive to compare the SMEs' definition in Pakistan with other business acquaintances in South Asia. SMEs' definition criteria varies country to country. There is very impulsive remoteness among the large, medium, micro and small firms. The issue is that, researchers compare identical and equal with identical and equal in the economies. In order to make comparison among different classes, similar magnitudes are needed (Hall, 2002). Along with their specific differences SMEs' definitions of Asian countries are shown in table 1 below.

Table 1
Synthesization of SME's Definitions in Asian Countries

SMEs' Definitions in Some Asian Countries							
Country	**Sector**	**Number of Employees**		**Annual Sales (in millions) Home country currency**		**Total Assets/ Investments (in millions) Home country currency**	
		Small	**Medium**	**Small**	**Medium**	**Small**	**Medium**
India *	Manufacturing					2.5 - 50	50 – 100
	Services/Trade					1.0 - 20	20 – 60
Malaysia**	Manufacturing	5 - 75	75 - 200	0.3 - 15	15 - 50		
	Services/Trade	5 - 30	30 - 75	0.3- 3	3 - 20		
Pakistan****	Manufacturing	20 - 50	51 - 250	75 – 150	150 – 800		
	Services/Trade	20 - 50	51 - 100	75 – 150	150 – 800		
Indonesia ***		5 - 19	20 - 99	<0.344	<17.20		
Thailand ***		<50	51 - 200			< 2.305	<11.524
Combodia ***		11 - 50	51 - 200			<0.250	<0.500
Vietnam ***		<30	31 - 200				
Philppines ***		<99	100- 199				
Loas ***		<19	<99				

Legend:
* Micro, Small & Medium Enterprises Development (MSMED) Act, 2006
** National SME Development Council (NSDC) 2013
***Harif and Hoe (2016)
****SMEDA (2017)

Source: developed for this research

Every country has its own definition for SME. There are different measures to define an SME, which are used by different countries. In Pakistan, Small and Medium Enterprises Development Authority (SMEDA) is the authority, which directly deals only SMEs in Pakistan. Along with SMEDA (2017), State Bank of Pakistan (SBP) defined SMEs in May 07, 2016 as shown in table 1 above. There is no hard and fast rule for the SMEs' definitions around the world. From table 1 above, it is concluded that Malaysia's SMEs' definition is identical with the Pakistan's SMEs' definition based on measures used by both of the countries. Definition of SMEs in Malaysia provides platform for the definition of SMEs in Pakistan. Only medium size firms are used by this research, which are directly involved in import and export businesses. The new definition of SMEs used by this research is shown in table 2 below.

Table 2
Definition of SMEs Used for This Research

Medium Size	**Employees**	**Sales turnover**
Manufacturing sector	Full time employees 51-250	Annual sales turnover PKR 150-800 million
Services sector	Full time employees 51-100	Annual sales turnover PKR 150-800 million

Source: developed for this research

From the table 2 above, those manufacturing firms, which are medium size and their number of employees not exceeding from 250 employees and sales turnover not exceeding from PKR 800 million, are used in this research.

After thorough searching of the literature, researcher did not find even a single study on the determinants of the usage of the financial derivatives within SMEs in Pakistan. Very few studies worked on the usage of financial derivatives in large firms only.

The non-financial determinants of the financial derivatives' usage within SMEs

What are the determinants that SMEs in Pakistan think about before going to use financial derivatives in order to manage their different types of risks? The past literature on the non-financial factors, which persuade the usage of financial derivatives in all businesses, is synthesized. It is necessary to take global view by literature through structured approach precisely.

There are many researches, which have been conducted in developed as well as developing countries in the gap of the usage of the financial derivatives. These studies are conducted in the past one and half decade, which include Ayturk, Gurbuz & Yanik (2016); Rogers (2002); Dadalt, Gay &Nam (2002); Anderson, Makar & Huffman (2004); Yip & Nguyen (2012) and Borokhovich, Brunarski, Crutchley & Simkins (2004). After thorough literature practice 11 related articles have been selected based on three characteristics, which are fit to the definition of financial derivatives, the most recent articles of last one and half decade and all articles are published at least in referred journals. Total nine (9) determinants of the usage of the financial derivatives have been synthesized, extorted and recognized as shown in table 3 below.

The first non-financial determinant of the usage of the financial derivatives in any business is the *management incentives.* Management incentives are the mechanisms of compensation policy in order to minimize the issue of conflict of interest (Jensen & Murphy, 1990). From the literature, many researchers found that management incentives have significant influence on the usage of financial derivatives (Bartram, Brown & Fehle, 2009; Benson & Oliver, 2004). Two (2) out of eleven (1) selected articles confirmed this determinant as shown in the synthesized table 3 (row 1, column frequency). Therefore, based on its importance this determinant is taken to be investigated in this research. The second determinant of the usage of the financial derivatives is *growth opportunities.* This determinant refers to the availability of the internal and external funds to be used for growth opportunities. Availability of funds has positive influence on the firm decision to use financial derivatives (Lin & Smith, 2007). This determinant has been reported in three (3) out of eleven (11) selected articles (Nguyen & Faff, 2002; Rossi, 2013; Fantini, 2014) as shown in the synthesized table 3 (row 2, column frequency). Therefore, due to its frequent use, this determinant has taken to be used in this research. The third most reported and prominent determinant is *risk reduction*. The risk reduction refers to the protection against the adverse movements in the prices of the assets (Froot, Scharfstein & Stein (1993). Five (5) researchers out of eleven (11) selected articles provided significant evidences as shown in synthesized table 3 (row 3, column frequency). Therefore, this determinant is considered important to be explored in this research.

Table 3
Synthesization of Non-Pakistan Literature on the Determinants of the Usage of Financial Derivatives in Larger and SME Firms

	The Determinants of the usage of the Financial Derivatives	1	2	3	4	5	6	7	8	9	10	11	Frequency	To be used for this research
1	Management Incentives	✓	×	✓	×	×	×	×	×	×	×	×	**2**	✓
2	Growth Opportunities	×	✓	×	×	×	✓	×	×	×	×	✓	**3**	✓
3	Risk Reduction	×	×	✓	✓	✓	×	×	✓	✓	×	×	**5**	✓
4	Corporate Governance	×	×	×	×	×	✓	✓	×	×	×	×	**2**	✓
5	Risk Attitude	×	×	×	×	×	×	×	×	✓	×	×	**1**	✓
6	Risk Perception	×	×	×	×	×	×	×	×	✓	×	×	**1**	✓
7	Decision Making Unit	×	×	×	×	×	×	×	×	✓	×	×	**1**	✓
8	Lack of Awareness	×	×	×	×	×	×	×	×	×	✓	×	**1**	✓
9	Lack of Expertise	×	×	×	×	×	×	×	×	×	✓	×	**1**	✓
	Total	**1**	**1**	**2**	**1**	**1**	**2**	**1**	**1**	**4**	**2**	**1**		**9**

Legend:
1= Bartram, Brown & Fehle (2009)
2= Nguyen & Faff (2002)
3= Benson & Oliver (2004)
4= Bartram, Brown & Conrad (2011)
5= Mallin, Ow-Yong & Reynolds (2010)
6= Rossi (2013)
7= Fauver & Naranjo (2010)
8= Alnassar & Chin (2015)
9= Pennings & Garcia (2004)
10= Bank & Weisner (2012)
11= Fantini (2014)

Source: developed for this research

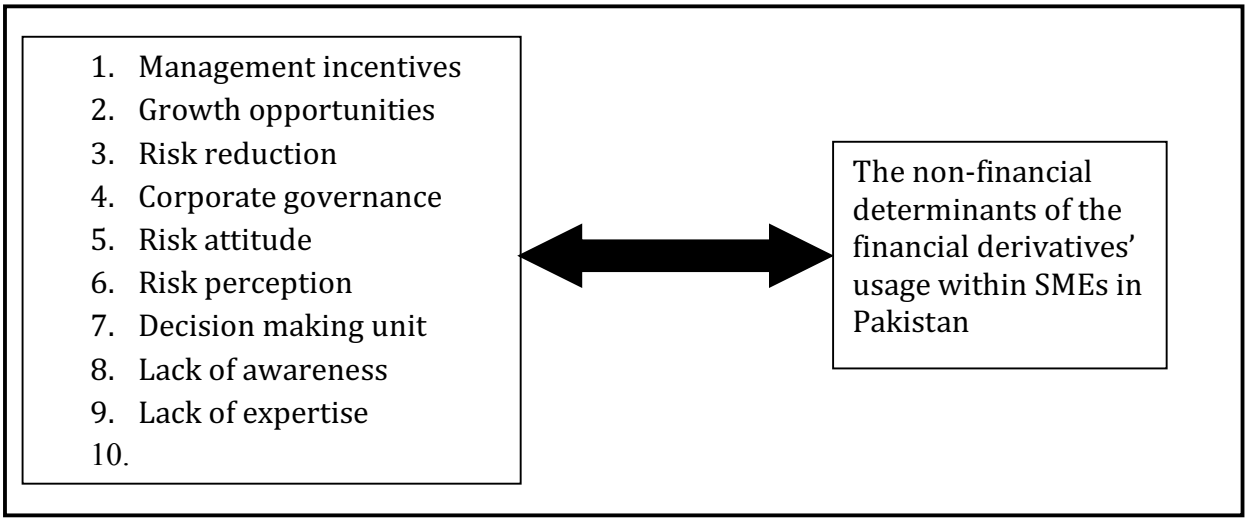
The next determinant taken from the non-Pakistan literature is *corporate governance* as shown in the synthesized table 3 (row 4, column frequency). Corporate governance is the set of codes, mechanisms, practices, rules and processes by which firms are monitored and directed (Lel, 2012). Two (2) studies (Rossi, 2013; Fauver & Naranjo, 2010) confirmed it as the non-financial determinant of the financial derivatives' usage. Therefore, this determinant could be further examined in this research. The fifth (5) determinant of the usage of the financial derivatives is *risk attitude.* This determinant states that managers have different risk behaviors while making financial decisions. Are managers risks averse or risk takers it depends upon their attitude (Johnson & Powell, 1994). Only one study (Pennings & Garcia, 2004) out of eleven (11) selected articles reported it as the non-financial determinant of the financial derivatives within SMEs as shown in the synthesized table 3 (row 5, column frequency). Therefore, based on its significance, this determinant is taken to be investigated in this research. The next sixth (6) important determinant of the usage of the financial derivatives is *risk perception* as shown in the synthesized table 3 (row 6, column frequency). Risk perception is defined as the subjective finding about the harshness of risk what people make (Wright, Pearman & Yardley, 2000). Out of eleven (11) selected articles, one study (Pennings & Garcia, 2004) indicated that the usage of financial derivatives is inclined to the risk perception. Thus, it is taken for further investigation in this research in the perspective of Pakistan SME businesses.

The next determinant extracted from the non-Pakistan literature is *decision making unit* as shown in the synthesized table 3 (row 7, column frequency). Decision making unit generally states the level to which the important persons around the managers that have influence on

the mangers can suggest the managers to use financial derivatives (Nance et al., 1993). From the literature, one study (Pennings & Garcia, 2004) showed the significance of decision making unit in the usage of financial derivatives. Therefore, this determinant is considered to be examined in this research due to its significance. The next eighth (8) succeeding determinant in the synthesized table 3 (row 8, column frequency) is *lack of awareness*. The lack of awareness refers to the situation when the investors, who are concerned to the financial derivatives, are not fully aware about the pros and cons and their usage (Arnell & Delaney, 2006). There is only one study (Bank & Weisner, 2012) out of eleven (11) selected articles, which had shown the significance of this determinant. Thus, it is taken to be investigated in this research due to its importance. The last ninth (9) determinant is the *lack of expertise,* which has been extricated from the non-Pakistan literature. Lack of expertise refers to the low level of abilities and skills of the management to use financial derivatives. Those investors who are well skilled and have abilities can use the financial derivatives efficiently and effectively (Pennings & Garcia, 2004). From the literature review, one researcher (1) researcher out of eleven (11) selected articles confirmed the correlation between the usage of financial derivatives and interest rate exposure as shown in the synthesized table 3 (row 9, column frequency). Thus, this determinant is taken to be inquired in this research.

In conclusion, total nine (9) non-financial determinants of the usage of the financial derivatives have been rationalized for this research from the eleven (11) selected articles from the non-Pakistan literature as shown in the last column of the synthesized table 3. The preliminary theoretical framework is prepared to further investigate the non-financial determinants of the financial derivatives' usage within Pakistan SMEs. The preliminary theoretical framework is shown in figure 1 below.

Figure: 1
Preliminary Theoretical Framework



Source: Developed for this research

Research Issue

What are the non-financial determinants for the SMEs businesses in Pakistan to use financial derivatives?

RESEARCH METHODOLOGY

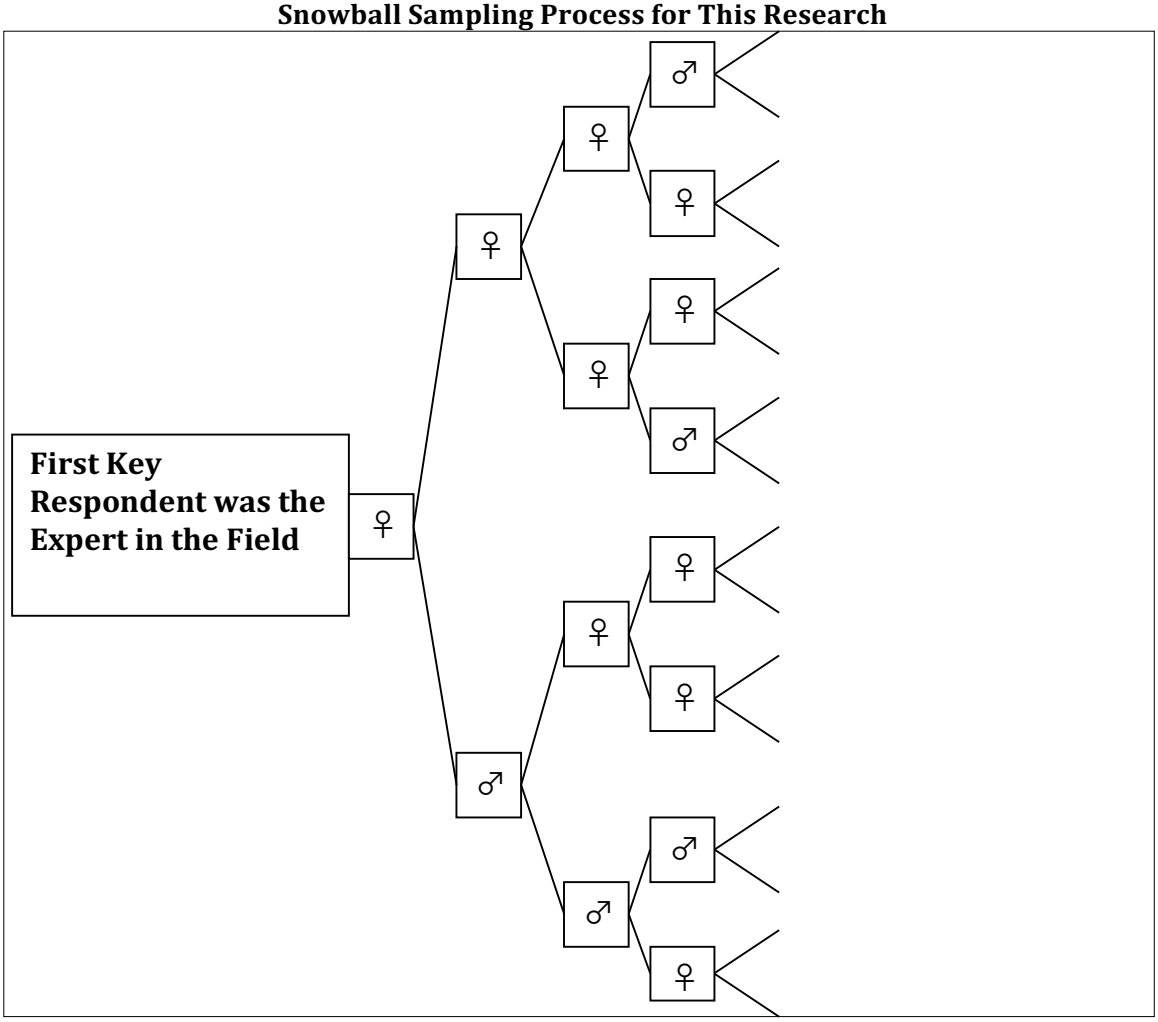
This study explores the financial derivatives' usage, hence choosing a realism paradigm to expose the "realities" on primary non-financial determinants that could persuade the financial derivatives' usage within SMEs in Pakistan.

Realism paradigm was considered appropriate for this research based on the truth, which is useful, uses convergent interviews and solves the problem. Qualitative research methodology approach was utilized in this research. There are three (3) reasons due to which qualitative research methodology is used in this research. The objective of the research was the first and foremost reason to use qualitative research in this research (Parkhe, 1993). The strength of the qualitative approach lies in its ability to provide rich data (Jack & Anderson, 2002). It provides a more realistic feel of the real world and flexible ways of collecting, analyzing and interpreting data of the phenomenon under investigation (Lee, 1992). The type of information required was the second reason for this research. It is difficult to understand complex phenomenon without using detail and in-depth qualitative data, which can be achieved by bringing psychologically close to the subject matter under study (Carson & Coviello, 1996; Guba & Lincoln, 1994). Sample size was the final reason of using qualitative research for this research. A large number of SMEs in Pakistan are working, a small sample was used based on convenience sampling to gather data as qualitative methodology requires in the marketing area (De Rutyer & Scholl, 1998).

For this study, data was collected using the converging interview technique. There are four convergent interviews' strengths that justified and supported its utilization for this research. First, it can significantly aid for improving the credibility of the qualitative findings (Dick, 1998). Secondly, it allows the relative structured approach for categorizing about what essentially needs to be incorporated within its reach in an initializing stage (Harif, Chee, Hussain, Mohd Isa, Othman & Din, 2011). Thirdly, it is data driven and emergent approach that provides a reliable, valid and rigorous data collection process (Harif & Hoe, 2016). Lastly, it permits the researchers deep data collection than several other interview types as they make effort to gain insight into the understanding of informant's situations.

The validity and reliability issue is much vital and usually cannot be ignored in convergent interview and qualitative research without having any exception (William & Lewis, 2005). The validity and reliability provide effective examination about the fitness of measure, which is reflected as essential element for addressing the research. Both reliability and validity depend upon the quality of research design. The reliability of convergent interviews was attained by two different approaches in this research. In first approach, reliability was achieved by using structured interview administration process while conducting convergent interviews. In second approach, a structured process was planned to attain reliability, which include recording, writing and interpretation of data. Construct validity of this research was obtained by two famous approaches namely triangulation of interview questions and flexibility of interview protocol. This research used internal validity for sample selection and information richness was obtained from the financial experts in their field in SME businesses in Pakistan. External validity in this research was obtained by sample selection in terms of generalizeability, which was possible by theoretical replication (Yin, 1989).

Figure: 2
Snowball Sampling Process for This Research



Source: developed for this research

Therefore, medium size firms in Pakistan were taken as population for this research, which fall under the SMEs definition of this research. Sampling approach or strategy explains how respondent's convergent interviews were identified and selected. The information related to the phenomenon of interest or subject matter is obtained from the financial experts in SME businesses. It shows that, sample was selected carefully with purpose in this research. Thus, this qualitative research deployed the purposive sampling technique. Moreover, this qualitative research used snowball sampling. A purposive snowballing technique resulted when the above described two sampling techniques were combined and this purposive snowball sampling technique was used in this research.

It is necessary to determine sample size in addition to sampling strategy. This research determined sample size based on the saturation principle. Using snowball sampling technique more interviewees were added until an agreed stable pattern, saturation, and divergence on the determinants was obtained. Interviews were stopped when stability was reached, agreement about the previous interviewees' questions was achieved and disagreement was explained (Naire & Riege 1995).

This research used convergent interview protocol as its research instrument. The convergent interview protocol contained a set of semi structured and pre-defined interview questions. Various issues were decided before going for every next interview. There was a combination of open ended research questions including opening questions, probe questions and ending

questions. Thematic analysis technique was used to identify, analyze and report the themes or patterns within interview data collection (Braun & Clarke, 2006). This technique cleanly organized and explained the data in detail. It also interpreted many facets of research phenomenon under study very frequently. This technique had six phases while doing analysis, which had been suggested by the researcher and were used in this research (Braun & Clarke, 2006). These six phases included; become familiar with the data, initial codes' generation, sear themes, review themes, define and name the themes and generate the report.

FINDINGS OF THE RESEARCH

This section presented a brief profile of the respondents participated in this research. All of them held top management position of Chief Finance Officers (CFOs) in their respective firms. Each of the respondents was in manufacturing industry specialties. Total nineteen firms were under the classification of medium-sized. The number of full-time employees hired by these firms was ranging from fifty one (51) to two hundred and fifty (250) registered workers. The profile of respondents contributed in this research is shown in table 5 below.

Table 5
The Profile of Interviewees Contributed in This Research

Respondents	Code of Respondent	Position of Respondent	SMEs Sector	Year of Establish	Annual Turnover PKR'mil	Number of Employees
1	MGCF01	CFO	Manufacturing	1998	713.00	234
2	MGCF02	CFO	Manufacturing	1992	761	247
3	MGCF03	CFO	Manufacturing	9187	743	199
4	MGCF04	CFO	Manufacturing	1995	573.0	219
5	MGCF05	CFO	Manufacturing	1992	651.0	187
6	MGCF06	CFO	Manufacturing	1999	423.00	200
7	MGCF07	CFO	Manufacturing	1993	685	196
8	MGCF08	CFO	Manufacturing	1993	711	224
9	MGCF09	CFO	Manufacturing	2001	614.0	237
10	MGCF10	CFO	Manufacturing	1988	779	201
11	MGCF11	CFO	Manufacturing	1995	627.0	217
12	MGCF12	CFO	Manufacturing	1998	537.0	241
13	MGCF13	CFO	Manufacturing	1983	691	211
14	MGCF14	CFO	Manufacturing	1997	744	207
15	MGCF15	CFO	Manufacturing	1995	781	213
16	MGCF16	CFO	Manufacturing	1993	683	180
17	MGCF17	CFO	Manufacturing	1998	796	245
18	MGCF18	CFO	Manufacturing	2002	588.0	161
19	MGCF19	CFO	Manufacturing	2000	723	177

Source: Developed for this research

In total, 19 respondents from 19 firms participated in this research, which indicated the stability or saturation was reached at this point. For the purpose of this research, all 19 respondents fulfilled the criteria of the SME definition adopted in this research. The actual snowballing of 20 respondents was followed as explained, which was according to the snowballing technique described in the research methodology above. These conditions implied that the data collected from these respondents were valid in regard to this research, hence, established a solid foundation to proceed with data analysis. The results of thematic analysis of

financial determinants of financial derivatives' usage taken from transcription of interviews were shown in Appendix 1.

Table 6
Summary of Data Analysis of the Core Financial Determinants of the Financial Derivatives' Usage with Respect to the Preliminary Theoretical Framework

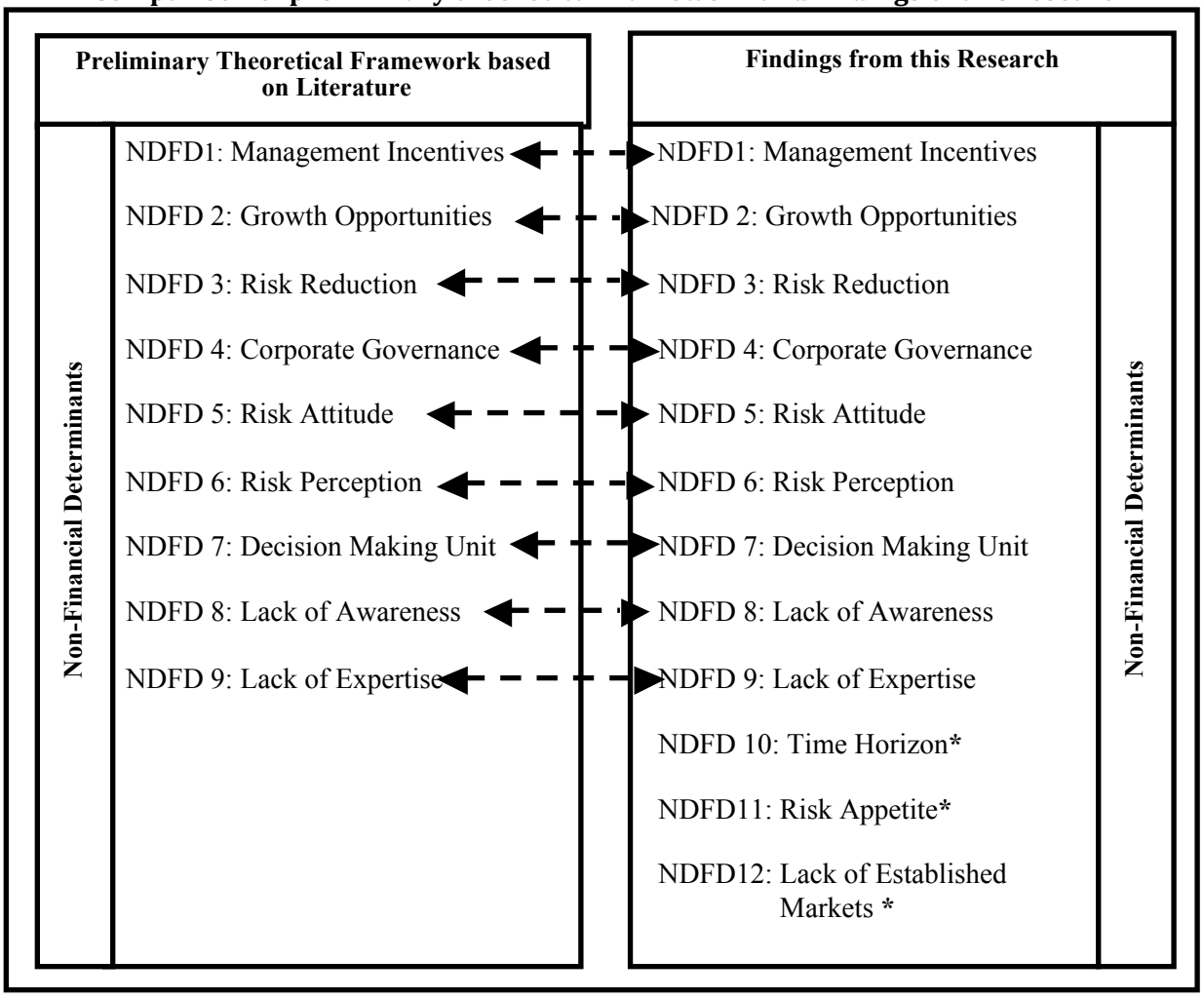
		Respondents from SMEs Business in Pakistan																			
Non-Core Non- Financial Determinants of Financial Derivatives' usage from Theoretical Framework (Refer to Figure 2.10)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
		MGCF01	MGCF02	MGCF03	MGCF04	MGCF05	MGCF06	MGCF07	MGCF08	MGCF09	MGCF10	MGCF11	MGCF12	MGCF13	MGCF14	MGCF15	MGCF16	MGCF17	MGCF18	MGCF19	Frequency
1	Growth Opportunities	x	✓	✓	✓	✓	✓	x	x	✓	✓	✓	x	✓	✓	x	x	✓	✓	✓	13
2	Risk Reduction	✓	x	✓	✓	x	✓	✓	x	✓	✓	✓	✓	✓	x	✓	x	✓	x	x	12
3	Management Incentives	x	x	x	x	x	x	x	✓	x	x	✓	x	x	x	x	x	x	x	x	2
4	High Corporate Governance	✓	x	✓	✓	x	✓	x	x	x	✓	✓	✓	✓	x	x	x	✓	✓	x	10
5	Risk Attitude	✓	x	x	✓	x	✓	✓	✓	x	✓	✓	✓	✓	✓	x	✓	x	x	x	11
6	Risk Perception	x	✓	x	x	✓	x	✓	x	x	✓	x	x	✓	✓	x	x	x	x	✓	7
7	Decision Making Unit	x	x	x	✓	x	x	x	x	x	x	✓	x	x	x	x	x	x	x	x	2
8	Lack of Awareness	x	✓	x	✓	✓	✓	✓	✓	✓	✓	x	x	✓	✓	✓	✓	✓	✓	x	14
9	Lack of Expertise	✓	x	✓	✓	✓	✓	✓	✓	x	✓	✓	x	x	✓	✓	✓	✓	✓	x	14
10	Time Horizon*	✓	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	1
11	Risk Appetite*	x	x	x	x	x	x	x	x	✓	x	x	x	x	x	x	x	x	x	x	1
12	Lack of established market *	x	x	x	x	x	x	x	x	x	x	x	x	x	x	✓	x	x	x	x	1

***Legend*:** ✓ Determinant considered by interviewees
X Determinant not considered by interviewees
* Newly discovered financial determinant

Source: Developed for this research based on analysis of field data

In summary, total twelve (12) non-financial determinants of the financial derivatives' usage inclusive of three newly discoveries management incentives, growth opportunities, risk reduction, corporate governance, risk attitude, risk perception, decision making unit, lack of awareness, lack of expertise, time horizon, risk appetite and lack of established market are confirmed by interviewees. Therefore, the findings of interviews have answered the issue of this research. The comparison of prior research findings and current research findings is shown in figure 3 below.

Figure: 3
Comparison of preliminary theoretical framework and findings of this research



Legend: ← – → Similar determinants in preliminary theoretical framework and findings of this research

* Newly discovered determinants

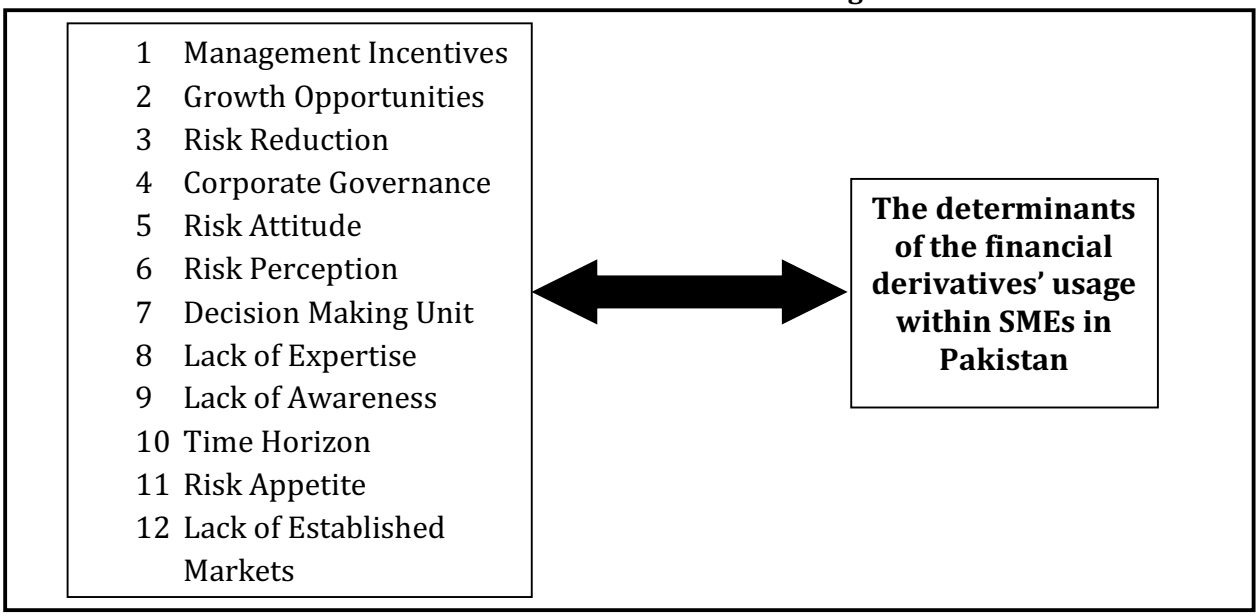
Source: Developed for this research

CONCLUSION

Due to unique features of SMEs as compared to large firms, this research was conducted to understand the non-financial determinants of the financial derivatives' usage within SME businesses in Pakistan. Similarly, the non-financial determinants of the financial derivatives' usage within SMEs were recognized. The preliminary theoretical framework was formulated based on the past literature, which was found in general business settings. In the preliminary theoretical framework total nine (9) non-financial determinants were listed. Though, the literature did not divulge sufficiently the non-financial determinants of the financial derivatives' usage within general business settings. In reality, this research found twelve (12) non-financial determinants; firm management incentives, growth opportunities, risk reduction, corporate governance, risk attitude, risk perception, decision making unit, lack of awareness, lack of expertise, time horizon, risk appetite and lack of established market including three newly emerged non-financial determinants of the financial derivatives' usage within SMEs in Pakistan. There was a slight difference between the prior literature and current research findings due to some reasons. These differences may be due to different research methodology

used in this research, because prior researches used quantitative research methodology. This research used qualitative research methodology, which facilitated this research to explore the problem deeper and generated findings, which were not established earlier due to which there was a slight difference between two findings. In conclusion, a minor amendment was made in this preliminary theoretical framework of this research after the whole discussion. This revised preliminary theoretical framework provides a foundation for discussion to conclude the research problem of this research: "How and why the non-financial determinants of the financial derivatives' usage could be established within SMEs in Pakistan". The revised preliminary framework is shown in figure 4 below.

Figure: 4
Revised Theoretical framework based on findings of this research



Source: developed for this research

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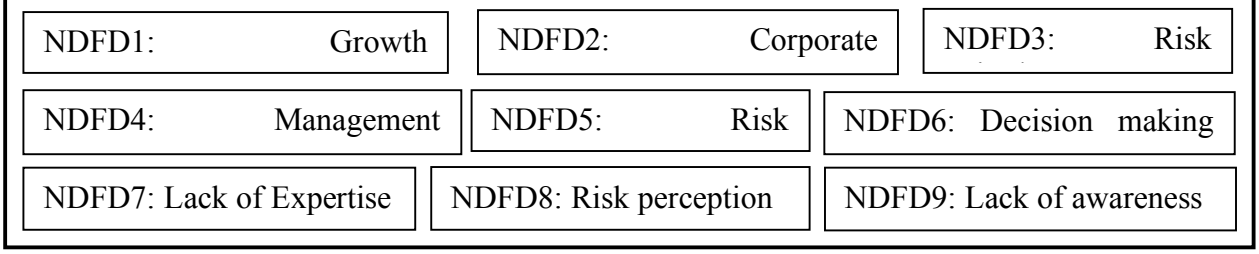
APPENDIX 1

Results of Thematic Analysis of Non-Financial Determinants of the Financial Derivatives' Usage

Level of risk involved (NDFD5) | Potential investment (NDFD1) | To reduce the risk (NDFD5) | Growth opportunities (NDFD1) | Growth determination (NDFD1) | Hedge against the risk (NDFD5) | Emerging projects (NDFD1) | Growth of the firm matter (NDFD1) | Risk reduction is the main purpose (NDFD5) | Reduce risk exposure (NDFD5) | Risk mitigation (NDFD5) | Major opportunities (NDFD1) | Growth opportunities (NDFD1) | To reduce the risk (NDFD5) | Risk reduction (NDFD5) | Firm growth opportunities (NDFD1) | Risk Reduction (NDFD2) | Growth opportunities to avail different contracts (NDFD1) | To reduce risk (NDFD5) | Growth opportunities (NDFD1) | How much risk it will reduce (NDFD5) | Potential to grow (NDFD1) | To reduce the firm risk (NDFD5) | See the growth perspectives (NDFD1) | Future opportunities or firm potential growth (NDFD1) | Purpose is to reduce the risk (NDFD5) | Unavailability of regulations regarding FDs (NDFD2) | Risk Attitude (NDFD3) | Lack of Expertise (NDFD7) | Awareness about the usage of FDs (NDFD9) |Perception about the risk matters (NDFD8) | Policies, governance and SOPs (NDFD2) | Expertise matter (NDFD7) | Management awareness (NDFD9) | Their attitude toward risk (NDFD3) | Expertise of management (NDFD7) | Firm corporate governance (NDFD2) | Availability of intermediaries (NDFD6) | Lack of awareness (NDFD9) | Non-expertise of management (NDFD7) | Management perception influence them (NDFD8) | Management risk attitude (NDFD3) | Awareness (NDFD9) | Expertise (NDFD7) | Regulations and policies (NDFD2) | Lack of awareness (NDFD9) | Management experience (NDFD7) | Management risk attitude (NDFD3) | Perception also matter (NDFD8) | Management benefits (NDFD4) | Their attitude toward risk (NDFD3) | Awareness is the major factor (NDFD9) | No expertise (NDFD7) | Awareness about derivatives (NDFD9) | Personal expertise (NDFD7) | Their awareness (NDFD9) | Attitude (NDFD3) | Perception (NDFD8) | Corporate governance (NDFD2) | Management attitude toward risk (NDFD3) | Availability of experts (NDFD7) | Management incentives (NDFD4) | Decision making units (NDFD6) | Corporate regulation (NDFD2) |Overall attitude toward risk (NDFD3) | Corporate governance (NDFD2) | Attitude to accept risk (NDFD3) | Management perception (NDFD8) | Awareness about the usage (NDFD9) | Regulations about FDs (NDFD2) | Owners' awareness (NDFD9) | Depend upon their attitude (NDFD3) | Depend upon their knowledge (NDFD7) | Perception matter very much (NDFD8) | Awareness (NDFD9) | Awareness would be at top (NDFD9) | Quantity of expert people (NDFD7) | Attitude (NDFD3) | Awareness (NDFD9) | Expertise (NDFD7) | Availability of regulations to use FDs (NDFD2) | Awareness matter a lot (NDFD9) | No expertise the management have (NDFD7) | Non availability of regulations (NDFD2) | Perception about the risk matters a lot (NDFD8) | Awareness is important factor (NDFD9) | Lack of expertise (NDFD7) |Management perception toward risk (NDFD8) | Risk attitude (NDFD3) |



Source: developed for this research