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Barriers to internationalization: A study of small and medium enterprises in India

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Abstract Small and medium enterprises (SMEs) play a significant role in the growth of the economy. Many SMEs have set up activities beyond their home markets, and their role is more important in contributing to future growth. They are confronted with international competition and forced to compete in international markets. In this study, authors have categorized obstacles to firm internalization as internal and external barriers. The three dimensions of external barriers include governmental and economic political/legal barriers, procedural, and currency barriers, and task and socio-cultural barriers. The internal barriers considered for the purpose of the study were informational barrier, managerial barriers, financial barriers, and marketing barriers. Authors have used adapted scale from previous researches in these domains. Database accumulated the SMEs that were involved in manufacturing activities in the state of Rajasthan, India. The measurement model is a confirmatory factor analysis. The measures used within this study were within the acceptable levels supporting the reliability of the constructs. The analysis of the data revealed that there was moderate correlation between the external and internal factors. Within the external factors, procedural and currency barriers showed the highest obstacle for SMEs in their pursuit for internationalization followed by task and socio-cultural factors. Results specified that the entrepreneurs were not able to handle and manage foreign exchange fluctuations due to their lack of knowledge in this field.

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Abstrait Petites et moyennes entreprises (PME) jouent un rôle important dans la croissance de l'économie. Beaucoup de PME ont mis en place des activités au-delà de leurs marchés domestiques et leur rôle est plus important en contribuant à la croissance future. Ils sont confrontés à la concurrence internationale et obligés de rivaliser sur les marchés internationaux. Dans cette étude, les auteurs ont classé les obstacles à raffermir internalization des obstacles internes et externes. Les trois dimensions de barrières extérieures comprend barrières gouvernementales et économiques, politiques/juridiques, procédurales et barrières de change et des tâches et les barrières socioculturelles. Les barrières internes, considérées comme le but de l'étude étaient barrière informationnelle, barrières managériales, obstacles financiers, et les barrières de marketing. Auteurs ont utilisé échelle adaptée de précédentes recherches dans ces domaines. Base de données accumule des PME qui ont été impliqués dans des activités de fabrication dans l'État du Rajasthan, en Inde. Le modèle de mesure est une analyse factorielle confirmatoire. Les mesures utilisées dans cette étude étaient dans les niveaux acceptables de soutien de la fiabilité des constructions. L'analyse des données a révélé qu'il y avait corrélation modérée entre les facteurs internes et externes. Dans les facteurs externes, les obstacles de procédure et de change ont montré le plus grand obstacle pour les PME dans leur poursuite de l'internationalisation, suivie par la tâche et les facteurs socio-culturels. Résultats précisé que les entrepreneurs ne sont pas en mesure de traiter et de gérer les fluctuations de change en raison de leur manque de connaissances dans ce domaine.

Keywords Small medium enterprises · Internal/external barrier · Internationalization · Economy · Entrepreneur

Mots-clés Petites et moyennes entreprises · Interne/externe barrière · l'internationalisation · l'économie · l'Entrepreneur

Summary Highlights

Contributions: Results specified that the entrepreneurs were not able to handle and manage foreign exchange fluctuations due to their lack of knowledge in this field. On the managerial front, the SMEs are finding it difficult to staff their representative office in foreign countries.

Purpose/research methodology: The study examines the effect of the internal and external SMEs internationalization barriers in the state of Rajasthan, India. The sample size of the study was 327. A measurement model is a confirmatory factor analysis.

Results/findings: The analysis of the data revealed that there was moderate correlation between the external and internal factors. Within the external factors, procedural and currency barriers showed the highest obstacle for SMEs in their pursuit for internationalization followed by task and socio-cultural factors. In the same way, authors have reported that the language is the huge entry barrier for the local entrepreneurs.

Limitations: Major limitations of the study include the following: first, a database accumulated the SMEs that were involved in manufacturing activities in the state of Rajasthan, India. Second, our sample focuses on small firms from different sectors, i.e., gems, jewelry, textiles, handicrafts, natural stones, marble blocks, food, agro products, hand tools, engineering, and chemical products.

Practical implication and recommendation: The findings support our expectation that the various SMEs internationalization barriers (internal and external) will differently trigger the attitude and behaviors relevant to the SMEs managers and owners who are helpful in dealing with those barriers in the future, resulting in different outcomes. Moreover, our findings suggest that policy makers should emphasize on the government added program for SMEs internationalization process. In order to overcome issues of the currency barrier, there are no fixed rules about which currency to use, but host usually prefer invoicing in their local currency.

Theoretical implications and recommendations: The findings reveal culture and language as major barriers to SME internationalization. SME managers should undergo a rigorous language and culture training through private and public initiatives to overcome this barrier. MSME-Development Institutes shall be able to cater to this need by designing and implementing language and culture training modules to the exporting SMEs. Industry associations can collaborate with institutions like IGNOU–School of Foreign Languages that have pan-India presence to facilitate their members with necessary skills.

Policy recommendations: Indian SMEs policy makers have an ongoing interest in how to best influence small firm international growth and in how firms with growth potential can be identified to maximize the value of policy intervention. However, the present study suggests that small firms with specific resources, such as prior international experience (exporting), have a greater ability to pursue strong growth internationalization by venturing into multiple countries at a high scale.

Introduction

Internationalization of firm was seen as an important issue for the globalized economy (Kauppinen and Juho 2012). However, it is the outward movement and international operations of a firm (Zeng et al. 2008), which encompasses strong challenge that firms have to face today (Calabrò and Mussolino 2013). Correspondingly, Yamakawa et al. (2008) consider internationalization as the outcome of dynamic interaction between organizations and institutions. Likewise, Ruzzier et al. (2006) claimed internationalization as "the process of mobilising, accumulating, and developing resource stocks for international activities." In the course of the last few decades' internationalization as a phenomenon are researched by many scholars from different points of view (Korsakienė and Tvaronavičienė 2012) in India and abroad. This leads to increase in attention placed on the internationalization of small and medium enterprises (SMEs) and results in extraordinarily competitive environment for developed and developing nations, which facilitate to compete in this globalized era. A report published by the European commission (2007) on firm internationalization indicated an increase in an average of global trade by 6 % since 1990, faster than the global gross domestic product (GDP). Many, countries have implemented policies to increase international activities of SMEs and to boost the economic growth of the nation. Authors deliberated on the internationalization process (Nitu and Feder 2010; Rialp et al. 2005) that these studies examined the different reasons for internationalization that includes motivation for international expansion, the mode of entry they had implemented, etc. Small firms are becoming international and over the last decades have begun as a need for a business success (Hyari et al. 2012; Saixing et al. 2009). In the same way, Kuada (2006) stated that the firm became a stronger player in its domestic market by increasing its involvement in the foreign markets.

The body of literature, which has investigated small-firm international growth includes (Kuada 2006; Etemad 2004) and the studies revealed that, small-firm international growth leads to national prosperity for individual organizations. This signifies that the government in the provision of trade helps to address international support requirements. In 2009, Organisation for Economic Co-operation and Development (OECD 2005, 2009) specified that export is the most common foreign market entry mode for these firms. Likewise, Kazem and Van Der Heijden (2006) stated and perceived export strategy as a vehicle for growth and enhanced profitability for SMEs. However, the traditional internationalization process approach continues to be relevant and important in understanding the international expansion of SMEs (Zahra 2005). Many SMEs have set up activities beyond their home markets and their role is more important in contributing to the future growth. They are playing a significant role in the growth of the economy and confronted with international competition and forced to compete in international markets. The growth in numbers of SMEs internationalization facilitated the structural changes in world markets, technologies, institutional constraints, and consumers' preferences. This leads to risen the modern communication and transportation technologies, the increasing importance of science as a basis of R&D, and the globalization of both businesses and individual consumers (Buckley 2009; Knight 2001).

SMEs in India

In Indian context, small and medium enterprise sector has made a phenomenal contribution to the Indian economy. India economic reform in 1991, lessening import restrictions, promotes the growth of trade to improve India's economic standing within the international community. The contribution of the SMEs to the growth and development of the Indian economy has multiplied over the last 10 years (Javalgi et al. 2011). In India, the growing demand of a global brand and services is due to rapid expansion of commerce into the international market (Javalgi and Ramsey 2001). As per Shridhar (2006), the small business sector has become more important as they emerge as a dominant force affecting the growth of national economies. In India, 1998 to 2008, SMEs accounted for 38–40 % of the country's total exports (Tambunan 2009). Today, SMEs are the backbone of Indian economy, accounted for a significant part of international trade. SMEs contribute 17 % to GDP and accounted for 40 % of total exports, contributing 45 % of manufacturing output, and employing 40 % of India's

Table 1 Production growth of micro, small, and medium enterprises (MSME) sector in India (1996–1997 to 2007–2008 and 2010–2011 to 2013–2014)

Year	%age Growth rate of MSME sector	%age Growth rate of industrial sector
1996–1997	11.32	6.08
1997–1998	8.43	6.65
1998–1999	7.70	4.09
1999–2000	8.16	6.68
2000–2001	8.23	4.97
2001–2002	6.08	2.71
2002–2003	8.68	5.70
2003–2004	9.64	6.90
2004–2005	10.88	8.40
2005–2006	12.32	8.10
2006–2007	12.60	11.51
2007–2008(P)	13.00	8.00
2010–2011	12.23	–
2011–2012	18.64	–
2012–2013	13.91	–
2013–2014	11.45	–

Source: Ministry of Commerce & Industry, Govt. of India. (10334) & Lok Sabha Unstarred Question No. 1110, dated on 02.03.2015 (http://www.indiastat.com/table/industries/18/microsmallandmediumenterprises/259/458796/data.aspx (accessed on 08-10-2015))

Note: *EM-II; *P* projected

workforce[1]. It is the second largest employer of human resources after agriculture (Javalgi et al. 2011). The increase in the demand for products exported from India, the availability of work force not being an issue, and the government purchasing exclusively from Indian SMEs are the reasons for growth in India (Javalgi et al. 2011). To meet the new business challenges in the competitive global business environment, it is crucial for the Indian Government to help and propose an SME development plan to help the SMEs (Tables 1 and 2).

Research context

The rationale for considering SMEs internationalization in Indian context as a part of the present study is that, SMEs internationalization is an area of critical interest for Indian policy makers and practitioners, to frame policy that supports the promotion of SMEs exporting activity and directed towards enabling established firms to overcome internationalization barriers. The SMEs internationalization process is interesting from a number of perspectives. First, there is a very little published research (Pradhan and

[1] http://articles.economictimes.indiatimes.com/2013-06-09/news/39834857_1_smes-workforce-small-and-medium-enterprises (accessed on 09-03-2015)

Table 2 Performance of SSI/MSME units, employment, investments and gross output

Year	Total working enterprise (in Lakh)	Employment (in Lakh)	Market value of fixed assets (in Crore)	Gross output (in Crore)
2001–2002	105.21	249.33	154,349.00	282,270.00
2002–2003	109.49	260.21	162,317.00	314,850.00
2003–2004	113.95	271.42	170,219.00	364,547.00
2004–2005	118.59	282.57	178,699.00	429,796.00
2005–2006	123.42	294.91	188,113.00	497,842.00
2006–2007	361.76[a]	805.23[a]	868,543.79[b]	1,351,383.45[b]
2007–2008[c]	377.37	842.23	917,437.46	1,435,179.26
2008–2009[c]	393.70	881.14	971,407.49	1,524,234.83
2009–2010[c]	410.82	922.19	1,029,331.46	1,619,355.53
2010–2011[c]	428.77	965.69	1,094,893.42	1,721,553.42
2011–2012[c]	447.73	1012.59	1,176,939.36	1,834,332.05
2013–2014[c]	467.56	1061.52	1,269,338.02	1,945,634.21

Source: Annual report MSME 2013-2014 (Annual Report 2013-2014 MSME (http://www.indiastat.com/table/economy/8/09.industrialperformance/767286/767353/data.aspx)).

[a] Including activities of wholesale/retail trade, legal, education and social services, hotel and restaurants, transports, and storage and warehousing (except cold storage) for which data are extracted Economic Census 2005, Central Statistics Office, M/o SPI

[b] Estimated on the basis of per enterprises value obtained from sample survey of unregistered sector for activities wholesale/retail trade, legal, education and social services, hotel and restaurants, transports, and storage and warehousing(except cold storage) which are excluded from Fourth All India Census of MSME, unregistered sector

[c] Projected

Das 2013; Javalgi et al. 2011; Tambunan 2009) on the subject to the extent covering SMEs internationalization in Indian context. Second, Indian economy is driven by SMEs, and therefore, governments are keen to grow this sector and expand its export potential. Third, from a micro perspective, SMEs in India are growing at a fast rate and its contribution is significant to the nation's development. Indian policy makers and practitioners viewed SMEs as a vehicle of innovation, employment, and social and cultural regeneration. Government policy and support instruments within the India as well as the behavior of SMEs themselves toward foreign business have improved significantly. In particular, India experiencing balance of payment deficits, and in this connection, government have to increase the international activities of their SMEs in order to boost economic growth cut unemployment and create potential multinational enterprise in the future. These changes (increased global competition, the shift in the blend and level of the workforce) have led to an increasing level of concentration of policy makers, practitioners, and academicians.

The above-mentioned scenario has led to an increased concentration of SMEs internationalization research in Indian context. Although SMEs internationalization has attracted substantial attention in the literature, only a few empirical studies (Pradhan and Das 2013, 2015; Javalgi et al. 2011; Tambunan 2009; Shridhar 2006; Javalgi and Ramsey 2001) have been undertaken in Indian context. We believe it is important to advance in this direction and provide further empirical evidence for the same. Therefore, in the present paper, the main objectives are to explore the SMEs internationalization barrier (internal and external) and to confirm the measurement model by using confirmatory factor analysis in Indian context with respect to SMEs manufacturing unit located in the state of Rajasthan. The purpose of the measurement model is to specify the relationships between observed variables and latent variables (Fig. 1). This would be the novel contribution to the research in the area of SMEs internationalization in Indian context. This paper contributes to the literature by theoretically and empirically investigating such measurement model, thereby addressing the research gaps reviewed from literature.

Literature review

SMEs internationalization

Internationalization considered being among most important motivations (Hussin et al. 2013) for SMEs to compete with the big world players. Yamakawa et al. (2008) deliberated internationalization as the "outcome of the dynamic interaction between organisations and institutions". Likewise, Mathews (2006) revealed internationalization as "the process of the firm's becoming integrated in international economic activities." Comprehensive literature has covered the topic SMEs internationalization (Pradhan and Das 2015; Ruzzier and Ruzzier 2015; Calabrò and Mussolino 2013; Hyari et al. 2012; Korsakienė and Tvaronavičienė 2012; Cardoza and Fornes 2011; Singh et al. 2010; Crick and Barr 2007; Ruzzier et al. 2006). Several authors (Singh et al. 2010; Malhotra et al. 2003; Cecora 2000) have noted an increase in the international activity of SMEs around the world and many SMEs are globalizing at an earlier age in comparison to earlier decades (Singh et al. 2010; Andersson et al. 2004). Likewise, Jones (1999) analyzed the international expansion as a holistic process of small, innovative high-tech firms by analyzing cross-border links chronologically. SMEs internationalization reduces market risks by making the acquisition of market knowledge more efficient. However, the acquisition of new knowledge and skills leads firms to accelerate their growth and internationalize their products and services (Prashantham 2008). Wide-ranging SMEs internationalization literature has shown a positive relationship between nations export activity and economic growth in developing countries. Many authors (Rutashobya and Jaensson 2004; Johansson and Nilsson 1997) have suggested export as critical to the development activity of these economies. The primary reasons for the internationalization are associated with the firms' motivations related to growth and financial viability (London 2010).

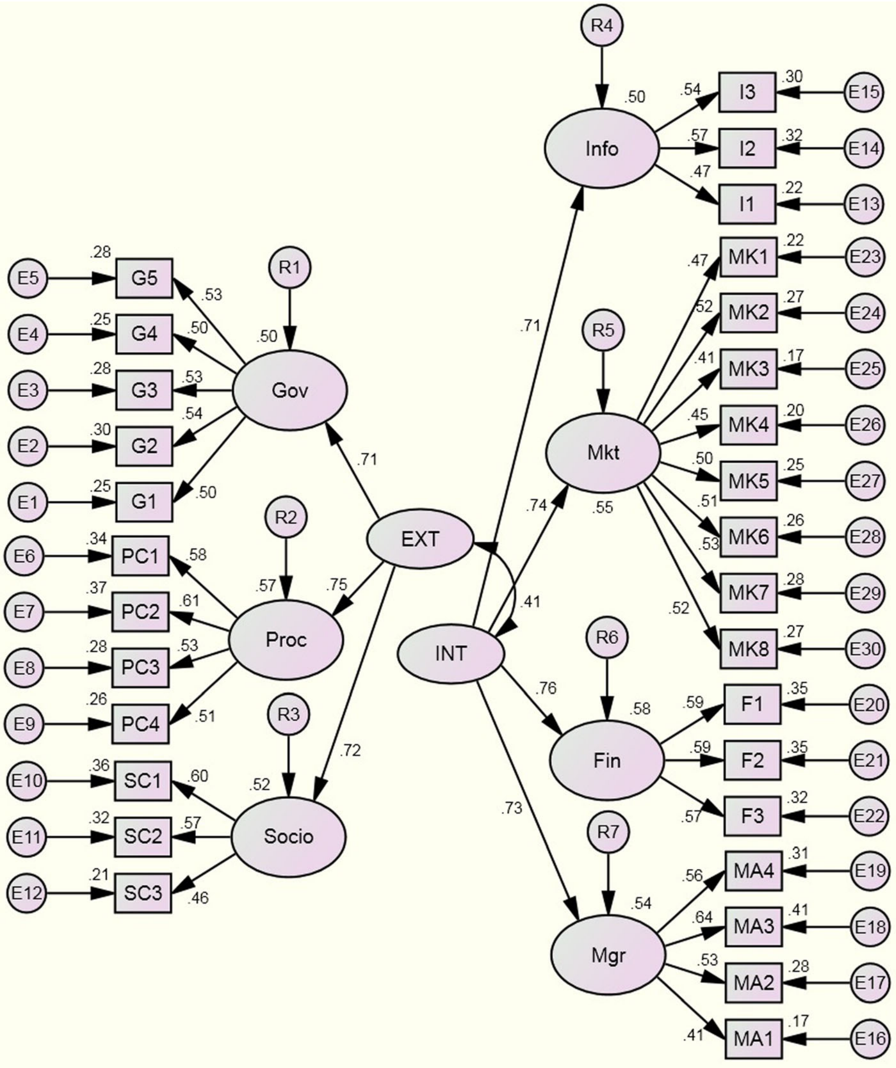

Fig. 1 Confirmatory factor analysis

One of the theoretical frameworks that explain internationalization of firms is the resource-based view (RBV). The RBV framework postulates that firms are a collection of various tangible and intangible resources. Over the years, researchers have studied the various resources used by SMEs in their internationalization process, including existing knowledge base (Yamakawa et al. 2013), technological knowhow (Karadeniz and Göçer 2007), human capital (Alon et al. 2013), social capital (Prashantham and Dhanaraj 2010), reputation (Yamakawa et al. 2013), etc. By leveraging on these resources, firms can attain a sustainable competitive advantage. However, SMEs from emerging economies do not have adequate resources for internationalization. Similarly, the lack of formal and informal institutions that helps firms to access capital, labor, and distribution channels (Khanna and Palepu 2000) are weak in emerging economies.

These firms have to operate in a political and economic environment that is unstable and risky (Gaur et al. 2014). To overcome these shortages, firms in emerging economy may instead seek resources through networks and business group affiliations (Huang and Renyong 2014). Networking theory of firm internationalization explains this behavior of SMEs. Through co-operation between competitors, firms are able to increase revenue and reduce competition (Fuller and Porter 1986). Because of complementary resources and capabilities, firms can coordinate their scarce resources through efficient use, thereby reducing cost and bringing in economies of scale (Contractor and Lorange 1988). Through a network of affiliates, firms are able to gain knowledge of foreign markets, required resources, and capabilities to attain competitive advantage abroad (Ahmad and Kitchen 2008). Researchers have explored the effect of networks in studying the internationalization of SMEs and have concluded that business relationships with various parties have helped the firms in access external resources and valuable information (Chetty and Holm 2000; Fuller-Love and Thomas 2004). Hence, it is evident from the discussion that SME's internationalization phenomenon cannot be explained through a single theoretical framework and thus researchers have tied to integrate various theoretical approaches for its complete understanding. This is more so relevant in the context of emerging economy.

While the SMEs internationalization concepts are typically knowledge based and create value networks and processes, in market niches, and are able to react quickly to market changes due to their size and products. It is important means as well as helpful for the economic growth and prosperity (Cerrato and Piva 2012) and an important strategic choice for small-firm growth (Skrt and Antoncic 2004). In addition, Thai and Chong (2013) stated that the process is influenced by their current experience than the earlier experience because of frequent shifts in the institutional environment. The process found to be significant for maximization of business opportunities (Hyari et al. 2012; Saixing et al. 2009; Rundh 2007). It is dependent on the entrepreneur's management ability, foreign language skills, and the extent to which e-commerce, adopted in the firm (Rana and Sorensen 2013). Earlier work acknowledges that internationalization consists of entrepreneurial action (international business opportunity) and learning from the market and detailed understanding of the process of social learning in internationalization is still lacking (Kauppinen and Juho 2012). Correspondingly, Coelho and Matias (2010) specified the economic success of developing countries and the internationalization of their economy depends on the performance of SMEs. The developing countries embracing SMEs as a vehicle for social and economic development due to the forces of globalization (Singh et al. 2010; Arinaitwe 2006; Fletcher 2004). With regard to the geographical scope of SMEs internationalization, firms with global market potential and the global mindset of the manager are prerequisites for successful internationalization in terms of increased growth and performance. Therefore, firm with global vision from the beginning is able to exhibit this internationalization activity in key territories with a high intensity of focus leading to rapid growth (Gabriellson et al. 2008). Nummela et al. (2004) described this global vision or mindset as a personal international market orientation or global mindset from the outset.

Consequently, firms that utilized strong international networks experienced an accelerated internationalization process, and the network spurs a pull effect on the firms towards internationalization. Shamsuddoha et al. (2009) conducted their study to examine the effects of government aid programs on internationalization of SMEs from an Asian developing nation and concluded that government export aid programs play an important role in the SMEs' internationalization process. Government aid program acts as an "external change agent" for successful international activities of the corporate sector and plays a key role in stimulating international business activities of domestic firms (Shamsuddoha et al. 2009; Czinkota and Ronkainen 2007). The knowledge-based economic policy should consider as one of the most effective policies for fostering SME internationalization sustainable development (Tangkittipaporn and Songkroh 2009). Internationalization knowledge influences the internationalization degree of the firm (Basly 2007). It affects the performance of the firm, and changes can measure in terms of turnover and/or profit development, as well as by the export ratio (Nummela et al. 2006). Lu and Beamish (2001) provided complete details on the relationship between internationalization and performance of SMEs. However, Kirby and Kaiser (2003 and Lu and Beamish (2001) focused on inter-firm cooperation and stated a possibility for going international. The most common goal attributed to internationalization is achieving firm growth and improving a firm's profitability.

Exporting

Exporting serves as a platform for future international expansions and the first step to entering international markets (Lu and Beamish 2001). Chelliah et al. (2010) revealed that SMEs have a stronger tendency towards exporting activities than large-sized firms. However, it regarded as a desirable activity that can contribute significantly to the firm's growth and profit. Premise of studies that narrate internationalization of SMEs (D'Angelo et al. 2013; Sousa et al. 2008; Leonidou et al. 2002) concluded exporting as a dominant entry mode into international markets, and the first success in exporting activities motivates small firms to internationalize in the later periods (Burpitt and Rondinelli 2000). Likewise, Kamakura et al. (2012) suggest that SMEs withdraw from exporting process and re-enter the foreign market after a period when the terms and conditions of the market changes. Lu and Beamish (2001) suggest exporting as a vehicle to help with fast access to foreign markets and the opportunity to gain valuable international experience. Bello et al. (2003) stated most SMEs internationalize via exporting, and it helps in developing a relationship with various types of foreign intermediaries, such as independent distributors, importing agents, and sales representatives. It is very helpful to the SMEs because of low risk and low resource requirements and provides growth opportunities, challenges, and complexities of entering the international markets. In exporting, many SMEs rely on intermediaries to achieve intended goals in foreign markets (Kuhlmeier and Knight 2010). Exporting helps the firms to set up direct and open communication with their intermediaries to help overcome differences in culture, language, and other areas (Leonidou et al. 2002). Similarly, Ural (2009) explains that the growing liberalization, firm integration, and competition in the world economies are the main reasons for exporting. The relationship that the exporter develops with its foreign intermediary is an important source of competitive advantage (Kuhlmeier and Knight 2010). Likewise, Leonidou et al. 2010 and Majocchi et al. 2005 indicated that exporting is the cheapest, simplest, and quickest way to enter foreign markets and achieve internationalization. In addition, exporting in diverse international market is helpful to meet market power and gains from the diversification of revenues. These processes shows that exporting activities should have a positive impact on firm profitability. By exporting, firm does not have to manage the complexities of establishing a foreign subsidiary (Lu and Beamish 2006) and helpful for the firm in faster access of a foreign market because of its existing production facilities than building new facilities in the foreign market. By broadening markets and creating room for expansion, exporting to foreign markets considered an essential path for firm growth (Lu and Beamish 2006). O'Cass and Julian (2003) emphasized on the role of company director and asserted the key element in promoting the exporting activities of the SMEs. Exporting contributes to firm growth and profitability and providing experiences which help firms develop capabilities for more comprehensive international expansion strategies and act as a stepping stone for further firm growth (Lu and Beamish 2006). Government has to take active part in the process to encourage SMEs internationalization by subcontracting, exporting, and collaborating through joint ventures, licensing, or franchising (Mori 2005).

For firms in emerging markets, the process of internationalization takes place in phases (Jansson 2007). Literature explains that firms in these countries commit themselves to the gradual learning process, which happens only by doing. The main catalysts of internationalization process are market knowledge, networking abilities, technical expertise, and financial strength (Oviatt and McDougall 2005). However, countries like India lack the necessary technical capability and financial resources to move rapidly through the stages of internationalization (Tigre 2003). Indian SMEs also lack the networking abilities that hinder their migration to more complex value chain spanning several countries. Most manufacturing firms from developing countries, like India, are still in the nascent state of international expansion and are struck with occasional exporting through intermediaries or sometimes through own representatives. This encourages the researchers to investigate the barriers to internationalization of exporting SMEs in the Indian context.

Barriers encountered by SMEs in international business

Research on barrier encountered in the SMEs internationalization process is attracting growing interest (Cerrato and Piva 2012; Sommer 2010). The bodies of literature that discuss SMEs facing exporting barriers in developing countries show that there has been very few research undertaken on this subject (Hyari et al. 2012; Altintas et al. 2007; Tesfom and Lutz 2006). Premise of the study relates to SMEs internationalization barriers (Hyari et al. 2012; Cardoza and Fornes 2011; Crick and Barr 2007). Leonidou (2004) defines that internationalization barrier as barrier to the national and international expansion of SMEs is those hindering this internationalization process. As per Katsikeas and Morgan (1994), SMEs internationalization barriers categorized into four groups that includes external, operational, internal, and informational barriers while division of export barriers into internal factors (export strategy, managers' perceptions and attitudes, the firms' characteristics and competencies) and external factors (industry characteristics, and foreign and domestic market characteristics) are identified by Zou and Stan (1998). Likewise, Leonidou (2000) argued that the lack of managerial, human, and financial resources is the main barrier that hinders the firm from initiating or increasing its export activity. Additionally, Rutashobya and Jaensson (2004) emphasized the number of internationalization barriers, including financial resources, management and marketing skills, currency risk management for exporting, knowledge, lack of foreign language knowledge, cultural experience, poor knowledge of foreign market information, fear of foreign market risks, and previous export experience. Besides, Gupta et al. (2005) stated that SMEs in India face problems in obtaining the financial capital necessary to become competitive and achieve economic growth. Moreover, Raymond et al. (2001 and Zafarullah et al. (1998) identified a lack of marketing capabilities, while Nakos et al. (1998, Zafarullah et al. (1998, and Badrinath (1994) argue that the lack of government support services was a major barrier and shortage of finance is stressed by Holland (2004 and Etemad (2004). The limited resources and management skills, language, and cultural differences become problematic for SMEs internationalization (Freeman and Reid 2006; Fletcher 2004). While, perceived distance between home and foreign markets as SMEs internationalization barriers stressed by Johanson and Vahlne (2003) and difficult foreign market operation cause problem emphasized by Ellis (2000). Suarez-Ortega (2003) emphasized on the lack of financial resources as internal resource barriers for SMEs internationalization. SMEs confronted with greater difficulties in accessing international markets than larger scale firms (Smallbone and Wyer 2000). Gilmore and Carson (1999) stated limited resources, constraints in finance, time, management, and market knowledge while Jones (1999) argued that of price control in foreign markets due to limited production capacity, and a high dependency upon a relatively smaller customer base can be the most notable limitation in an SME's internationalization. Likewise, Lin and Chaney (2007 and Gilmore and Carson (1999) identified managerial time to deal with export less time spent on management and planning, and control systems are automatically inefficient. Andersson and Florén (2011) also suggest that the manager within a small firm can have an important effect on the firm's international development. Similarly, Karagozoglu and Lindell (1998) pointed out that the cultural distance is a significant barrier for SMEs to international partnerships. In addition, Tangkittipaporn and Songkroh (2009) quote government export policy as external barriers. However, barriers to internationalization relating to management include lack of vision, fear of losing control, lack of knowledge; the company comprises the transfer of retail concept overseas, lack of resources, lack of consolidation in domestic market; and the external environment involves legislation, currency, cultural differences, and logistics are pointed by Hutchinson et al. (2009). Pinho and Martins (2010) stated that the lack of knowledge of potential markets, lack of qualified export personnel, lack of technical suitability, degree of competition in the sector, lack of financial aid (governmental and financial institutions), and lack of qualified human resources as the main export barriers. In 2004, European commission identified the most often cited barrier by SMEs as the high cost of the internationalization process (these costs include market analysis, cost, purchasing, legal consulting services, translation of documents, adaptation of products to foreign markets, besides the higher business and financial risk incurred). In addition, OECD in 2005 identified political risk, international compatibility issue, corruption, rules of law issue, and issue related to intellectual property protection are the main barriers encountered by SMEs in international business. While the knowledge of foreign competitors, the experience of foreign cultures, language skills, and educational background are identified by Loyd-Reason et al. (2005). Acs et al. (1997) mentioned that SMEs have limited operations abroad due to the existence of entry barriers, which could be financial market imperfections or differences in legal systems, culture, and languages. External factors, such as non-tariff trade barriers, legal system, new regulations non-existent infrastructure system, modern highways, airports, or maritime services and the seaports are inefficient. Moreover, Lu and Beamish (2001) and McDougall and Oviatt (2000) concluded that SMEs internationalization process is likely to increase as the world becomes more integrated, as trade barriers decline, and as transportation and communication become more efficient. It is essential for the SMEs to make connections with other firm that helps them to access foreign market knowledge, needed resources, and capabilities, and assist them to reduce entry barriers (Senik et al. 2011).

It is worthwhile to note that although Leonidou (2004), Katsikeas and Morgan (1994) and many other scholars have explored various perceived barriers to exporting, the research still lacks an empirically tested theoretical base (Hyari et al. 2012).

Research methodology

The scale used for the study was adapted from the previous researches in this domain. The obstacles to firm internalization categorized as internal and external barriers. The three dimensions of external barriers (EXT) were measured using 12-items, 5-point Likert scale to assess the responses from the firms. The three dimensions of the present study were based on the conceptualization of EXT by Hyari et al. (2012), Crick and Barr (2007), Cardoza and Fornes (2011), and Korsakienė and Tvaronavičienė (2012). The dimensions are governmental and economic political/legal barriers (Gov), procedural, and currency barriers (Proc), and task and sociocultural barriers (Socio).

The internal barriers (INT) considered for the purpose of the study were measured using 18-items, 5-point Likert scale. Hyari et al. (2012) based the four dimensions of the study on the conceptualization of INT. The dimensions are informational barrier (Info), managerial barriers (Mgr), financial barriers (Fin), and marketing barriers (Mkt). The scale was further modified to suit the context of the present research from studies by Crick and Barr (2007), Cardoza and Fornes (2011), Korsakienė and Tvaronavičienė (2012), and Belso-Martinez (2005). The study used a 5-point Likert scale (strongly disagree to strongly agree) in the questionnaire keeping in mind its popularity and appropriateness for the study. Details of the items and their labels are shown in Table 6 (see Appendix).

For the research purpose, a database accumulated of the SMEs that were involved in manufacturing activities in the state of Rajasthan, India. Although there was an effort to make the sampling frame as exhaustive as possible but as many of the units not registered with any chamber of commerce or other trade associations, tracing them down for the purpose of data collection was a difficult task. Based on the convenience and suitability of the study, an appropriate sampling frame was prepared from records available with Federation of Rajasthan Exporters (FORE), Jewelers Association (Jaipur), Centre for Development of Stones (CDOS), and Rajasthan Chamber of Commerce and Industry (RCCI). During sampling design, the entire population was divided into subgroups or strata based on industry type. The different industry segments identified were gems and jewelry, textiles, handicrafts, natural stones and marble blocks, food and agro products, hand tools and engineering, and chemical products. Thus, the stratifications increased homogeneity within each stratum and increased heterogeneity between each strata. Next, in each of the subgroups, a simple random sampling was conducted and the final sample was selected. This helped reduce biases in the sample selection. The respondents were the owner/managers operating out of Rajasthan. During the data screening process, 29 samples were omitted as they were found to be incomplete and unsuitable for analysis. Therefore, the workable sample was reduced to 327. Trained field investigators were engaged for data collection. This method of data collection had its own benefits, as the response rate (number of useable responses) was very high.

Data analysis

The measurement model is a confirmatory factor analysis (CFA). The purpose of the measurement model is to specify the relationships between observed variables and latent variables.

Higher order factor analysis enforces a more parsimonious structure to account for the interrelationships among the factors established by the lower order CFA (Brown 2006). The goal of a higher order factor analysis is to provide a more parsimonious account for the correlations among the lower order factors.

The model fit was assessed using CMIN/DF, goodness-of-fit index (GFI; Jöreskog and Sörbom 1984), the comparative fit index (CFI; Bentler 1990), root mean square error of approximation (RMSEA; Browne and Cudeck, 1993), Tucker-Lewis coefficient (TLI; Bollen 1989), adjusted goodness-of-fit index (AGFI), and root mean square residual (RMR). The threshold for CMIN/DF should be less than 3.0 (Carmines and McIver 1981; Hu and Bentler 1999) or less than 2.0 in a more restrictive sense (Byrne 1989). Values of GFI, AGFI, TLI, and CFI should be over 0.90. Moreover, RMSEA should be lower than 0.05 to indicate a close fit of the model in relation to the degree of freedom. When all or most of the fit indices did not indicate an acceptable level of fit, the model modified until the fit indices achieved an acceptable level.

Second-order CFA was applied to establish the measurement of the constructs in the proposed model. Before starting with CFA, the data file should be screened for multivariate normality. Prerequisite to the assessment of multivariate normality is the need to check for univariate normality, as the latter is a necessary, although not sufficient, condition for multivariate normality (DeCarlo 1997). Table 3 presents the assessment of normality. West et al. (1995) recommend concern if skewness and kurtosis is greater than 2 and 7, respectively. Kurtosis is usually a greater concern than skewness. Using this value of 7 as a benchmark, a review of the kurtosis values reported in the table reveals no item to be substantially kurtotic. In addition, skewness was within the limits ($-1.25 < \text{skewness} < 2.0$). Hence, there was no concern regarding univariate normality. Next, multivariate normality assessed using Mardia's (1970) test. Bentler (2005) has suggested that values >5.00 are indicative of data that are non-normally distributed. In the study, the z-statistic of 1.216 was highly suggestive of multivariate normality in the sample.

Next is to assess unidimensionality of the proposed model. Firstly, the variables specified to measure a proposed underlying factor should have relatively high-standardized loadings on that factor, typically 0.50 or higher (Hair et al. 2006). However, values between 0.50 and 0.30 (Holmes-Smith 2001) are acceptable. Secondly, the estimated correlation between the factors should not be greater than 0.85 (Bagozzi and Fornell 1982; Kline 2005). These two considerations made in conjunction with the overall goodness-of-fit indices to suggest acceptance of unidimensionality for the proposed model.

Table 3 Descriptive statistics (test of normality)

Variable	Skew	c.r.	Kurtosis	c.r.
MK8	−.131	−.971	−1.193	−4.405
MK7	−.269	−1.984	−.906	−3.345
MK6	−.268	−1.981	−1.092	−4.029
MK5	−.233	−1.717	−.933	−3.443
MK4	−.319	−2.355	−.678	−2.504
MK3	−.295	−2.179	−.928	−3.425
MK2	−.349	−2.575	−1.074	−3.963
MK1	−.297	−2.191	−1.042	−3.845
F3	−.309	−2.280	−.907	−3.349
F2	−.255	−1.886	−.931	−3.438
F1	−.316	−2.336	−.928	−3.425
MA1	−.303	−2.234	−.826	−3.048
MA2	−.195	−1.437	−.971	−3.586
MA3	−.265	−1.957	−.987	−3.642
MA4	−.202	−1.492	−1.001	−3.695
I1	−.196	−1.450	−1.133	−4.181
I2	−.160	−1.182	−1.130	−4.173
I3	−.164	−1.209	−1.012	−3.735
SC1	−.170	−1.254	−1.157	−4.272
SC2	−.198	−1.462	−.988	−3.648
SC3	−.234	−1.729	−.890	−3.286
PC1	−.168	−1.244	−.979	−3.614
PC2	−.374	−2.764	−.970	−3.580
PC3	−.398	−2.942	−.736	−2.718
PC4	−.337	−2.485	−.956	−3.528
G5	−.316	−2.331	−.974	−3.595
G4	−.228	−1.681	−1.064	−3.927
G3	−.460	−3.397	−.909	−3.355
G2	−.317	−2.340	−.832	−3.072
G1	−.355	−2.622	−.938	−3.461
Multivariate			5.893	1.216

The proposed measurement model showed that all regression weights were significant ($p < 0.001$). All the variable items measuring the first-order constructs showed a standardized regression weights of 0.41 and above. The absolute fit statistics showed a chi-square of 454.910 with 397 (*df*) was significant ($p = 0.023$) [CMIN/DF = 1.146] with RMSEA = 0.021, RMR = 0.079, CFI = 0.956, TLI = 0.952, GFI = 0.921, and AGFI = 0.907, suggesting that the model was fitting the data adequately. Moreover, covariance among the second-order factors was significant ($p = 0.002$). In addition, correlation among the constructs (0.413) was below the threshold limit, which confirmed discriminant validity. All observed variables loaded to their corresponding first-order construct. As there were no cross loadings of variables unidimensionality of the model was established.

For testing convergent validity, composite reliability (CR) of the model along with the average variance extracted (AVE) needs to be checked (Table 4). These calculated using the formula given below:

Composite reliability = sum of SRW estimate squared/(sum of SRW estimate squared + sum of error variance) (Bacon et al. 1995)

Average variance extracted = sum of squared SRW estimate/number of variable items (Fornell and Larcker 1981)

Bagozzi and Yi (1988) recommended that CR should be equal to or greater than 0.60, and AVE should be equal to or greater than 0.50. However, in the study, in many cases, the above was not achieved. This could be explained by the existence of several observed variables with lower factor loadings. Although it might be an indicator of weak convergent reliability, the previous researchers argued that it is possible to have a poor variance extracted, yet have high construct validity (Bagozzi 1991; Hair et al. 2006). However, the CR and AVE calculated for the second-order construct was satisfying the minimum cut off set in theory. A high CR and AVE for a second-order construct justified for a low CR and AVE for the first-order constructs. Hence, it could be concluded that the measures used within this study were within the acceptable levels supporting the reliability of the constructs.

To establish discriminant validity, the variance shared between a construct and any other construct in the model need to be assessed (Fornell et al. 1982). This done by comparing the square root of the average variance extracted for a given construct with the correlations between that construct and all other constructs (Table 5). If the square roots of the AVEs were greater than the off-diagonal elements in the corresponding rows and columns, it suggested that the given construct more strongly correlated with its indicators than with the other constructs in the model; and discriminant validity achieved. In table, four diagonal elements in the correlation matrix were replaced by the square roots of the average variance extracted. The values suggested that discriminant validity was present at the construct level in the measurement model.

Table 4 Calculation for composite reliability (CR) and average variance extracted (AVE)

Factors	Composite reliability	Average variance extracted
Gov	0.53874	0.27226
Proc	0.52849	0.30968
Socio	0.43489	0.29791
Info	0.40634	0.28119
Mgr	0.51069	0.29333
Fin	0.49825	0.33654
Mkt	0.60351	0.23961
EXT	0.89763	0.52935
INT	0.90891	0.54349

Table 5 Discriminant validity for the measurement model

	EXT	INT
EXT	(0.727)	
INT	0.431	(0.737)

Discussion

The analysis of the data revealed that there was moderate correlation between the external and internal factors. Within the external factors, procedural and currency barriers showed the highest obstacle for SMEs in their pursuit for internationalization followed by task and socio-cultural factors. Results specified that the entrepreneurs were not able to handle and manage foreign exchange fluctuations due to their lack of knowledge in this field. Due to their lack of understanding the foreign currency movement, which becomes even complex due to involvement of number of foreign currencies they have to deal with, the entrepreneurs have to bear exchange losses is many transactions. Many a times they are not able to collect payment on time from the middlemen in the far off country adding to their anxiety and hence lower exposure in foreign trade. Although trade associations and ministries of state and federal government have certified many consultants and export agencies, yet, the entrepreneurs find the export documentation too cumbersome and complex to handle. This also adds as a barrier for SMEs trying to venture into international business.

On the socio-cultural front, language is huge entry barrier for the local entrepreneurs. Doing business in the international arena requires knowledge of basis local languages and dialects prevalent in those countries. This generally helps in better understanding of the customer needs and business processes. The lack of awareness about foreign language among SME owners is a hindrance for the firms to engage in international business effectively. Foreign markets, although very lucrative in view of the return they generate, are highly competitive. The local distributors, retailers, and customers are always in look out for cheaper products and services along with superior features. Given this fact, it becomes very difficult to satisfy the ever-increasing needs of the end users and the middlemen. This also acts a deterrent of the domestic SME players to venture in the foreign land with no clear idea of how to service the customer in a hyper competitive environment.

Within the internal factors, financing barriers, marketing barriers, and managerial barriers were the most prominent. Getting low cost capital from financial institutions has been always been a problem for the SME sector. These problems for SMEs persist for the export venture as well. In order to adhere to product quality, packaging requirement and distribution challenges high capital commitment are required. The financial institutions are not being able to cater to this higher capital requirement of the firms due to the latters' inexperience in international business activity. In addition, the financial institutions are skeptical of the firms' capability to hedge against foreign exchange risk and thus exposing their own portfolio into risky avenues (Cavusgil et al. 2014). Lead time for payment realization is also significantly higher as compared to domestic business. This leads to shortage of working capital needed for consistent export activity. Without backing from financial agencies during crisis situation acts a barrier for internationalization of Indian SMEs.

Second internal barrier for SME internationalization is due to factors relating to international marketing. SME entrepreneurs find it difficult to have an effective control on the middlemen. This factor could be attributed to language and cultural (national and business) challenges. In many situations, middlemen are the main representatives of the SMEs in the foreign land. Without an effective control on these important members of the downstream supply chain, the entrepreneurs develop a sense of distrust in them. This distrust early in the partnership does not help in developing a sustainable relationship between the associates, which is very important for business success. Moreover, several countries have their own testing laboratories for certifying products, which are imported there. As a statutory requirement goods imported in those countries have to certify by those labs to test product quality and other regional specific standards. The fees charged as well as the quality standards required by the rule of the land becomes too much to handle for small business owners. Entrepreneurs generally avoid those countries, which require mandatory product testing which thereby limit their expose to specific countries. Coupled with the above, higher transportation cost (including insurance, port charges, etc.) and insufficient warehousing facility in many developing/under-developed economies are restraining entrepreneurs to venture into international markets. Due to increased fuel and overhead cost, the shipper and container service providers are passing on the increased cost of operations to the customers. SMEs, which are already surviving on thin margins, are finding it difficult to sustain export operations due to these adversities.

On the managerial front, the SMEs are finding it difficult to staff their representative office in foreign countries. Entrepreneurs usually accomplish their daily domestic operations using hands-on approach to management. They take active participation in most of the firms' operations. This is not possible in an export venture. The lack of trust and finding reliable people to manage the overseas establishments (export office) in foreign countries becomes a challenge for them. Even if they are able to control the foreign operations from the home country, the lack of personal time and lack of experience in handling export operations become a challenge for the entrepreneurs. Overall, the barriers for internationalization are high for the Indian SMEs.

Conclusion

This paper offers a fresh approach to the literature by examining the SMEs internationalization in Indian context. Our analysis provides support for the two barriers (i.e. internal and external barriers) of internationalization of small firms. We advance previous studies (Pradhan and Das 2013; Javalgi et al. 2011; Tambunan 2009; Shridhar 2006; Javalgi and Ramsey 2001) by observing internationalization of small firms in Indian context, in particular in SMEs manufacturing unit. Based on our findings, we develop a new classification of SMEs internationalization barrier, i.e., internal and external barriers. On the external barrier front, we have found that the lack of awareness about foreign language among SME owners is a hindrance for the firms to engage in international business effectively. Simultaneously, our results specified that the entrepreneurs were not able to handle and manage foreign exchange fluctuations due to their lack of knowledge in this field and lack of their understanding the foreign currency movement (involvement of number of foreign currencies they have to deal with).

Similarly, with reference to financing barriers, marketing barriers and managerial barriers getting low cost capital from financial institutions have always been a problem for the SME sector. Because financial institutions are skeptical about SMEs capability to return back the loan amount to the parent institutions. This leads to shortage of capital for internationalization purpose. On the other hand, factor related to language and cultural (national and business) is also a big challenge for SMEs. This cultural and language barrier can be overcome by having middlemen (government have certified many consultants and export agencies) as a representative of the host countries to deal with the business activity.

However, as researchers continue to study the barriers to exporting and their alleviation in small and medium businesses in developed and developing countries, they are still to reach to a unified theoretical framework on the same (Narayanan 2015).

Managerial implication

This study contributes to literature by exploring and confirming the measurement model of SMEs internationalization in Indian context in several ways.

First, the findings support our expectation that the various SMEs internationalization barrier (internal and external) will differently triggers the attitude and behaviors relevant for SMEs managers and owners helpful in dealing with those barriers in the future, resulting in different outcomes. Second, our study includes three dimensions of external barriers (dimensions are Gov, Proc, and Socio) and the internal barrier (dimensions are Info, Mgr, Fin, and Mkt), and empirically assessed, there is synergy between the dimensions. As a result, the findings of the study translated into firm policy formulating activities.

The findings reveal culture and language as major barriers to SME internationalization. SME managers should undergo a rigorous language and culture training through private and public initiatives to overcome this barrier. MSME-Development Institutes shall be able to cater to this need by designing and implementing language and culture training modules to the exporting SMEs. Industry associations can collaborate with institutions like IGNOU–School of Foreign Languages that have pan-India presence to facilitate their members with necessary skills. To circumvent the lack of knowledge of international statutes and procedure, SME managers can engage with professional business service firms in foreign countries to facilitate exporting and selling of their products. These facilitating agencies can be accessed through government channels or through industry associations and can help in providing end-to-end solutions to the SMEs, including securing regulatory clearances, product and service marketing, media promotions, relationship management with distributors and retailers, etc. Network with business affiliates (peers and members in the supply chain) can also augment the exporting potential of the Indian SMEs. Looking into the importance of the SME sector in Indian economy, federal and state governments can institute special funds on public-private partnership model (similar to Yozma-Israel) to promote export activities. This can help the sector tide over financial constraints largely. In addition, private sector participation (through venture funds) could bring in much-needed knowledge of foreign exchange management to the SME managers in the country.

Sapienza et al. (2006) revealed that internationalization per se is a strategy for small firms' growth. Indian SMEs policy makers have an ongoing interest in how to best influence small firm international growth and in how firms with growth potential can be identified to maximize the value of policy intervention. However, the present study suggests that small firms with specific resources, such as prior international experience (exporting), have a greater ability to pursue strong growth internationalization by venturing into multiple countries at a high scale.

Limitation and future scope

As is the case for most empirical studies, several limitations apply to this study. First, a database accumulated of the SMEs that was involved in manufacturing activities in the state of Rajasthan, India. Second, our sample focuses on small firms from different sectors, i.e., gems, jewelry, textiles, handicrafts, natural stones, marble blocks, food, agro products, hand tools, engineering, and chemical products. As most studies, which observe many SMEs from different state, our research context contains specifics, which limit the representativeness of our study. Moreover, India is a relatively developing country, which offers rich internationalization opportunities to SMEs because small business sector has emerged as a dominant force affecting the growth of national economies (Shridhar 2006). It is the second largest employer of human resources, after agriculture (Javalgi et al. 2011). However, the future work done by considering SMEs manufacturing industries of different nature or service SMEs located in the other state of India.

Appendix

Table 6 Details of the items and their labels

SL. No.	Scale items	
A.	Governmental and economic political/legal barriers (Gov)	
	G1	Lack of government assistance and incentives
	G2	No clarity in domestic regulations for exports
	G3	Strict and complex foreign country rules and regulations
	G4	High tariff and non-tariff barriers restrict export activities
	G5	Political stability in foreign markets
B.	Procedural and currency barriers (Proc)	
	PC1	Currency exchange rate fluctuations
	PC2	Collection of payments from abroad is difficult
	PC3	Complexity of export documentations requirements
	PC4	Inadequate communications with overseas customers
C.	Task and sociocultural barriers (Socio)	

Table 6 (continued)

SL. No.	Scale items	
	SC1	Keen competition in export markets
	SC2	Language differences overseas
	SC3	Socio-cultural (religion, values, customs, attitude, etc.) differences overseas
D.	Informational barrier (Info)	
	I1	Insufficient information about overseas markets for company's product / services
	I2	Difficulty in identifying and contacting potential customers
	I3	Difficulties in gaining access to data sources to access possibilities that international offer
E.	Managerial barriers (Mgr)	
	MA1	Lack of managerial time to deal with exports
	MA2	Inadequate/untrained personal for exporting
	MA3	Difficult to find reliable representative abroad
	MA4	Lack of managerial and personnel time
F.	Financial barriers (Fin)	
	F1	High cost of capital to finance export
	F2	Lack of financial resource to finance exports
	F3	Difficult for companies to give credit to customer in international markets
G.	Marketing barriers (Mkt)	
	MK1	Difficulties in adapting export product design
	MK2	Difficulty in meeting export product quality/standards
	MK3	Lack of competitive price to customers in foreign markets
	MK4	Complexity of foreign distribution channels
	MK5	Companies does not have means to offer an adequate post sale service
	MK6	Difficult to exercise effective control on middlemen
	MK7	Difficulty in countries where company does not have adequate warehousing facility
	MK8	High transportation/shipping costs

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