



Factors Affecting the Internationalization of Manufacturing SMEs in Zimbabwe

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Abstract

The study investigated the factors affecting the internationalization of manufacturing SMEs in Zimbabwe. A triangulated research approach involving explanatory and descriptive designs was used to collect and analyze data from 302 manufacturing SMEs in Zimbabwe. The findings are that SME internationalization is positively influenced by availability of funds, management attitudes, and knowledge of the market, risk perception, international networks and intensity of competition. We also observed that contrary to contemporary literature, age and size of the SME as well as technical ability of managers do not influence internationalization. We therefore argue that unless the government and trade associations devise means to cushion the SMEs financially and expose them to the internationalization process, the number of SMEs that do business internationally will continue to dwindle.

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1. Introduction

There is a relatively large body of knowledge on the establishment, growth, performance and contributions of small to medium enterprises (SMEs) to national economies. These contributions of SMEs to employment and country's Gross Domestic Product (GDP) are well documented and are by no means trivial, (Kauffman, 2005). SMEs are regarded as promoters of economic growth (Westhead and Storey, 1994), generate income at a time when large sector is declining (Hash and Krasniqi, 2011) and because of their size easily adapt to changes in the environment, (Cateora, 2010).

The Government of Zimbabwe (GoZ) identified entrepreneurship development as a major thrust to achieve economic development through SMEs, (Maseko et al, 2012) and the prioritization of the SME sector is resonated in many government policy documents including the Framework for Economic Reform 1991-1995 and the Industrial Development Policy 2011-2015, (Sibanda,2004; Maseko et al, 2012). State institutions to support and facilitate growth and development of SMEs were established. These include the Small Enterprise development Corporation (SEDCO), the Venture Capital Company (VCC) and the Credit Guarantee Company of Zimbabwe (CGCZ).

SMEs can generate more income and create more employment through internationalization, which is defined as the process of increasing involvement in international markets, (Welch and Luosharinen, 1988). Dhanaraj and Beamish (2003) further explain that being aware of, influencing international transactions or conducting transactions with another country is internationalization. The GoZ in partnership with the private sector established institutions that would promote international trade and, in particular, enhance foreign direct investment (FDI) and develop exports. These include the ZimTrade, Zimbabwe Investment Authority and Trade Missions. In spite of all these initiatives, the level of international involvement, in particular, exports by SMEs remains low according to ZimTrade 2013 report, and this study seeks to establish the factors affecting the internationalization of SMEs.

1.1 Background

Researchers and practitioners have come up with country or region specific definitions of SMEs. For example, the European commission defines SMEs as, "independent enterprises that have fewer than 250 employees and annual turnover not exceeding 34 million pounds". This separates SMEs from microenterprises with fewer than 10 employees.

In Zimbabwe, the Ministry of Small to Medium Enterprises (SMEs) and the Small Enterprise Development Corporation (SEDCO) have defined SMEs differently. The Ministry of Small to Medium Enterprise defines a small enterprise as one that employs not more than 50 people and acting as a registered entity and then a medium enterprise as a firm that employs between 75 and 100 people, (GoZ, 2000). SEDCO (2010) has defined an SME as a firm that has no less than 100 employees and an annual turnover of not more than \$830 000. While the above definitions focused on size of the firm in terms of number of employs and annual turnover, other definitions that have been put forward by researchers focus on other measures such as legal structures or degree of formalisation, (Kapoor et al, 1997). For example, from

the corporate governance perspective, an SME has no separation between ownership and control of the firm and usually there are no outside equity owners, (Olson, et al, 2004).

For the purpose of this study, the definition by the Ministry of Small to Medium Enterprise was used. This describes an SME as a registered enterprise (registered according to the Company Act, Chapter 190) with not more than 100 employees. The capital base would not be considered as most owner managers are reluctant to give information relating to their capital base.

The four main SME economic segments in Zimbabwe are mining, agriculture, manufacturing and services and employ 90% of the employable population. The manufacturing sector in Zimbabwe is fourth in terms of revenue generation. First is mining, followed by agriculture and then services.

Manufacturing SMEs employ varied means of production ranging from quasi-cottage systems to automated assembly line systems, (Bango, 1990) and their activities are in leather and textile, paper and paper products, wood and wood products, electrical and electronics, chemical and pharmaceuticals, metal and fabrication food and beverages, and glass and ceramics.

The growth and contribution to GDP of manufacturing SMEs over the past decade is shown in table 1 below.

Table 1: Contributions of manufacturing SMEs to GDP

Year	2000	2002	2004	2006	2008	2010
GDP growth%	-11.5	-13.3	-10.2	1.7	17.9	2.8
Contribution to GDP/%	13	18	16	27	7	13
Contribution to exports/%	37	39	37	3	27	27

Source: RBZ, ZIMSTAT (2011)

In the 1990s, the contribution of manufacturing SMEs to GDP was 28% and dropped to 17 % by 2011(African Development Bank, 2005; ZNCC, 2011). This decline was due to the shrinking local market as a result of a number of factors including product ‘dumping’ by the emerging economies of East Asia and South Africa; hostile regulatory environment for the local firms, continuous changes to government policies; infrastructural obstacles and high inflation, (Maseko et al , 2012; Zindiye, 2008; and Ngwenya and Ndlovu, 2003).

Consequently, capacity utilization went down and was estimated at 43 % in 2009 (ZNCC, 2009), unemployment increased to 80% in 2010, (ZNCC, 2010) and balance of payment stood at \$1,77 billion in the same year, (African Development Bank, 2011) due to the saturated local market effect . These figures show that the SMEs failed to create enough employment, reduce poverty or generate significant income from the local market. If the local market is saturated, the SMEs have an obligation to look across the borders and identify possible markets within the region or across regions. However, this is not easy as there are numerous factors the SMEs have to contend with.

1.2 Problem statement

The literature clearly states that one of the key reasons for the internationalization of SMEs is the need to free them from ‘the small market effect’, (Cateora, 2010) and generate income for the local market from the international markets. In spite of all the signs that the local market had become saturated and was getting smaller, only a small number of SMEs in the formal sector went international. Failure by manufacturing SMEs to internationalise creates a myriad of problems for the local market. These include low capacity utilization, failure to support downstream industries, low contribution to GDP, high level of unemployment and unprecedented poverty. Therefore, a serious analysis of the factors affecting SME internationalization is required in order to promulgate policies that will help SMEs particularly in the manufacturing sector to internationalise.

1.3 Purpose/ aim of the study

The purpose of this study is to explore the factors affecting the internationalization of manufacturing SMEs in Zimbabwe.

1.3.1 Research questions

The questions that this study seeks to answer are:

What is the impact of the SME characteristics on their internationalisation?

What is the effect of managerial characteristics on the internationalization of SMEs?

What is the impact of environmental characteristics on the internationalization of SMEs?

1.3.2 Justification

This project is intended to provide information required by the Ministry of Small and Medium Enterprises of Zimbabwe, the Private sector foundations, Small and Medium Scale Associations and other policy makers, international agencies like donors in making informed decisions not only on why SMEs internationalise, but also more importantly on how they internationalise. The Ministry of Small and Medium Enterprises and Cooperative Development would find the results of this study very relevant in developing policies that promote SME sector as a key growth area towards employment creation, reduced poverty and stimulate growth. Specifically, the intended beneficiaries of the research project are: Government (Ministry of Small to Medium Enterprises and Ministry of Finance.), private sector focused foundations and policy makers. The study is of value to owners and managers of SMEs in the manufacturing sector in Zimbabwe as the recommendations made assist them in their long term development and internationalization.

The choice of the manufacturing sector is premised on the fact that this sector has historically been the backbone of the economy of Zimbabwe contributing the largest share to the GDP. However, with the changes in the global environment this sector was expected to act to maintain its large share of the GDP. This did not happen yet this sector used to employ the largest number of people. This sector also has a direct impact on many other downstream industries.

The study contributed to the generation of new knowledge and close gaps on factors affecting internationalization in developing countries. Models of internationalization in developed countries were also tested for the developing countries.

1.3.3 Scope of the study

The study was done in Zimbabwe focusing on SMEs in the manufacturing sector. The definition of SMEs given by the Ministry of SMEs was adopted in this research. According to the Ministry of SMEs, an SME is a registered enterprise employing less than 100 people. The manufacturing sector has been chosen given that it has the highest number of SMEs, employs the highest number of employees, used to be the backbone of the economy and that it experienced the greatest shrinkage of GDP contribution.

Although the literature identifies many factors that affect the internationalization of SMEs, this study focused on the impact of SME characteristics (size, age, experience, amount and sources of financial resources), managerial characteristics (age, experience, attitudes and perceptions) and environmental characteristics (market, technology, competitors, networks, regulation and support institutions) on internationalization.

The study was carried in the capital cities of all the ten provinces of the country. This is where there is the highest concentration of the SMEs.

1.3.4 Limitations

The major limitation was lack cooperation from the SME management as some did not perceive benefits they could derive from the research. Some suspected that the research was meant to unearth their unethical practices or to provide information for competitor activity. However, the use of university identity cards and introductory letters from the industry associations helped reduce suspicions.

1.3.5 Definition of terms

Small to Medium Enterprises (SMEs): these are registered enterprises with less than 100 employees.

Manufacturing SMEs: these are SMEs that convert raw materials into finished or semi-finished products.

Internationalisation: the process of increasing involvement in international markets.

This can be through exporting, manufacturing in foreign markets, networks or resource sharing with other firms in foreign markets.

2. Literature Review

This section is going to focus on the theoretical framework, theories and empirical evidence of SME internationalization.

2.1 Theories of internationalization

Works by Montgomery and Wernfelt (1999) show that SMEs internationalise to make use of their resources in the market abroad and flee from the small market effect on the domestic market. The classical and neo-classical theories that explain the internationalization of large firms have also been used to explain the internationalization of SMEs. According to Laghcaoui (2011) these theories are the stage approach, network approach and 'Born globals' approach.

2.1.1 Stage approach theory

The stage approach theory considers internationalization as a linear and sequential process composed of a whole chain of established stages. The Swedish scholars Johnson et al (1977) advocate the Uppsala model to explain the stage approach theory. The Uppsala model identifies the sequential stages of internationalization as irregular exporting, exporting via independent agent, establishment of subsidiaries and production in the foreign country.

2.1.2 Network approach theory

The network approach theory is developed from the Uppsala model but describes internationalization in terms of connections through financial, technological and commercial applications with other partners on the network until own territory activities become international, (Laghcaoui, 2011). In the establishment of these networks, managerial, financial and technological resources appear to be important, (McDougall, 2000; and Dhanarai, 2003).

2.1.3 Theory of 'born globals'

This theory, introduced by Oviat et al, (1990) challenges the Uppsala and Network theories in that some firms do not go through or experience the stage model in the Uppsala theory nor need the wealth resources mentioned in the Network model. According to this theory, some firms called 'born globals' can start to export less than 2 years after formation. However, they are still influenced by managerial and environmental characteristics.

2.2 Empirical evidence of internationalization of SMEs

There are many volumes of empirical evidence of researches done in the developed and some developing countries on the internationalization of SME. In a survey of the Australian Manufacturing Council, McKinsey and Company found that there are firms that start to export less than two years after formation. This contradicted with the Uppsala and Network models and gave rise to the new concept of 'new international ventures'.

In the United Kingdom Bell, Crick and Young (2004) explored the relationship between the SME's business strategy and the pace of internationalization. They carried a qualitative research involving 30 SMEs. Their findings revealed that there was a strong relationship between the SMEs strategy and its international orientation. However, this study was exploratory and there was need for further research to see how finding the internationalization theories.

Studies on internationalization of SMEs have also been carried in developing countries. Abdullah and Zain (2011) carried a survey of 250 Malaysian SMEs to assess the impact of

reductions in trade barriers and developments in information technology (ICT) on pace of internationalization.

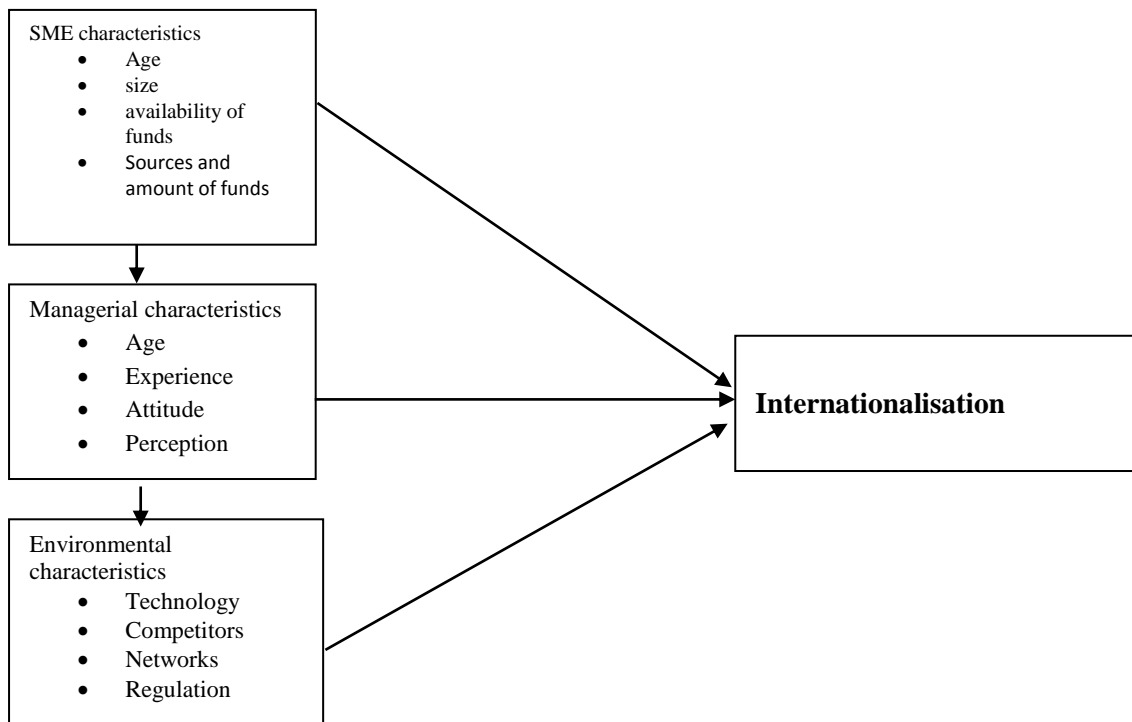
2.3 Theoretical framework

The model below is a proposition of the relationships between the dependent and independent variables in this study. The proposition is that the nature of the SME influences the managerial characteristics of that SME, and then the managerial characteristics are important in understanding the environmental characteristics. However, SME characteristics, managerial characteristics and environmental characteristics influence the SME's ability not only to internationalise but the speed and scope with which this can be done.

Works by Scriba-Estece (2006) on the relationship between firm characteristics and intention to internationalise showed a positive correlation between these variables. In the same study, Scriba-Estece observes that attitudes and perceptions have a direct impact on firm's intentions to internationalise. In related studies, Hutchnison, et al (2006) concludes that age and experience of managers also have a direct impact on the firm's ability to internationalise.

Fourcade (2002) identifies market knowledge, technology capability, competitor knowledge and networking capability as key environmental factors that affects the scope, extent and speed of the firm's internationalization. To these environmental factors, Cateora (2010) adds regulation and institutional bureaucracy as a factor that impedes internationalization.

Figure 1: Factors affecting internationalization of SMEs



Adapted from Hutchinson (2006) and Cateora (2010)

A myriad of factors, both external and internal to the SME exists which influence its ability to internationalise. These include the SME characteristics such as its age, size and funding availability; the managerial characteristics and market characteristics.

2.4 SME characteristics

2.4.1 Age of the SME

The question on whether the age of an SME has any relationship with its ability to go international has over the years attracted a lot of scholarly attention. There is no agreed position on the impact of age of the SME on its ability to internationalise. The traditional internationalisation theories such as the Uppsala, propose that the firm has to go through various stages before it becomes fully internationalised. The conclusion would be that the older the firm the more it is able to internationalise. However, with the knowledge that some firms are ‘born-global’ and those others bypass several stages in the traditional model, then there seems to be no positive relationship between the age and ability of the SME to internationalise, (Chelliah et al, 2010). In fact, researches by OECD (2006) and Lu and Beamish (2002) concluded the older the firm, the less it is able to internationalise. Their argument is that the older the firm, the more established would be its routes and practices and the higher the organisational inertia and the more resistance to pursuing internationalisation. Therefore, the sooner the internationalisation, the easier the learning in the international environments, and the faster the firm growth, (Lu and Beamish, 2002). From the above, we suggest the following proposition:

P1: There is a significant positive association between the age of the SME and internationalisation. Thus, Intern = $\alpha + \beta A + \varepsilon$

Where

Intern is for Internationalisation

α is the intercept

βA is the age of the SME

ε is the error term

2.4.2 Size of the SME

The influence of the SME size on its ability to internationalise is one of the most studied areas on SME internationalisation. The varied arguments by Kaguake and Kothari (1984), Hester (1985), Bonaccorsi (1992), Mason and Pauluzzo (2008), Onkelinx and Sleuwaegen (2008), Chelliah et al, (2010) among others show that there is no consensus on the effect of SME size on its ability to internationalise. For instance, Bonaccorsi (1992) after studying Italian firms observed that firm size was positively associated with the propensity to export. This was later confirmed by Calof (1994) who studied 14,072 Canadian SMEs; Mason and Pauluzzo (2008) and Chelliah et al, (2010). Their argument is that the bigger the firm, the more resources it has for its internationalisation ventures. This makes it therefore critical to understand the basis of the firm size, that is, whether the size of the firm is based on number of employees, annual sales/ profits or its market share.

On the other hand, research by the OECD (1997) in Italy, Japan, Denmark, Spain and Australia did not confirm a positive relationship between the size of the SME and its ability to internationalise. The research showed that size of the SME was only important during the first phase of internationalisation and would cease to be significant thereafter. This was confirmed by Lefebvre and Lefebvre (1999) who did not see any relationship between size of SME and its exports. Table 2 shows some of the researches carried to determine the relationship between firm size and its ability to internationalise.

Table 2: Relationship between size of SME and ability to internationalise

Study	Size of firm	Measurement	Result
Cavulsgil and Nevin (1981)	SME	Sales	positive
Kaguake and Kothari (1984)	SME	Sales	not significant
Bonaccorsi (1992)	SME	Sales	positive
Onkelinx and Sleuwaegen (2008)	SME	Sales	positive
Mason and Pauluzzo (2008)	SME	Sales and employees	positive
Hester (1985)	SME	employees	Not significant
Hozlmuler and Kasper (1991)	SME	employees	positive

The findings from the above researchers seem to suggest the existence of a positive relationship between the SME and its ability to internationalise irrespective of the variable

used to define the size of the SME. This confirms the general international marketing maxim, 'to compete globally, you have to be big'.

Given the above, we propose the following:

P2: There is a significant positive association between the size of the SME and internationalisation. Therefore:

$$\text{Intern} = \alpha + \beta A + \varepsilon$$

Where

Intern is for International

α is the intercept

βA is the size of the SME

ε is the error term

2.4.3 Financial resources

Failure to expand the business and in particular, the international ventures can be linked to an actual lack of money or failure to adequately use the available financial resources, (Papulova and Papulova, 2006). Adequate financial resources are needed by SMEs that intend to internationalise to cover costs associated with international market research, developing export markets, international exhibitions, increasing production capacity to meet export demand, shipment costs, insurance and non-payment of delivered goods. Lack of adequate financial resources has been identified as the highest weight factor limiting SME internationalisation, (Lopez, 2007; Rundh, 2007; UPS, 2007; EFIC, 2008 and OECD, 2009).

Most countries, particularly the OECD members, have developed measures to support SMEs intending to internationalise. Some non-OECD countries such as Brazil, Russia, India, China and Israel have also come up with new schemes that support SME internationalisation. Appendix A summarises some of the measures adopted by OECD and non-OECD member countries to support SME internationalisation.

The main program activities are direct financing, provision of soft loans through banks or government agencies to cover pre and post shipment cost and the provision of insurance to cushion against non-payment after deliveries.

This study therefore posits the following proposition:

P3: There is a positive association between availability of financial resources of the SME and its internationalisation. Therefore, Intern = $\alpha + \beta A + \varepsilon$

Where

Intern is for Internationalisation

α is the intercept

βA is the availability of SME funds for internationalisation.

ε is the error term

2.5 Managerial characteristics that influence SME internationalisation

Although SMEs have become a formidable force which international firms cannot ignore in terms of competition, they still face huge challenges in stamping their foothold in international markets. Since the majority of SMEs are owner managed, managerial capability barriers become an impediment for their internationalization. According to OECD (2008) limited managerial skills and knowledge (Aharoni, 1966) about internationalization have remained critical constraints to SME internationalization. Difficulties arising from limited managerial knowledge base emerge as a top barrier to SME internationalization in a survey carried out recently. Studies from American and Canadian firms revealed that managerial risk perceptions and lack of knowledge about international markets were major reasons for not going international (UPS, 2007). Studies further reveal that limitations in manager's internationalization knowledge emerged as a leading obstacle to export initiatives among Russian and South African SMEs, (IBF International Consulting, 2008 and AMSCO, 2000). Smith et al, (2006), found out that differences in managerial perceptions among American and Indian engineering firms were also found to account for the observed variations in export activity. Further research among Korean and Spanish SMEs similarly pointed out the salience of experiential/international market in explaining the internationalization process of SMEs, a scenario concurred by Crick (2007) and Vivekanandan and Rajendran (2006). Rajesh *et al*, (2008) bring in a critical view in as far as management perspective to internationalization of SMEs is concerned. They argue that SMEs have lack of resources, shortage of manpower, ineffective management skills to cope with the local and international challenges.

Works by (Narala, 2004; Xiong *et al*, 2006; Hashim and Wafa, 2002; Chorda *et al*, 2002) point out that the main factors impeding SMEs to internationalize their businesses are high productivity costs, lack of high tech technology, resource constraints, poor or lack of marketing research techniques and selling techniques, poor international networks which all lead to managerial incompetence to grow their business.

The lack of marketing knowledge in SMEs leaves a huge gap that need sophisticated management approaches to strike the right balance between marketing locally and internationally as there are complex decisions to be made by international marketers to deal with challenges associated with international markets. Kohli and Jaworski (1990) argue that strategic orientation (SO) has a powerful influence on both management expectations and organizational performance. SO has been described to include traits like managers/owners attitudes towards risk taking on entrepreneurship, objectivity assertiveness and information use thereby influencing internationalization of SMEs businesses (Wood and Robertson, 1997). Allison (1971) buttress the foregoing by saying strategic orientation which managers adopt has a profound effect on what an organization can do and will do and is associated with the ultimate level of an organization's success. Cavasgil and Nevin (1981) and Rosson and

Stanley (1987) also outline the need for a favourable managerial orientation towards internationalization in terms of perceived risks, opportunities and costs of such a venture. They further state that managerial orientation in this case refers to the subjective evaluation of problems and opportunities associated with SME internationalization. Managerial decision making characteristics do have an impact on the SME internationalization process.

Barney (1986) brings in an interesting dimension. The researcher argues that the culture of an organization where managers are part of it defines how an organization conducts its business. Managerial decision making characteristics are not only linked to strategy through creating a key capacity to implement a particular strategy but could be a direct source of competitive advantage as well.

In elaborating the managerial attitude as perception, Ogbuehi and Longfellow (1994) point out that personal commitment to exporting appears to be relevant explanation for export success among the manufacturing SMEs in United States of America. They conclude that as firms' commitment to exporting increases, managers tend to seek greater information regarding foreign markets and put greater emphasis on growth strategy for the organization. On the other hand Reid (1981) in the researcher's study in relationships between firm characteristics and the export entry decisions of SMEs, observed the existence of a strong linkage between a firm's behaviour and market expansion and the characteristics and experience of managers and decision makers. He further suggests that exporting firms are managed by decision makers who are internationally oriented and possess a favourable attitude towards exporting. Management has the responsibility to develop means of leveraging resources and capabilities. Therefore capabilities of top management in emerging market firms are critical to their success (Hitt *et al*, 2000). Allmendinger and Hackman (1996) postulate that an aggressive managerial attitude combined with proper resources can be the difference between survival and failure for organizations from communism to free markets. This issue of managerial attitude is important in Central Eastern European (CEE) countries where general management skills are still limited and managers might base their current decisions on prior knowledge which for managers of former state enterprises in particular will be that of the former planned economy (Makhija and Stewart, 2002; Uhlenbruck *et al*, 2003 and Elenkov, 2002). Since most SME decisions are made by one or a few top managers, it is expected that managerial characteristics do influence the level of internationalization (Cavusgil and Naor, 1987; Manolova *et al*, 2002; Reuber and Fisher, 1997; Wieldersherm-paul *et al*, 1978; Harveston *et al*, 2000; Knight, 2001; Nummela *et al*, 2004). Ainaddin and Junit (2001) studied the characteristics of entrepreneur-owned firms in terms of entrepreneur orientation that is having thrust for innovation, pro-activity and propensity for risk taking, business strategy, organizational structure and business performance. Based on the research findings of 64 SMEs in Malaysia, the business performance of these companies vary with their willingness to innovate, risk taking potentials and the degree of organicity of their organizational structure. They found out that there is a positive relationship between management attitude and internationalization.

Burpitt and Rondinelli (2000) in their study on 138 firms with exporting experience in North Carolina found out that, firms that strongly value learning from international experience are

more likely to continue exporting. Small firms that value the opportunity to develop new skills, technology and organizational capabilities tend to be involved in internationalization even when initial financial returns are disappointing. Knowledge and skills can be acquired by hiring managers with knowledge and skills in international markets or developed through training and experience. Reuber and Fisher (1997) examined the role of the management team's international exposure as a mechanism for the internationalization of Canadian SMEs in the software industry. The results indicated that managers with international exposure are the propellants for SMEs internationalization.

From what has been discussed above, the study presents four propositions below:

P4: The age of managers or owners of SMEs is significantly positively associated the SME internationalisation. Thus, Intern = $\alpha + \beta A + \varepsilon$

Where

Intern is for Internationalisation

α is the intercept

βM is the age of owner/ manager of the SMEs

ε is the error term

P5: The level of risk perception of the managers or owners of SMEs is significantly negatively associated with the SME internationalisation.

Similarly, Intern = $\alpha + \beta M + \varepsilon$

Where

Intern is for Internationalisation

α is the intercept

βM is the risk perception level of the owner/ manager of the SME.

P6: The attitude of managers or owners of SMEs towards international markets is significantly positively associated with SME internationalisation. Thus, Intern = $\alpha + \beta M + \varepsilon$

Where

Intern is for Internationalisation

α is the intercept

βM is the level of risk perception of the owner/ manager of SME.

ε is the error term

P7: The experience and educational qualifications of SME managers and owners is significantly positively associated with SME internationalisation. Therefore, $Intern = \alpha + \beta M + \varepsilon$

Where

Intern is for Internationalisation

α is the intercept

βM is the experience and educational qualifications of owner/manager of the SME

ε is the error term

2.6 Environmental factors that influence internationalisation of SMEs

The Uppsala theory states that SMEs first establish themselves in the domestic market before they become visible in international markets for they have to first gain experience and knowledge on how to conduct business in foreign markets.

This section of the literature review focuses on four salient market features that are key in foreign market commitment decision. These are networks, competition, regulations and technology which are separately discussed below.

2.6.1 Networks

Intense rivalry, environment unfamiliarity and distance are crucial characteristics that foster the development of strategic alliances in the global market place. The relations that are established in a network play a vital role in developing relevant foreign market knowledge, (Collinson, et al, 2005), providing access to knowledge flow, (OECD, 2010), creating relations with partners with local knowledge, (Lu and Beamish, 2012), and expediting the process of internationalisation.

Effective networks bring information about targeted overseas markets. SMEs heavily depend on information they obtain through networking and contacts that enable them to overcome internal barriers such as identifying foreign business opportunities, locating or analysing markets, contacting potential overseas customers, partner- distribution networks and supply chain, (Mahommad and Kumar, 2012). The aspect of "effective network" seems key implying that results should be beneficial to all parties involved. Nummela (2002) brings in a very important issue of investing in establishing long lasting relationship and acquisition of knowledge as it provides SMEs with a not-possible to copy competitive advantage and strengthen their growth. Networks provide information about strategic management orientation options and possible investment risks. Hill (2005) asserts that networks are informative in terms of market orientation and risk preferences. He goes on to say that the process of knowledge accumulation of foreign markets is complex but can be bypassed through network relationships and alliances.

The success of many SMEs in the foreign markets relies on distribution networks. Foreign intermediaries facilitate quick entry into foreign markets, (Baronchelli and Cassia,

2008) and successful relationship with distributors forms the basis for overseas expansion, Hill (2005).

Risk, cost and loss sharing is one of the most important rewarding elements in well networked relations. Small firms in a network minimally suffer a loss because cost and risks are divided among cluster members, risks and reward are shared, (Hill, 2005), achieve cost-reductions through piggy backing on large firms, (Dana *et al*, 2007). It is apparent that if SMEs put effort in investing in relationship building any excuse for not going international or not realising a good profit margin will not hold water.

SMEs which fail to abreast themselves with contemporary innovations find it difficult to succeed. Networks are the core characteristics for active innovation. In their effort to innovate, SMEs have increasingly relied on networks, clusters, and partnerships.

Lack of required skills is another problem SMEs face when they plan to internationalise. Lu & Beamish (2002). It is vitally important to network with individuals who have the ability to close the resource gap. Lu and Beamish argue that therefore SMEs should partner with those with crucial resources such as capital equipment and other tangible assets needed in international expansion. Networks and alliances overcome the liabilities of smallness, (Danna, Ratten and Welppe, 2012), give SMEs an opportunity to learn new skills, and bring information about networks of suppliers who may also be used to get information about potential buyers, (Mahammad *et al*, 2012). Thus the following proposition is given:

P8: There is a significant positive association between SME international networks and SME internationalisation. Thus, $Intern = \alpha + \beta S + \varepsilon$

Where

Intern is for Internationalisation

α is the intercept

βS is the level of international networks

ε is the error term

2.6.2 Competition

A recent development that has characterized the global market place is the knowledge of the existence of stiff rivalry among players in both domestic and foreign markets. SMEs are not spared from this phenomenon and have to abreast themselves with current changes despite their newness and smallness. They find themselves operating in highly competitive domestic markets which result in a greater likelihood of opting for other markets, Danna (2007). This makes an intension to operate in international markets not a luxury but a necessity.

The newness and smallness characteristics of SMEs make them more vulnerable to adverse effects of intense competition. Hyunsuk and Lee (2012) observe that liabilities of newness and smallness put SMEs at disadvantages in domestic markets where mature organisations

can leverage benefits such as brand recognition, market acceptance of their products and supply chain control. SMEs may therefore only benefit from expanding their markets reaches to foreign customers profitably. Papulova (2006) identifies factors that dominate the competitive environment as market structure and profitability, the competitive rivalry and degree of differentiation, market growth, capital intensity and economies of scale. Thompson (1997) in Populova (2006) adds changeability of market environment, speed of change, intensity of competition, fertility of ecology, discrimination by customers and pressures from government and influence groups to the list. He goes on to say that the more turbulent the environment is the more aggressive the firm must be in terms of competitive strategies and entrepreneurialism or change orientation if it is to succeed.

Rajesh et al, (2008) in Mahammad *et al*, (2012) argue that competition in international markets realize the firms to improve the standards of their performance in many fields such as productivity, quality of their products, cost, smooth flow of operations and introduction time of their products. The nature and scope of international business is associated with escalating cost yet non-conformist and sophisticated customer demands put pressure on SMEs to price their products competitively.

It is clear to note that economics of scale through volumes are difficult to achieve since SMEs produce relatively few products or service due to limited resources and capabilities, Populova (2006).

Lack of resources, shortages of manpower and ineffective management skills affect the ability of SMEs to cope with the local and international challenges, (Mahammed, 2012). Many unsuccessful entrepreneurs blame their failures on lack of adequate financial resources while successful ones identify the proper allocation of resources and a niche market and clearly understand its needs and satisfy them more profitably than the competitors, (Papulova and Papulova, 2006).

In view of shortage of resources, Gianpaolo and Cassia (2008) perceive close network alliances in multiple countries as a proprietary network that creates a company's competitive edge. Apart from networks as the best solution to resource challenges in various countries SMEs receive substantial support from the government either in the form of grants, capital or knowledge source access. In order to battle effectively with competition, SMEs are required to strengthen their management skills, financial capabilities and learning capabilities, to improve their infrastructure and to fully utilize the support given by the government in the form of self-loan and matching grant financial assistance,(Hashim, 2012).

Governments may protect infant industries through quotas and subsidies until they have grown strong enough to meet international competition but the protection seems to have little more than foster the development of inefficient industries that have little hope of ever competing in the world market, (Hill, 2005). In support of Hill (2005), Kotabe (2011) argues that governments protect fledging industries in order to allow them to gain the experience and size necessary to compete internationally. They give loans, subsidies or training programs to support export activities.

Given the above, the following proposition is made:

P9: There is a significant positive relationship between intensity of competition faced by the SME and SME internationalisation. Hence,

$$\text{Intern} = \alpha + \beta S + \varepsilon$$

Where

Intern is for Internationalisation

α is the intercept

βS is the intensity of competition faced by the SME

ε is the error term

2.6.3 Technology

The robust developments in technology and especially information communication technology make internationalisation a realisable dream. SMEs are more likely to internationalize their operations both through the formulation of a new strategy taking into account the information and communication technologies, (Beneki *et al*, 2011). Globalisation is increasing the importance of cross-border technologies which help to upgrade SMEs competitiveness and stimulate its growth, (OECD, 2010). SMEs with greater ability not only to integrate the internet technologies into enterprise resource management and customer relationship management but also to formulate an explicit strategy for the adoption and use of ICT SMEs have potential to extend their activities on an international level. Unprecedented development in information and communication technologies continues to become the driving forces behind the growth of e-commerce. Global e-commerce which leverages on the capabilities of the internet is the most powerful medium of communication that business around the world has ever known, (Javalgil and Todd, 2007).

The internet has the capability to generate international market expansion and future growth for the firm and it fosters easy international market penetration and allows development of new international customers. Firms utilising the internet in internationalization process, capture international transactions and communication efficiencies. The internet has also improved the firm's ability to interact with customers, suppliers and business partners through multiple inexpensive interactive technologies, (Marilyn, 2006).

The integration of information communication technology with manufacturing technologies (such as computer aided design (CAD), computer aided manufacturing (CAM)), procurement systems (such as the just-in-time and quick response systems) and customer relationship management (CRM) approaches has resulted in new forms of competitive advantages for SMEs as a result of reduced reworks, improved delivery speed and improved understanding of customer needs. All these tremendously reduce operational costs. Therefore, we propose the following:

P10: There is a significant positive association between the SME's technological capabilities and SME internationalisation. Therefore,

$$\text{Intern} = \alpha + \beta S + \varepsilon$$

Where

Intern is for Internationalisation

α is the intercept

βS is the level of SME's technical capability

ε is the error term

2.6.4 Regulation

The government of every country is responsible for instituting policies, legal frameworks and procedures that govern how business is conducted within its borders. Political and legal climates are inherently related and inseparable because laws are generally a manifestation of a country's political processes, (Kotabe, 2011).

Categories of laws that affect business operations, both locally and internationally marketing, anti-trust and foreign corrupt practice laws, (Cateora, and Graham, 2011).

The marketing laws regulate marketing activities in product development, labeling, pricing, promotion and channels of distribution, (Cateora and Graham, 2011). Issues that are covered under product include Health and Safety, local content requirements, quantity limits, buy-national restrictions, packaging requirements, administrative policies, anti-dumping policies, tariff barriers, promotion policies and protection of intellectual property.

Product and process standards for health, welfare, safety, size and measurements can create trade barriers by excluding products that do not meet the standards, Rugman and Hodgets (2005). They further state that testing and certification procedures, such as testing only in importing country and on-site plants inspections are time consuming and expensive. A product may have to change in a number of ways to meet the physical or mandatory requirements of a new market, ranging from package changes to total redesign of the physical core product, (Cateora, and Graham, 2011). It must be highlighted that ISO 9000 is not only concerned with standardised systems and procedures for manufacturing, but for all activities of firms. The activities include management responsibility, quality systems, contract reviews, design control, document control, purchasing, product identification and tracking, non conforming products and necessary corrective actions, handling, storage, packaging and delivering, recordkeeping, internal quality audits, training and servicing, (Kotabe and Helsen, 2011).

Local content specifies that some specific fraction of a good be produced locally, (Hill, 2005; Kotabe and Helsen, 2011). Local content laws are designed to encourage foreign exporters to set up their manufacturing locations in free trade areas, (Kotabe, 2011).

Exporting firms face restrictions in terms of quotas or embargoes, Rugmen and Hodgetts (2005, Cateora and Graham, 2011) to force them to purchase more supplies from the host country.

Governments may enforce policies that give preferences to domestic producers, thereby giving a bidding edging to domestic suppliers and the policy does not apply if domestically produced goods are not available, if the cost is unreasonable, or if “buying local” would be inconsistent with the public interest, (Kotabe, 2011).

Packaging may require both discretionary and mandatory adaptations to be made. Some countries require labels to be printed in more than one language, while others forbid the use of any foreign language. Several countries are now requiring country-of- origin labeling for food products, (Cateora and Graham, 2011). Food packaging, for example, is required to be more informative and easier to understand and must present information regarding nutrition and serving size in a standard format. Mandatory health warnings are also required, (Keegan and Green, 2010).

In some cases bureaucratic rules are designed to make it difficult for imports to enter a country. Restrictive administrative instruments may be used to benefit local producers even though they hurt consumers, who are denied access to possibly superior foreign products, (Hill, 2005).Fees for import certificates or other administrative processing can assume such levels that they are, in fact, import taxes. Exports and import licenses, other documents, and the physical arrangements for getting the products from port of entry to the buyer’s location mean additional costs, (Kotabe, 2011)

Anti-dumping policies have been adopted in many markets to punish firms that engage in dumping. The objective is to protect domestic producers from unfair foreign competition, (Hill, 2005).When domestic producers can show that they are being harmed, most countries have introduced legislation providing for imposition of anti-dumping duties if injury to domestic producers. Such duties take the form of special additional import charges equal to the dumping margin. Countervailing duty legislation and producers are similar to those pertaining to the dumping and are levied to offset subsidies granted in the exporting country, (Keegan and Green 2010).

Cateora and Graham (2011) state that companies spend millions of dollars establishing brands, names or trademarks to symbolize quality and design a host of other product features meant to entice customers to buy their brands to the exclusion of all others. In addition they say that millions are spent in research to develop products, process designs and formulas that provide companies with advantages over competitors. Companies must however, keep vigil against piracy and counterfeiting on such assets. While many countries have stringent intellectual property regulations on their books the enforcement has often been lax, (Hill, 2005).Methods which are used to protect intellectual property rights are, prior use registration and international convention,(Kotabe, 2011).

Strong legal protection of property rights is another requirement for a business environment to be conducive to innovation, entrepreneurial activity and hence growth. With strong

property rights protection, businesses and individuals run the risk that the profits from their innovative efforts will be expropriated either by criminal elements or by the state (excessive taxation and kickbacks), (Hill, 2005), leading to legal loss of rights, (Hagedoorn *et al*, 2005). Intellectual rights broadly include patents, trademarks trade secrets and copyrights. International treaties such as the Paris convention, European Patent Convention and Berne Convention help provide international property protection, (Keegan and Kotabe, 2011).

There are many international treaties to help provide intellectual property protection across national boundaries. Most important treaties are Paris convention, Patent cooperation Treaty, Patent Law Treaty, European Patent Convention and Berne Convention, (Keegan and Kotabe, 2011). Patent and trademarks that are protected in one country are not necessarily protected in another, so global marketers must ensure that patents and trademarks are registered in each country where business is conducted, (Keegan and Green, 2008).

Tariff barriers impede imports that might compete with locally produced good, raise revenue for the government, discourage imports and make local goods more attractive. A tariff may be levied for the purpose of protecting a market or for increasing government revenue. They serve to discriminate against all foreign goods. Customs and entry procedures (product classification, product valuation, documentation license, or permit, inspection, health and safety regulations), product requirements such as product standard, packaging, labeling and marking, product testing and product specification and financial controls (exchange controls, multiple exchange rates, prior import deposits, credit restrictions, and profit remittance restrictions all impede gainful business transactions in overseas markets, (Kotabe, 2011)

Promotional programmes may be controlled or censored. Some countries e.g. Sudan ban all TV advertising to children. Some restrict advertising of soft drinks and snack foods to children, (Cateora and Graham, 2011).

Given the above, the following proposition is presented.

P11: Knowledge of regulation in foreign markets is significantly positively associated with SME internationalisation. Thus, Intern = $\alpha + \beta S + \varepsilon$

Where

Intern is for Internationalisation

α is the intercept

βS is the SME amount of knowledge of regulation in foreign markets.

ε is the error term

From the discussion in this section, we therefore show that SME internationalisation is associated SME characteristics, managerial characteristics and environmental characteristics as shown below.

$$\text{Intern} = \alpha + \beta A + \beta M + \beta S + \varepsilon$$

Where

α is the intercept

βA is SME characteristics

βM is managerial characteristics

βS is environmental characteristics.

ε is the error term

3. Methodology

This section focused on the research design, research technique, the target population, sample frame, sample size, sampling procedures, sampling type and data analysis.

3.1 Research design

This study adopted a triangulation of both the explanatory and the cross sectional descriptive analytical design. This involves using quantitative approaches to collect primary data from a large number of respondents with the intention of projecting the results to a wider population. To answer the research objectives listed above we proposed a large scale comprehensive survey among the ten provinces of Zimbabwe. This means that collected data was subjected to statistical manipulation and forecasts for future events, (Cant, 2003:144).

3.2 Target population and sampling frame

The target population constituted all the manufacturing SMEs in the formal sector in Zimbabwe. The number was estimated to be 1451 (RBZ, 2010). The sample frame was the Zimbabwe National Chamber of Commerce (ZNCC) list. All the SMEs in the formal sector were on the ZNCC directory or database list.

3.3 Sample size

Martins (1999) notes that sample size depends on the size of the population and objectives of study. Here the objective is to generalize results so a sample size representative of the whole population was desired. Krejcie and Morgan (1970) developed sample estimation tables which the researchers used to get representative sample sizes. For a population of 1451, the Krejcie and Morgan tables gave a sample size estimate of 302.

3.4 Sampling techniques

Sampling is the procedure by which some elements of a given population are selected as representative of the entire population. Sampling methods can be probability or non-probability. Probability sampling was used in this study to allow every SME the chance of being selected. Therefore, sampling was not done at the discretion of the researcher.

To select the 302 SMEs using probability sampling, simple random sampling technique was used. According to Cooper and Schindler (2003:160), each SME has a known and equal

chance of being selected. Each SME was assigned a number from 1-1451 according to their sequence in the ZNCC directory. After choosing the first number randomly, a number was then chosen at the interval of 5 until the 302 SMEs were selected. Therefore bias was eliminated.

3.5 Data collection instruments

Data collection was through a survey involving the use of self administered questionnaires. A survey allowed the collection of data from a large sample size. The use of self-administered questionnaires allowed respondents to complete the questionnaires on their own and in some cases at their own time. This has the advantage of not putting the respondents under pressure to complete the questionnaire and as a result increases quality of responses and also has tendency to improve response rate.

The questionnaire had mainly closed questions and few open ended questions. The closed questions were in the form of dichotomous questions, multiple-choice questions and Likert-scale questions. The few open ended questions were used to solicit data not captured through the closed questions. They allowed further probing of the respondent. For the questions on managerial characteristics and more specifically attitudes and perceptions, verbal scales or Likert scales were used. Closed ended questions were used for the following reasons:

- ✓ They are easy to understand, less time is consumed completing them and response error is reduced.
- ✓ Are easy to code and analyse since the responses are pre-determined, (Cooper and Schindler, 2003).

As for the content of the questionnaire, variables derived from the literature on SME characteristics, managerial characteristics and environmental characteristics were used. These were included in the conceptual framework and are as follows:

- ✓ SME characteristics: age, experience and sources and size of funds;
- ✓ Managerial characteristics: age, experience, attitudes and perceptions; and
- ✓ Environmental characteristics: market knowledge, technology capability, competitor knowledge and regulation.

3.6 Validity and reliability

To ensure face and content validity, pilot testing was done on 10 SMEs in Gweru. This allowed testing all the aspects of the questionnaire including wording sequence and layout. A study by Panasen, Laukkanen and Niitykangas (2002) on factors affecting the performance of SMEs in peripheral locations used both open and closed questions. The research instrument was considered valid in their study. Fatoki (2007) used both open-ended and closed-ended questions in his research instrument on the study of the impact of debt usage on profitability in small manufacturing firms. The questionnaire was tested for reliability and was found to be reliable. This information showed that the researchers were not the first ones to use both open ended and closed ended questions on a questionnaire. This made the research instrument applied in this study relevant as a measuring tool.

3.7 Data analysis

Data analysis involved the reduction of accumulated data to a manageable size, developing summaries, looking for patterns and applying statistical techniques. It also included the interpretation of research findings in the light of research questions, and determines if the results are consistent with the research hypothesis and theories, (Cooper and Schindler, 2003: 87). Editing, coding and processing of data formed an integral part of data analysis.

3.7.1 Editing of data

Editing involved a thorough and critical examination of the completed questionnaire to detect errors and omissions corrects them where possible and certifies that the minimum data quality standards have been achieved, (Cooper and Schindler, 2003:236). Therefore, collected data was edited to ensure that it is accurate and consistent with the intent of the questions.

3.7.2 Coding of data

Coding involved assigning numbers or other symbols to answers so that responses could be grouped into a limited number of classes or categories. It assisted the researchers to reduce a large number of replies into a few categories containing critical information required for analysis. The researchers pre-coded the data to avoid the unnecessary step of completing the coding sheet.

3.7.3 Processing of data

The Stata Package and Excel were used to test hypothesis and run regressions as well as generating frequency variations and tabulations.

3.8 Data analysis for each objective

Objective 1: To evaluate the impact of SME characteristics on its intention to internationalise. A measurement of the relationship of the SME characteristics (age, experience, availability of funds) that internationalized was done using regression analysis. According to Cooper and Schindler (2003) regression analysis gives a description of the nature of a relationship between two or more variables; estimates the value of the dependent variable on the basis of one or more independent variable. The correlation coefficient is the yardstick of regression analysis. A correlation efficient of 1 means there is a direct relationship; -1 means a negative relationship and zero means there is no relationship between the two factors.

Objective 2: To assess the effect of managerial characteristics on the SMEs internationalization. This objective sought to measure the impact of managerial characteristics (age, experience, attitudes and risk perceptions) on the internationalization process. Hypothesis testing was carried to accept or reject the proposition that the managerial characteristics variables are significantly associated with SME internatinalisation.

Objective 3: To evaluate the impact of environmental characteristics on SME internatinalisation. Hypothesis testing was carried to accept or reject the proposition that the managerial characteristics variables are significantly associated with SME internatinalisation.

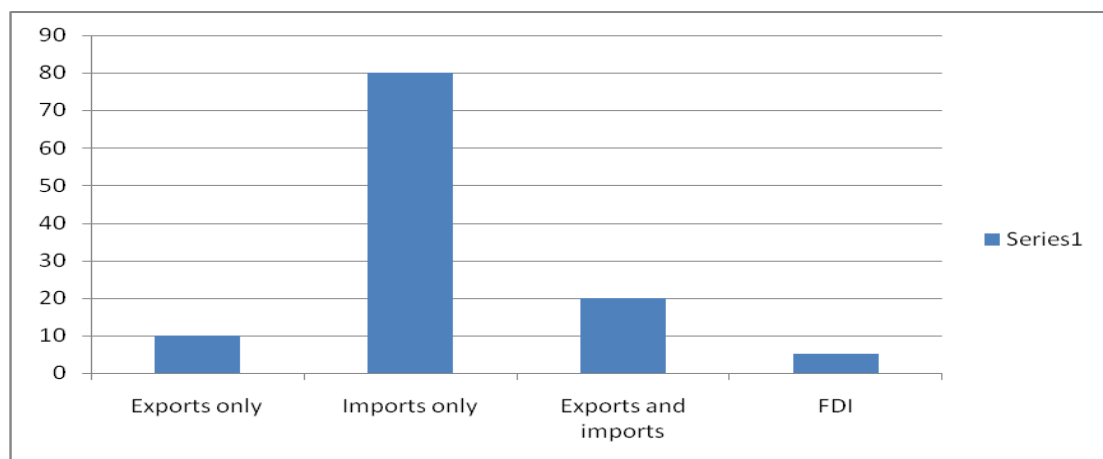
4. Findings of the study

The research sought to explore the factors affecting the internationalization of manufacturing SMEs in Zimbabwe. A systematic random selection of 302 SMEs was done and self administered questionnaires were distributed between the months of February and March 2013. A total of 141 questionnaires were returned and usable for data analysis. This constitutes a 47 % response rate and according to literature this is acceptable, (Hair, Bush and Ortinaw, 2003).

4.1 Mode of SME internationalization

Out of the 141 SMEs that responded, 115 indicated that they had internationalized. This constitutes almost 82%. Of the 115 SMEs that have internationalized, 80 are involved in importations only, 20 import and export at the same time, 10 are in exports only and 5 have invested in business in foreign markets through foreign direct investments (FDIs). The distribution of the SME modes of internationalization activities are shown in figure 2 below.

Figure 2: SME internationalisation activities



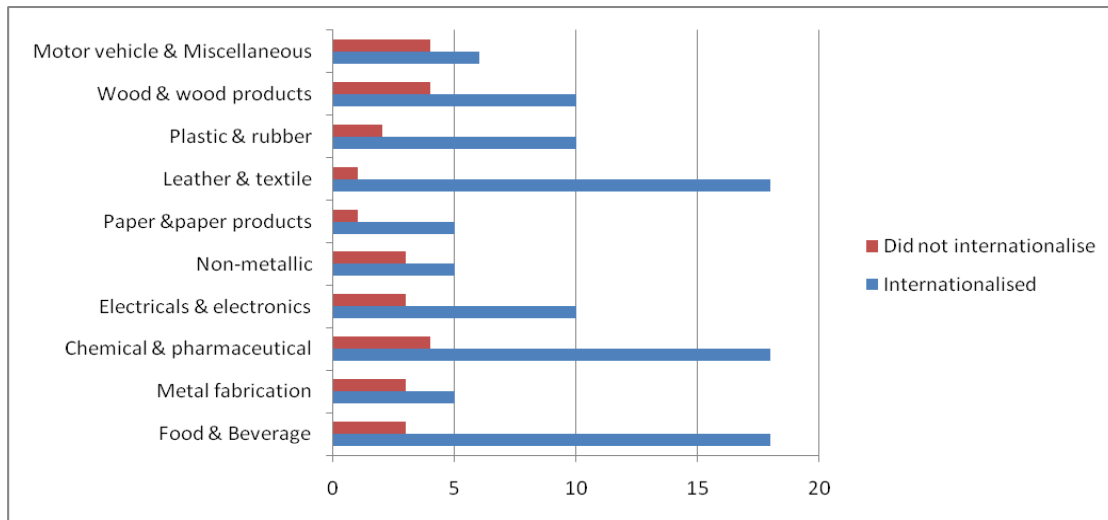
Source: survey data

The results show that there are more importing SMEs than those that export. Although both imports and exports increase chances of SME survival, (Onkelinx and Sleuwaegen, 2008), skewness towards imports may have a negative impact on the overall balance of payment (BOP).

4.2 Sectoral internationalisation of SMEs

The SME manufacturing sectors that lead in internationalisation are the food and beverages; textile and leather, and chemical and pharmaceuticals in that order. Metal fabrication, non-metallic and glass, and paper and paper product sectors have the lowest international involvement level. This could be because of the small number of players involved in these sectors. Figure 3 below shows a graphic presentation of these results.

Figure 3: SME sectoral internationalisation level



Source: Survey data

4.3 Effect of SME characteristics on internationalization

Data on SME characteristics such as size (number of employees), age and turnover of the SME were collected and the correlation coefficients calculated.

4.3.1 Effect of size of SME on internationalisation

The correlation coefficient of -0.8184 in appendix B shows a statistically significant negative relationship between the size of an SME as measured by the number of its employees and internationalisation. These results show that the bigger the SME the more inertia it has to internationalise.

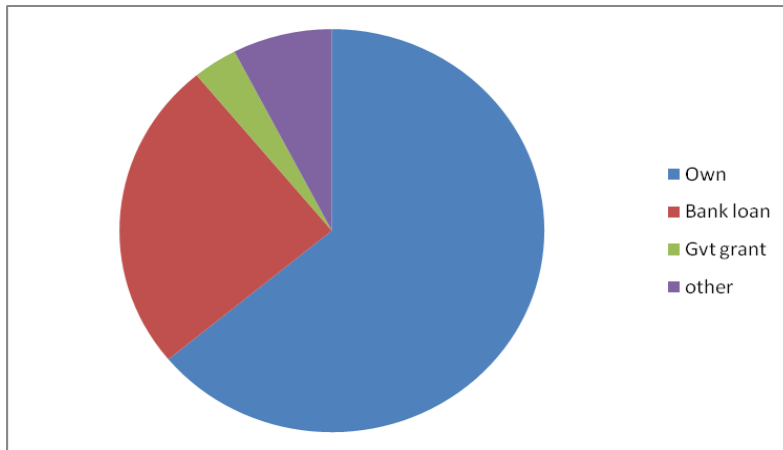
4.3.2 Impact of SME age on its internationalization

The results in appendix C show a coefficient value of -0.955 which reflects a strong negative correlation between the age of the SME and its internationalisation. This means that the older the SME, the lower the propensity to internationalise.

4.3.3 SME financial resources and internationalization

The findings presented in Appendix D show a correlation coefficient value of 0.4. This shows a weak positive correlation between the SMEs financial resources and internationalization. Sources and level of funding is critical in international business ventures. Figure 4 shows that 64 % of the SMEs that internationalized used their own resources, 25% got loans from banks and 3.4% got government assistance.

Figure 4: Sources of funds for internationalization.



Source: Survey data

4.4 Effect of managerial characteristics on internationalization

4.4.1 Relationship between age of owner/manager and internationalisation

A correlation coefficient value of 0.5074 (see appendix E) reflects a positive moderate relationship between the age of the SME manager and its internationalization. A bigger number of SMEs that internationalized had older owners/ managers. There has been very limited research on this as focus was on the manager's experience, capabilities or level of education. Perhaps this implies that as age increases, the manager gets more experienced, has reduced risk perception and establishes linkages necessary for internationalization.

4.4.2 Educational qualifications of owner managers and internationalization

Of the 115 SMEs that responded that they had internationalized, 46 % of them are managed by diploma holders, 48 % by degree holders and 6 % by certificate holders. (See appendix F).

4.5 Other SME, managerial and environmental characteristics that affect internationalization

Managers were asked to rank identified factors to see how they influenced their decision to internationalise. Appendix G has the computed responses ranging from strongly agree to strongly disagree. A test of proportion was carried to see if there was a significant difference between those who affirmed or did not affirm the impact of the factor on internationalization. The results of the test and the deduced impact of the factor on internationalization are shown in Table 3. Appendix H is a graphic presentation of all the analysed factors that inhibit internationalization of SMEs.

Table 3: Hypothesis testing on factors that influence SME internationalization

Factor	Z value at 95% degree of confidence	p value at 95% degree of confidence	Factor impact on SME internationalisation
Commitment	3.21	0.0013	Influences SME internationalisation
Passion	3.88	0.0001	Influences SME internationalisation
Risk perception	2.49	0.0128	Influences SME internationalisation
Market information	3.23	0.001	Influences SME internationalisation
Networks	3.75	0.0002	Influences SME internationalisation
financial resources	2.1	0.0478	Influences SME internationalisation
Workforce experience	-0.59	0.5525	Does not influence SME internationalisation
Workshop attendance	1.8	0.072	Does not influence SME internationalisation
Technical capability	-0.47	0.6399	Does not influence SME internationalisation
Attitudes	1.98	0.0499	Influences SME internationalisation
Good relationships	2.89	0.0038	Influences SME internationalisation
Regulation	3.35	0.0008	Influences SME internationalisation

Table 3 shows that there is a significant relationship between the independent variables management commitment, passion for international markets, risk perception, knowledge of international markets, networks with suppliers and distributors in international markets, availability of financial resources, managerial attitudes towards international markets, knowledge of the regulatory forces in international markets and the dependent variable, internationalization. However, the effect of manager's technical capability, workforce experience and attendance to internationalization seminars and workshops on internationalization is not significant.

5. Discussions of Findings

5.1 Effect of SME characteristics on internationalization

5.1.1 Size of SME

Although the findings of the effect of size of SME on internationalization seem to contradict with some literature sections, (Hozlmuler and Kasper, 1991; Hester, 1985), they are consistent with Jovanovic's "noisy selection" model which argues that small firms grow faster than larger firms. This is also in support of the findings by Kraniqic (2006), Harabi (2003) and Almus (2002) who found a negative relationship between firm size and its activities.

5.1.2 Age of SME

The results show that the older the SME, the less able it is to internationalise. This is not consistent with the Upssala model which posits that SMEs have to go through stages before they internationalise. This means that the older the SME the higher is the propensity to

internationalise. Our results seem to support the ‘born-global’ theory which states that some SMEs can internationalise from the day they are established, (Chetalliah, 2010).

5.1.3 Financial resource availability

It seems there is consensus in literature about the effect of financial resources on internationalization as this is consistent with literature, particularly the work by Cavulsgil and Nevin (1981), Kagauke and Kothari (1984), Bonarceorsi (1992), Onkelinx and Sleuwagen (2008). The financial resources are needed to boost production capacity and for pre and post-shipment financing. The weak relationship between the financial resources and SME internationalization seems to suggest that financial resources are only needed up to a certain level beyond which they cannot inhibit internationalisation.

The study also found that most of the SMEs that internationalized used own financial resources as very few accessed funding from the banks or Government. This has the possibility of limiting the scope of the SME internationalization.

5.2 Managerial characteristics

5.2.1 Age of owner/ manager of SME

It seems the older the owner/ manager of the SME, the higher the chance to internationalise. This could be explained in terms of the experience, the relationships established and even the financial resources acquired over time.

5.2.2 Educational level of owner/ manager of SME

The study confirms that the level of education may influence internationalization of SMEs. These findings are consistent with the ascension by Hashim and Wafa (2002) and Xiong (2006) that marketing and managerial skills are critical for international business ventures.

5.2.3 Attitudes and risk perception

Owner/ manager’s attitude towards international markets has an effect on internationalization. A positive and aggressive attitude towards internationalization becomes a driving force for the SME to internationalise, (Allmendinger and Hackman, 1996). The results of this study confirm the current literature. On the other hand owners/ managers who perceive risk in international markets tend to lack an impetus for internationalization. The higher the risk perception level, the higher the chance that they would not internationalise.

5.3 Environmental characteristics

5.3.1 International networks

The study has found that international networks are positively associated with internationalization of SMEs. Hill (2005) and Lu and Bleamish (2012) identified international networks as key in expediting internationalization through knowledge and information flow, movement of goods and services and technology and capital transfer. This means that the more and stronger the networks the higher the chances to internationalise.

5.3.2 Intensity of competition

Competition in the local market is closely associated with SME internationalization. The intensity of the competition coupled with high production capacity becomes a driver for internationalization as SMEs look for new markets for their products. Competition abroad requires that the SME provides high quality products and cut costs as well. This would require the government or banks to cushion the SME through provision of cheaper loans or grants, (Allmendinger and Hackman, 1996).

5.3.3 Regulation

The finding of the study show that knowledge of regulations, laws and rules in the foreign markets are positively associated with the SME internationalization. This is consistent with findings by Hill (2005), Kotabe (2011) and Cateora and Graham (2011). Lack of knowledge of regulations in a given foreign market inhibits SMEs internationalization process.

6. Conclusions

The purpose of this study was to explore the factors that affect the internationalization of SMEs in Zimbabwe. The methodological approaches adopted helped obtain results which made the researchers come up with the following conclusions:

- ✓ The most common mode of SME internationalization in Zimbabwe is import. This is common among older and smaller firms, although some firms start importing shortly after inception.
- ✓ The main barriers to SME internationalization are lack of commitment to internationalization by owners or managers, low production capacity, lack of financing, lack of market knowledge, laws and regulations in the foreign markets, failure to establish international networks and strategic partnerships and lack of industry and government support.
- ✓ SME internationalization is positively influenced by SME characteristics such as age, size and availability of funds.
- ✓ SME internationalization is closely associated with managerial characteristics such as age, attitudes, risk perception, experience and educational level.
- ✓ SME internationalization is closely associated with environmental characteristics such as intensity of competition, technology, international networks and regulation.

7. Recommendations

Globalization is a reality and is driving internationalization. Although there are challenges in going global, the risks become greater if SMEs wait for globalization to reach the local market and then have to deal reactively with the consequences. Based on the review of studies dealing with SME internationalization and findings of this study, the following recommendations are made to reduce the barriers and entry costs:

- ✓ Increase awareness. Both government and industry associations should make entrepreneurs aware of the benefits of internationalization (both importing and exporting) in the face of globalization. Information about the international markets

requirements, laws and regulation should be made available to both new and old SMEs as there is increasing need among SMEs for reliable information about these international markets. Therefore, government and industry associations could facilitate quality advisory services for new SMEs.

- ✓ Train and retrain: managerial traits can be improved through exposure and training. Industry associations and government could organize workshops and seminars that expose the SMEs to internationalization procedures.
- ✓ Target new SMEs. New ventures with high ambition and the ability to realize these ambitions must be supported. If supported these SMEs generate high export return, (Onkelinx and Sleuwagen,2008)
- ✓ Policies should be developed to make the SMEs prepared and ready to make the necessary investments and take the risk involved in internationalization. There should be the right framework conditions for trade and investment, education and training, and establishment of partnerships, (Wilson, 2006)
- ✓ Help SMEs to improve production capacities so that excess stock generates the need to export.
- ✓ Facilitate SME financing. Internationalisation requires a lot of funds for both pre-and post-shipment activities. Government or industry associations could facilitate the financing of these activities through bank loans, grants, and etcetera.
- ✓ Link the SMEs with local, regional and international strategic partners and multinational enterprises (MNEs) to circumvent barriers to internationalization. Clusters could be developed to assist SMEs in establishing partnerships and increase international cooperation, (Onkelinx and Sleuwagen, 2008)
- ✓ Government and industry associations could make some long term follow ups and measure the impact of support to assess effectiveness of specific measures.

8. Further Research

The findings of this research on the relationship between the age, size and financial resources of the SME as well as technical abilities of managers and the SME internationalisation are quite interesting as they seem to contradict with the current literature. This could be an area of further research, and in particular an in-depth analysis of the causes of the emerging relationships. Furthermore, the research could be replicated within specific manufacturing sectors to see if the pattern is uniform across different sectors or is specific for certain sectors since our sampling in this research was not stratified.

References

- Aharoni, Y. (1966). *The Foreign Investment Decision Process*, Boston: Harvard University.
- Allison, G. T. (1971). *Essence of Decision*, Little Brown and Co, Boston.
- African Development Bank (ADB), Annual Report, 2005.
- African Development Bank (ADB), Annual Report, 2005.
- Barney, J. B. (1986). "Strategic factor markets: expectations, hick and business strategy", *Management Science*, Vol.32 (10) 123-141.
- Barnitt, W. J. and Roudinelli, D. A. (2000). "Small firms' motivations for exporting: to earn and learn". *Journal of Small Business, Management* Vol.10: 1-14.
- Baronchelli, G. and Cassia, F. (2008). "Internationalisation of the firm". Global conference on Business and Economics, Florence, Italy.
- Beneki, C.C, Papastathopoulos, A. and Tsagris, M. (2011). "The influence of web-based Enterprises System on SME's internationalization process", *International Bulletin of Business Administration*, Issue 12.
- Blackburn, R. and Jemings, P. (1996). *Small firm's contribution to economic regenerations*, Paul Chagnan Publishing, London.
- Bonarceosi, S.S (1992). "On the relationship between firm size and export intensity". *Journal of International Business*, Vol.23.605-635.
- Calof, J.L. (1994). "The relationship between firm size and export behavior revisited". *Journal of Business Studies*, 25 (2).367-387.
- Camara, F.J.L. and Simoes, V.C (2008). Social networks as driver of internationalization patterns. A case of Fish exports, Mimeo.
- Cant, M., Gerbel-Nel, C. and Kotze, T. (2003). *Marketing Research*, Claremont: Cateora, P. (2010). *International Business Management*, McGraw Hill.
- Cavasgil, S. T. and Naor, J. (1987). "Firm and management characteristics as discriminations of export marketing activity". *Journal of Business Research*, 15 (3).221-235.
- Cavusgil, S.T. and J. Naor (1987) "Firm and management characteristics as discriminators of Export marketing activity". *Journal of Business Research*, Vol.15. 221-235.
- Cavusgil, S.T. and Nevin, J.R (1981) "Internal determinants of export marketing behavior: An empirical investigation". *Journal of Marketing Research*, Vol. 18.114-119.
- Chelliah, S. et al, (2010). "The moderating effect of the firm size: Internationalisation of Small and medium enterprises (SMEs) in the manufacturing Sector", *African Journal of Business Management*, 4 (14) pp 3096-3109.
- Collinson, S. and Houlden, J. (2005). "Decision-making and market orientation in the Internationalization process of small and medium sized Enterprises". *International Management Review*.
- Cooper, D.R. and Schindler (2003). *Business Research Methods*. Irwin: McGraw-Hill
- Crick, D. (2007). "SMEs Barriers Towards internationalization and assistance requirement in The UK". *Journal of Small Business and Entrepreneurship*, Vol. 20 (3).233-244.
- Danielle, J.H. and Vankranenburg, H. (2005). "Intellectual Property rights and the Governance of intellectual R&D Partnerships". *Journal of International Business Studies*, Vol. 36 (2).156-174.
- Dhanaraj, C.A (2003). "Resource based approach to the study of export performance". *Journal of Small Business Management*, 41 (3) pp 242-261.
- Douglas, S. P. And Perlmutter, r H. (1973). "Guidelines for developing International Marketing Strategies". *Journal of Marketing*, Vol. 37. 14-23.
- EFIC (2008). *Global Readiness Index-national results report*, April.
- Fourcade, C. (2002). Le territoire comme atout des processus d'internationalisation des PME: concept de milieu internationalisant, in actes du XVIIIème colloque de l'ASRDLF, Trois-Rivieres, Que'bec.

- Government of Zimbabwe: Industrial Development Policy (2011-2015). [On-line], available, <http://www.zimtrade.co.zw/> accessed 21/12/2012.
- Government of Zimbabwe: ZimTrade Report on Balance of Payment. [On-line], <http://www.zimtrade.co.zw/> accessed 6/07/2013.
- Harveston, P. D. et al (2000). "Internationalization of bone global and gradual globalizing Firms; the impact of the manager". *Advances in competitive Research*, 8 (1) 92-99.
- Hash, I. and Krasniqi, B.A. (2011). "Entrepreneurship and SME growth: evidence from advanced and laggard transition economies". *International Journal of Entrepreneurial Behaviour and Research*, 17 (5). 456-487.
- Hashim. M. K and Wafa, S. A. (2002). Small to medium sized enterprises in Malaysia Development issue Prentice Hall, Eagle wood Cliffs N J.
- Hashim, F. (2012) "Challenges for the internationalization of SMEs and the role of Government". *Journal of International Business and Economy*, 4 (3). 67-89.
- Hitt, M. et al, (2000) "Partner selection in emerging and developed market contexts; Resource-based organizational perspectives", *Academy of Management Journal*, Vol.143 (3). 444-467.
- Hutchinson, K. (2006). "The internationalization of small to medium retail firms: towards a Conceptual Framework." *Journal of Marketing Management*, 21.149-179.
- Johanson, J. and Mattson, G.L (1988) Internationalisation in industrial systems: a networkApproach, Croom Helm, London
- Krejcie, R.V and Morgan, D.W (1970). "Determining sample size for Research Activities". *Educational and Psychological Measurement*, Vol.30. 607-610.
- Kauffmann, C. (2005). *African Development Bank and OECD Development Centre Report*, African Economic Outlook, 2004-2005.
- Knight, G. A. (2001). "Entrepreneurship & strategy in the international SME". *Journal of International Management*, 7 (3) pp.155-172.
- Kohli, A. K. and Jarwoski, B. J. (1990). "Market orientation; the construct, research Propositions and managerial implications". *Journal of Marketing*, Vol.54.1-8.
- Laghcaoui, S (2011) "SME Internationalisation: an analysis with the concept of resources and Competences". *Journal of Innovation Economics*, 4(3). 77-92
- Lefebvre, E. and Lefebvre, L.A. and Prefontain, L, (1999). The role of technological Capabilities in internationalization of R&D intensive SMEs, Proceedings of the 32nd Hawaii International Conference on System Sciences.
- Lloyd-Reason, L. (2004). "Internationalisation process, SMEs and transitional Economies: A four country perspective". *International Journal of Entrepreneurship and Innovation Management*, Vol. 5:4. 206-226.
- Lopez, N.V (2007). "Export barriers and strategic grouping". *Journal of Global Marketing*, (2).17-29.
- Lu, J.W and Beamish, P.W (2001) "The internationalization and performance of SME's", *Strategic Mix Journal*, 2 (23). 123-145.
- Lu, J.W. and Beamish P.W. (2002). "Internationalisation and growth of SMEs". *Strategic Management Journal*, 22 (67). 469-487.
- Makhija, M. And Stewart, A. C. (2002). "The effect of national context on perceptions of risk: A comparison of planned versus free market managers". *Journal of international business studies* 33 (4). 737-758.
- Mankova, T. S. et al, (2002). "Internationalization of small firms". *Journal of international Small Businesses*, 20 (1). 9-31.

- Mason, M. and Pauluzzo, R. (2008). "Small business Entrepreneurship and the internal Determinants of International Behaviour". 8th Global conference on Business Economics- Florence Italy.
- Mathews, S. and Healy, M. (2006). "From garage to global: The internet's influence on International market growth: An Australian SME perspective." International Council for Small Business 51st World Conference, Queensland University of Technology.
- McDougall (2004). "International Entrepreneurship: the intersection of two research parts", *Journal of Small Strategic Management Journal Business Management*, Vol. 43(5). 902-909.
- McDougall, P., S. Shane and Oviat, B. (1996). "New venture internationalisation, Strategic Change and Performance: A follow up study". *Journal of Business Venturing*, 11 (1). 23-40.
- Mohammad, A.B. and Kumar, D.M (2012). "Internationalisation factors and entrepreneurial Perception", *Far East Journal of Psychology and Business*, 1 (6).19-33
- Montgomery, C.A and Wernfelt, B. (1991) "The link between resources and type of Diversification: theory and evidence", *Strategic Management Journal*, 12 (1). 33-48.
- Naidu, G.M. and Rao, T.R. (1993). "Public Sector promotion of exports: A needs based Approach". *Journal of Business Research*, Vol. 27.85-101.
- Narula, R. (2004) "R & D collaboration by SMEs: new opportunities and limitations in the face of globalization". *Technovation*, 24 (2). 153-161
- Ngwenya, T. and Ndlovu, N. (2003). "Linking SMEs to sources of credit: The performance of Microfinance institutions in Zimbabwe, [On-line], available at: <http://www.ilo.org/public/English/employees>. Accessed 23/12/12.
- Nummela, N. et al (2004). "A global mindset; a pre-requisite for successful Internationalization". *Canadian Journal of Administrative Sciences* 2 (1). 51-64
- Nummela, N. (2002). "Change in SME internationalization: A network perspective". Paper Presented at the 28th EIBA conference, Turku School of Economics, Athens, Greece, 8-12 December.
- OECD (1997) 'Globalisation and Small and Medium Enterprises (SMEs)', Paris.
- OECD (2006) "Encouraging the internationalization of SMEs", OECD, Paris.
- OECD (2008) 'Enhancing the role of SMEs in global value chains', Paris organizations for Economic cooperation and development (OECD) Publishing.
- OECD (2009) "Top barriers and drivers to SME internationalization". Report by OECD Working Party on SMEs and Entrepreneurship, OECD Publishing.
- OECD (2010) "SME Entrepreneurship and International Marketing". OECD, Paris.
- Ogbueh, A. O. and Longfellow, T. A. (1994). "Perceptions of US manufacturing SMEs concerning exporting: A comparison based on export experiences". *Journal of small Business Management*, 10:37-43.
- Olson, D., Blomskvisk, M., Dergard, J. and Jonsson, C. (2004). Accounting and Entrepreneurship: A review and discussion of the scientific literature. Presentation paper at the 4th Asia-pacific Interdisciplinary Research in Accounting Conference, 4-6 July 2004, Singapore.
- Onkelinx, J. and Sleuwagen, L. (2008). Internationalisation of SMEs, Brussels.
- Oviat, B.M., McDougall, P.P. and Patricia, P. (1994). "Toward a theory of International New Ventures", *Journal of International Business*, Vol. 25 (1).45-64.
- Papulova, E. and Papulova, Z. (2006) "Competitive strategy and competitive advantage of Small and midsized manufacturing enterprises in Slovakia", E-Leaders Practice. Pretoria: Unisa Press.
- Rajesh, K. et al, (2008). "Strategy development by SMEs for competitiveness: A Review", *International Journal*, 15 (5). 525-547
- Reserve Bank of Zimbabwe (RBZ), Annual Report, 2005.

- Reserve Bank of Zimbabwe (RBZ), Annual Report, 2005.
- Ratten, V., Dana, L.P., Han, M. and Welpel, I. (2007). "Internationalisation of SMEs", *International Journal of Entrepreneurship and Small Business*, 4 (3). 111-124.
- Reid, S. D. (1981). "The decision-maker and export entry and expansion". *Journal of International Business* (full; 101-112)
- Reuber, A. R. And Fisher, E. (1997). "The influence of the management team's international experience on the internationalization behaviour of SMEs". *Journal of International Business Studies*, Vol. 28 pp.807-825.
- Reynolds, A. (2007). "Building institutional capacities beyond politics. Making trade support Institutions effective". World export development forum, Switzerland.
- Rossou, J. and Stanle, D. R. (1987). *Managing export entry and expansion: Concept and Practice*. Praeger Publishing, NY.
- Rundh, B. (2007). "International Marketing behavior amongst exporting firms". *European Journal of Marketing*, 41:1/2 .181-198.
- Sibanda, O. (2004). An assessment of the contribution of SMEs to the manufacturing sector in small urban centres of Zimbabwe: A case of SMEs in Bindura Town, *Masters in Philosophy Thesis*, University of Zimbabwe.
- Small Enterprise Development (SEDCO) of Zimbabwe, 2010. www.sedco.co.zw. (Accessed 21/12/12.
- Smith, D. et al, (2002). "Manager's perception of export barriers: A cross-cultural perspective of service firms". *Journal of transnational Management*, 12 (1), 51-68.
- Storey, D. (1994). *Understanding the Small Business sector*, Routledge, London.
- Tambunan, T. (2006). *Export performance of Indonesia's SMEs*, University of Trisakti, Indonesia.
- Todd, P.R. and Javulgi, G.R (2007). "Internationalisation of SME in India: Fostering Entrepreneurship by leveraging information technology". *International Journal of Emerging Markets*, .2 (2).66-180.
- Torkkeli, L.Puumalainen, K. Saarenket, S. and Kuivalainen, O. (2012). "The effect of network competence and environmental hostility on the internationalization of SMEs". *Journal of International Entrepreneurship*, 10 (1). 25-49.
- Uhlenbruck K et al (2003). "Organizational transformation in transiting economics: resource-Based and organizational learning perspective". *Journal of Management studies*, 40 (20).257-282.
- UPS (2007) Business Monitor. www.pressroom.com/pressreleases/current/ accessed 5 March 2008.
- Vivekanandan, K. and Rajendran, R. (2006). "Export Marketing and the World Wide Web: Perceptions of export barriers among Firupur knitwear Apparel exporters, an empirical analysis". *Journal of Electronic Commerce Research*, 7 (1). 27-40.
- Weinerfelt, B. (1984). "A resource-based view of the firm". *Strategic Management Journal*, Vol.5. 171-180.
- Welch, L. and Luostarinen, R. (1988). "Internationalisation-evolution of a concept", *Journal of General Management*, 14 (2).34-55.
- Westhead, P. and Storey, D.J.(1994). *An assessment of firms located on and off Science Parks In the United Kingdom*, HMSO, London.
- Wiedershern-Paul, F. et al (1978). "Pre-export activity; the first step in internationalization". *Journal of International Business studies*, 9 (1).47-58.
- Wood, V. R.and Rokbertson, K. R. (1997). "Strategic orientation and export success: An Empirical study". *International Marketing Review*, 14 (6).424-444.
- Xiong, M. H. et al (2006). "A DSS approach to managing customer enquiry stage". *International Journal of Production Economics*, 103 (1). 332-346.
- Zimbabwe National Chamber of Commerce (ZNCC), Annual report, 2009.

Zimbabwe National Chamber of Commerce (ZNCC), Annual report, 2010.

Zimbabwe National Chamber of Commerce (ZNCC), Annual report, 2011.

Zimstats, Annual report, 2011

Zindeya, S., Roberts-Lombard, M. and Herbert, G (2008). An empirical investigation into the factors affecting the performance of SMEs in the manufacturing sector of Harare, Zimbabwe. *Masters Thesis*, University of Fort Hare, South Africa.

Appendix

Appendix A: Country initiative to support SMEs

Country	Programme
Canada	Export Development Canada (EDC) provides a range of financing, insurance and bonding solutions to Canadian SME exporters including working capital and pre-shipment financing and masters accounts receivable guarantees
Czech Republic	Government offers long-term soft loans to exporters.
Finland	The Finnish Ministry of trade and Industry provides financing and guarantees to support SMEs working capital needs and internationalisation efforts
Germany	The Government provides credit guarantee schemes, Hermes cover, for SME exports.
Greece	The Export guarantee organisation covers Greek exporters and foreign buyers of Greek exports against commercial and political risks of non-payment
Italy	The Ministry of Foreign Trade provides insurance and financing schemes for export activities, including soft loans
Japan	Provides export credit insurance of SME's receivables. This insurance is used as collateral for bank loans.
Sweden	The Swedish Export Credit Corporation (SECC) grants export credits at subsidised and concessionary rates to SMEs
UK	The Export Credit Guarantee Department provides insurance to UK exporters against non-payment by their overseas buyers and guarantees bank loans to facilitate the provision of finance to overseas buyer of UK goods and services
USA	The Small Business Administration (SBA) and Export-Import Bank provides backing for working capital loans aimed at enabling small business exporters to fulfil export contract Also offers credit to overseas buyers of USA goods.
Brazil	Apex-Brazil, an independent agency linked to the Ministry of Development, Industry and Foreign Trade, provide financial support to SMEs
Chile	Government provides pre- and post shipment credits and insurance to exporters.
Hong Kong	The Hong Kong Credit Insurance Corporation offers a loan guarantee scheme for SMEs.
India	EXIM Bank offers direct financial assistance, term finance for expansion of production Capacity for exports, export development and pre-shipment financing.
Mexico	Government provides export credit guarantee scheme for all small businesses.
South Africa	The Export-Credit Guarantee Scheme provides substantial export credit insurance to SMEs. The Export Marketing and Investment Assistance (EMIA) offers exporters financial assistance for cost involved in developing export markets, pre-shipping financing and credit financing of exporters of Capital reduced roads. Private sector merchant banks also offer credits at reduced rates

Source: OECD (2009)

Appendix B: Relationship between size of SME and internationalisation

Manufacturing sector	Number of employees					Total
	0-10	11-20	21-49	40-99	≥100	
Food and beverages	4	2	3	2	3	14
Metal fabrication	7	5	1	1	1	15
Electrical and Electronics	6	3	3	2	0	14
Chemical and pharmaceuticals	8	1	1	0	0	10
Non-metallic minerals	2	1	0	0	0	3
Paper and paper products	0	1	1	1	0	3
Textile and leather	8	6	1	1	1	17
Electrical Engineering	4	2	1	1	0	8
Plastic and rubber	2	2	4	1	1	10
Motor industry	4	5	4	0	1	14
Wood and wood products	4	1	1	0	1	7
Other						
Number of SMEs that internationalised	49	29	20	9	8	115
% of firms that internationalised	43%	25%	17%	8.00%	7.00%	
Correlation coefficient			-0.8184			

Appendix C

Table 3: Relationship between SME age and internationalisation

Manufacturing sector	Firm age				Total
	0-10	11-20	21-49	≥50	
Food and beverages	6	3	2	3	14
Metal fabrication	11	1	2	1	15
Electrical and electronics	7	5	2	0	14
Chemical and pharmaceuticals	3	6	1	0	10
Non-metallic minerals	1	2	0	0	3
Paper and paper products	1	0	0	2	3
Textile and leather	10	4	3	0	17
Electrical & Electronics	5	2	1	0	8
Plastic and rubber	4	4	2	0	10
Motor industry	4	1	1	1	7
Wood and wood products	8	4	1	1	14
Other					
Number of firms that internationalised	60	32	15	8	115
% of firms that internationalised	52%	28.00%	13%	7.00%	
Correlation coefficient			-0.955		

Appendix D

Table 3: SME financial resources and SMEs internationalisation.

		Turnover/000 USD				
Manufacturing sector		100	101-200	201-500	501-830	Total
Food and beverages		5	1	0	8	14
Metal fabrication		6	4	3	2	15
Electricals and electronics		6	2	5	1	14
Chemical and pharmaceuticals		6	3	1	0	10
Non-metallic minerals		2	1	0	0	3
Paper and paper products		0	0	1	2	3
Textile and leather		9	4	2	2	17
Electrical Engineering		1	2	3	2	8
Plastic and rubber		5	2	0	3	10
Wood and wood products		3	4	4	3	14
Motor industry		5	1	1	0	7
Other						
Total						
Number that internationalised		48	24	20	23	115
% of firms that internationalised		42%	21%	17%	20%	
Correlation coefficient				0.4067		

Appendix E: Age of owner/ manager and internationalisation

		Age of owner/manager					
Manufacturing sector		≤20	21-30	31-40	41-50	≥100	Total
Food and beverages		0	2	2	6	4	14
Metal fabrication		0	2	9	3	1	15
Electrical and electronics		0	4	6	3	1	14
Chemical and pharmaceuticals		0	1	5	3	1	10
Non-metallic minerals		0	0	0	2	1	3
Paper and paper products		1	0	0	0	2	3
Textile and leather		0	3	3	7	4	17
Electrical Engineering		1	1	3	2	1	8
Plastic and rubber		0	0	2	1	7	10
Motor industry		0	1	4	5	4	14
Wood and wood products		1	1	2	2	2	7
Number that internationalised		3	15	36	34	28	115
% of firms that internationalised		2.50%	13%	31%	29.50%	24%	
Correlation coefficient				0.5074			

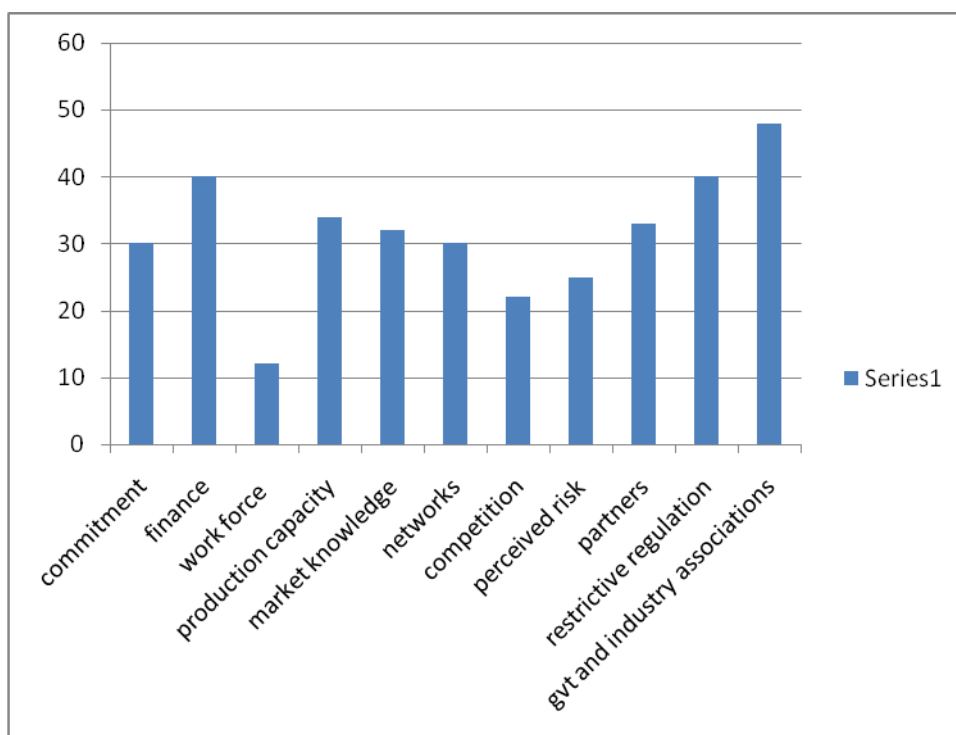
Appendix F: Educational qualifications of owner managers and internationalisation.

Manufacturing sector	Educational Qualifications			
	Certificate	Diploma	Graduate degree	Post grad
Food and beverages		5	2	7
Metal fabrication		8	2	1
Chemical and pharmaceuticals	2	6	7	6
Non-metallic minerals	2	9	7	1
Paper and paper products	1	0	2	2
Textile and leather	1	9	5	5
Plastic and rubber	1	3	3	3
Motor Industry	0	5	0	2
Wood and wood products	0	8	1	6
Other				
Total	7	53	32	23

Appendix G: Other SME, managerial and environmental factors affecting SME internationalization.

Factor	Ranking				
	strongly disagree	disagree	not sure	agree	strongly agree
	1	2	3	4	5
Management commitment to internationalisation	13	15	18	38	31
	11%	13%	16%	33%	27%
Passion for international markets	16	15	17	40	27
	13%	13%	15%	35%	23%
Owner/manager takes risk	24	16	20	32	33
	20%	13%	18%	29%	29%
Enough international market information	11	12	25	36	31
	10%	10%	22%	32%	27%
International networks with suppliers, distributors	12	15	13	35	40
	10%	13%	11%	30%	35%
Knowledge of regulations in international markets	15	18	25	35	22
	13%		22%	30%	19%
Company has budget for international operations	20	31	19	30	15
	18%	27%	16%	26%	13%
Employee experience in international markets	13	23	23	36	20
	11%	20%	20%	32%	18%
Owner/manager attends workshops on internationalisation	21	23	34	20	17
	18%	20%	30%	18%	15%
Owner/ manager has technical capabilities	17	21	18	32	22
	15%	18%	16%	29%	19%
Positive attitude to internationalisation	12	15	23	28	37

Appendix H: Factors inhibiting SME internationalization.



Appendix I: Sources of funds and internationalisation

Manufacturing sector	Sources of funds					Other	Total
	Own	Bank loan	Gvt grants	FDI			
Food and beverages	6	6	1		1	14	
Metal fabrication	12	2	0	0	1	15	
Electrical and electronics	7	3	2	0	2	14	
Chemical and pharmaceuticals	9	1	0	0	0	10	
Non-metallic minerals	2	1	0	0	0	3	
Paper and paper products	2	1	0	0	0	3	
Textile and leather	8	7	1	0	1	17	
Electrical Engineering	6	2	0	0	0	8	
Plastic and rubber	8	2	0	0	0	10	
Motor Industry	10	2	0	0	2	14	
Wood and wood products	4	2	0	0	1	7	
Other							
Total							
Number of SMEs that internationalised	74	29	4	0	8	115	
% of firms that internationalised	64%	25%	3.40%	0	7.60%		