

Differences between Indian Exporters and Non-Exporters of Engineering Consultancy Services

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Export of engineering consultancy services represents a small but growing portion of India's services exports. This paper seeks to understand major impediments that must be overcome to encourage more Indian professional services firms to enter foreign markets. It develops research propositions that may differentiate between exporters and non-exporters and empirically examines them through a survey of 167 Indian engineering consulting firms. Export motivations among exporters and different external support systems to help firms market their services in the international arena are also examined. Two-thirds of the firms surveyed were not exporting. It is found that exporting firms invest greater time and resources to develop international business relations with an eye on future business potential. Senior managers of exporting firms provide unique network connections through their personal / social contacts enabling the firm to exploit foreign business opportunities. Exporting firms are on an average larger, i.e. employ more number of professionals. It is also found that senior managers of exporting firms are positively inclined towards international activity and perceive lower barriers to exporting as compared to their non-exporting counterparts. Findings enhance knowledge about the key differences between exporters and non-exporters of knowledge intensive professional services like engineering consultancy.

Keywords: Consultancy; Engineering; Professional Service; Business Network.

Introduction

INDIA was the tenth largest exporter of services in the world in 2008 with its services export estimated at US\$104.2 billion and a share of 2.7 per cent in world services export (Reserve Bank of India, 2010).

Exports of architectural, engineering and other technical services were measured at US\$3.13 billion from April 2008 to March 2009 compared to exports of software services, estimated at US\$46.3 billion during the same period (Reserve Bank of India, 2010). Corresponding export figures from April 2007 to March 2008 were US\$3.09 billion for architectural, engineering and other technical services as compared to US\$40.30 billion for software services.

India has the single largest pool of engineering talent among emerging countries. According to a study by Booz Allen Hamilton for National Association of Software & Service Companies (2006) India accounts for 28 per cent of all the available engineering services outsourcing (ESO) and business process outsourcing (BPO) talent in low-cost countries. The next largest sources of low-cost supply, Russia and China, contribute only 11 and 10 per cent respectively. Despite the edge, India enjoys due to its large engineering talent pool, lower manpower cost, English language and IT capability, majority of engineering consultancy services firms are still not marketing their services internationally and the sector is under-represented in India's services export. There are only two Indian firms as compared to 22 Chinese firms listed in the "Top 200 International Design Firms in 2009", an annual list of international engineering design firms based on revenues from projects outside home country by Engineering News Record (2010).

It is important to understand the factors that deter some consultancy service firms from exporting whereas enable other firms to export their services, both from a research as well as a managerial perspective. This paper seeks to identify and understand major impediments that must be overcome to encourage more Indian professional services firms to enter foreign markets. The paper develops and empirically tests five research propositions that may differentiate exporters and non-exporters of engineering consultancy services. The research propositions have been developed based on extensive review of the services exporting literature including network theory of internationalization, influence of social networks in the internationalization of firms, managerial perceptions regarding exporting, barriers to exporting and firm characteristics. The paper also seeks to identify principal motivations to export among existing engineering consultancy exporters as well as rank the importance of certain external support systems that will help the engineering consultancy exporters market their services in the international arena.

Existing literature provides some factors that may distinguish between professional services exporters and non-exporters. These are *firm size* (Javalgi *et al.* 2003, Aaby and Slater 1989, Winsted and Patterson 1998, O'Farrell *et al.* 1998, Katsikeas 1994, Erramilli and Rao 1993); *managerial attitude towards exporting* (Javalgi *et al.* 2003, White *et al.* 1999, Winsted and Patterson 1998, Axinn 1998, Kedia and Chhokar 1986); *export stimuli* (Katsikeas 1996, Leonidou 1995, Katsikeas and Piercy 1993, Czinkota and Johnston 1981); *barriers to exporting* (Nguyen-Hong 2000, Winsted and Patterson 1998, Ramaswami and Yang 1990), etc. However, the above literature do not take into account the influence of firm's international business networks and social networks/personal relationships of firm's senior managers. Research directly addressing the differences between exporters and non-exporters of engineering consultancy services remains low (Winsted and Patterson, 1998). Also, existing literature do not report any India (or any other emerging market) specific research in this area.

As per Consultancy Development Centre (2008), the number of consultancy firms and domain experts in India is well over 6,000. The largest concentration of consultancy firms is in the four major cities: Delhi (25.7%) followed by Mumbai (25.5%), Chennai (12.1%) and Kolkata (9.1%). 68.3 per cent of the consultancy firms employ up to 10 technical professionals, 14.3 per cent employ 11 to 25 technical professionals and only 1.5 per cent employ more than 1,000 technical professionals.

Research Propositions

Establishing and Developing International Business Relations

A large amount of international activity is associated with networking because it involves building relationships with foreign intermediaries, customers, alliance partners, suppliers, government officials and so on. According to the network model of internationalization (Johanson and Mattsson 1987, 1993), firms internationalize through the establishment of business relationships in country networks that are new to the firm (international extension), through the development of relationships in those networks (penetration) and through connecting networks in different countries (international integration). Firms exploit their established network positions to gain entry into foreign markets.

The model assumes that firms are dependent on the resources controlled by others and access them through their position in the network. Establishing a position is time and resource consuming but determines future opportunities and constraints. Hence, Johanson and Mattsson (1988) describe the position of a firm in the network as a market asset. The network perspective views the market as a network of exchange relations between producers, suppliers, customers and competitors. These relations may serve very different intentions (Johanson and Mattsson, 1987): They may reduce the cost of production or transaction; contribute to the development of new knowledge and competencies; lead to at least partial control over an actor, serve as bridges to unrelated third actors, or help to mobilize partners against a third party.

The role of information and knowledge is important in the internationalization process. Use of business networks (Johanson and Vahlne, 1990) improves understanding of new markets and how to overcome the institutional and cultural barriers in order to conduct business there. If a firm is not involved in a network then it has little knowledge about actors, relations, structures and processes in it. Since a firm's main channel for learning about its network is through its partners, it has to interact with them to gain this knowledge (Andersson, 1997). Business networks provide access to various sources of information, thus offering more opportunities to learn than relying on knowledge from within the firm. According to Yli-Renko, Autio and Tontti (2000, p. 19), "the higher the level of a firm's external social capital, the higher is the amount and quality of market knowledge available to it".

In their study of New Zealand based engineering consulting firms, Coviello and Martin (1999) conclude that internationalization is heavily influenced by the firm's network of formal and informal relationships involving clients, competitors, colleagues, government, friends and so on. In their study of high-technology firms Coviello and Munro (1995) state "foreign market selection and entry initiatives emanate from opportunities created through network contacts, rather than solely from the strategic decisions of managers in the firm. These contacts may be formal (i.e. business-related) or informal (family, friends, etc.)". Visits to foreign markets, negotiations, and learning about foreign cultures provide experience and courage to initiate foreign business activities or relations that result in direct orders from foreign companies (Forsman,

Hinttu and Kock 2002, p. 4). It has been observed that foreign market opportunities are discovered in trade fairs where face-to-face encounters by individuals initiate the start of international business activities (Ellis 2000, p. 448) and provide information on the market and its competition (Chetty and Campbell-Hunt, 2000).

In a cross-national study of internationalizing firms Loane and Bell (2006) suggest “international growth takes place through the extension of the firm’s network through investment in network positions and the development of network relationships. Network development or building appears to have much more strategic intent than heretofore observed and this issue urgently requires further investigation”. They conclude “firms should recognize that network development must be an ongoing core activity that is firmly embedded in the firm’s overall internationalization strategy”.

Hence, it is expected that consultancy service firms that export their services will place greater emphasis (i.e. make greater effort and commit higher resources) on establishing and developing international business relationships as compared to the non-exporting firms.

Research Proposition 1: Emphasis placed on establishing and developing international business relations will differentiate between consultancy service exporters and non-exporters.

Social Networks and Personal Relationships

An important aspect is the role of social networks and personal relationships of the senior managers contributing to the internationalization process of the firm. Scholl (2006) acknowledges the role of personal relationships in the internationalization of firms. According to Scholl (2006, p. 22), social networks and personal relationships contribute to the process of internationalization in terms of access to privileged resources such as information on business opportunities and potential partners. In the search for new international business partners, decision-makers seek to avoid high search costs, due to uncertainties and complexity, and try to minimize these costs by relying on their personal network, which also seems to be “the line of least resistance” (Ellis 2000, p. 462).

Peng and Luo (2000) assert that managers within the focal firm translate their micro personal links with managers in other firms into

improved macro organizational performance, in this case international growth. Loane and Bell (2006) suggest “firms internalize new network connections by acquiring additional management team members who had particular network resources required by the firm”. Usually, senior managers have prior work experience in multinational corporations and leverage their personal contacts and experience to facilitate the firm’s entry into international markets (Axinn, 1988; Ellis, 2000).

In his study of management consulting firms Gluckler (2006) demonstrates that social networks are the most frequent cause of international market entry. Gluckler (2004) refers to three types of relational (foreign market) entry contexts for consulting firms: “the first being client following; second being business referrals by current or former employees; and the third type through the so-called piggybacking. In this case, consulting firms enter a market on the back of strategic partners and collaborators”. Hence, it is expected that when a firm gets a foreign consulting assignment, it is more likely as a result of referral by foreign business associates, individuals known to senior managers, past clients or employees.

Research Proposition 2: It is likely that when a firm gets a foreign consulting assignment, it is as a result of referral by foreign business associates, individuals known to senior managers, past clients or employees.

Firm Specific Factors

Previous research indicates that the probability of international activity increases with firm size (Aaby and Slater, 1989; Erramilli and Rao, 1993; Katsikeas, 1994). Resource theory is used to explain relationship between firm’s size and its internationalization (Aaby and Slater, 1989; Bonaccorsi, 1992). Aaby and Slater (1989) argue that international expansion requires a great deal of resource commitment by the expanding firm. They indicate that the larger a firm becomes, the greater its ability to effectively engage in export activity, and that larger firms appear to be better suited to absorb the risks associated with internationalization. O’Farrell, Wood and Zheng (1998) found that, as the resources (i.e. financial and human) of a service firm increased, its ability to absorb the risks associated with internationalization increased. Thus, human capital reduces a firm’s risk of failure through the increased probability of employing those with skills necessary to

internationalize. In a study of engineering consulting firms in the United States, Winsted and Patterson (1998) had found that service firm characteristics like size are associated with their propensity to export and that exporting firms in general were larger than the non-exporting firms. In their study Javalgi, Griffith and White (2003) found that firm size plays a critical role in influencing managerial attitude towards international activity.

Another firm characteristic – firm age (number of years in business) may have a bearing on export propensity of consulting service firms. Several studies have detected that older firms are more likely to export their goods or services abroad (Ali and Swiercz, 1991; Westhead, 1995; Burgel *et al.*, 2001). According to Samiee and Walters (1991) larger and older firms tend to have specialized managerial resources as well as make more effective use of economies of scale. Stage model theory of internationalization (Johanson and Vahlne 1977, 1990) suggests that older firms are likely to be more effective exporters, i.e. older the firm more successful it will be in the internationalization process. An examination of the accounting and management consulting industries supports this contention: firms that have been in business long enough to become well established domestically and who have many employees also tend to operate internationally (White, Griffith and Ryans: 1998). Thus both firm characteristics: firm size and age may differentiate between exporters and non-exporters of consulting services.

Research Proposition 3: Larger and older engineering consultancy service firms are more likely to be involved in foreign consulting assignments.

Managerial Perceptions towards Exporting

Previous research shows managerial attitudes and perceptions towards exporting affect the exporting decision. In her study of manufacturing firms, Axinn (1988) finds manager's attitudes towards operating internationally to be the single most significant indicator of firm's export performance. In an earlier study, Kedia and Chhokar (1986) also found that managerial attitudes towards exporting strongly correlate with the international performance of the firm. In a study of engineering consulting firms in the United States, Winsted and Patterson (1998) had found that managerial attitudinal factors discriminate between service exporters and non-exporters. White, Griffith and Ryans

(1999) had found that managerial attitude towards the international marketplace was a key discriminating variable differentiating exporting from non-exporting service firms. They suggest that, given lower capital requirement in the service industry, managerial attitude may play a stronger role in internationalization. Similarly, in their study Javalgi, Griffith and White (2003) found that service firm's management attitude positively relate to its international activity. Hence, it is expected:

Research Proposition 4: Managerial perceptions towards exporting will discriminate between consultancy services exporters and non-exporters.

Barriers to Exporting

Another area examined in the literature is perceived barriers to exporting. Ramaswami and Yang (1990) point out that there are four sources of export barriers that affect a firm's export performance: export knowledge, internal resource constraints, procedural barriers and exogenous variables. "Export knowledge" barriers refer to lack of information and knowledge about foreign markets and difficulties in identifying opportunities in foreign markets. "Internal resource constraints" refer to the need for a firm to possess a series of resources (like finance, manpower, etc.) in order for it to be able to initiate export activity. "Procedural barriers" refer to the obstacles pertaining to the export activity itself (e.g. documentation, non-tariff barriers, etc.). Finally, "exogenous barriers" refer to those variables that transcend the control of the exporting company such as competitors, foreign market political and financial risk, etc.

In his study *Restrictions on Trade in Professional Services*, Nguyen-Hong (2000) found that foreign barriers to establishment and ongoing operations are significant and positive determinants of the price-cost margins of engineering service firms. The results suggest that restrictions on foreign supply of engineering services tend to protect domestic firms from competition and directly raise business costs of foreign firms. These costs stem from qualification requirements, compulsory membership of professional bodies, and to a lesser extent from restrictions on incorporation.

In their study of engineering consulting firms in the United States, Winsted and Patterson (1998) have examined number of variables as perceived barriers to services exporting and point out that the perceived

level of these barriers serve as determinants of whether a service firm will export or not. They report that most of the barriers to exporting were perceived to be significantly greater obstacles by the non-exporters than by exporters. They also point out that foreign market knowledge and resource limitations are perceived to be the most significant barriers to exporting for such professional service firms. Hence, it is expected that non-exporting consultancy service firms will perceive these barriers to be significantly higher than consultancy service exporting firms.

Research Proposition 5: Perceived levels of barriers to exporting will differentiate between consultancy service exporters and non-exporters.

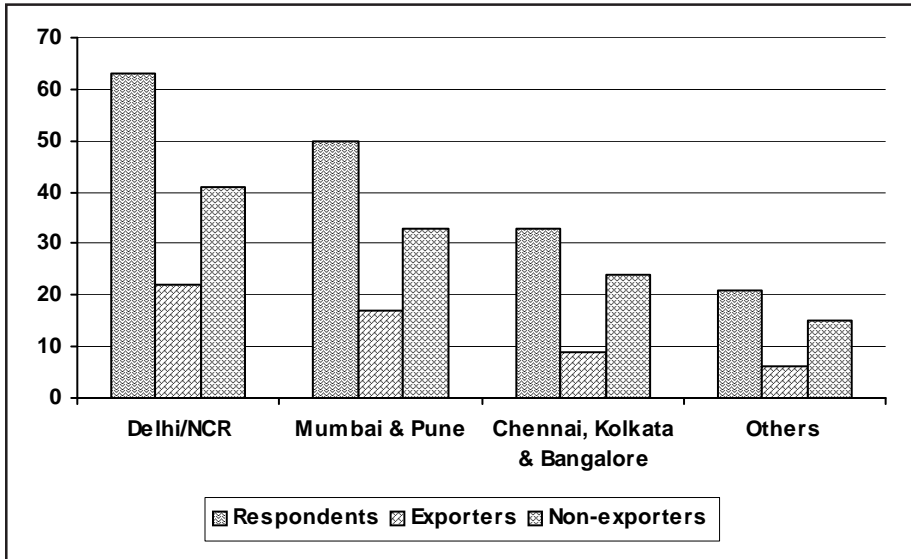
Method

The hypotheses developed were examined by studying engineering and industrial consulting firms in India. A survey questionnaire was mailed to the CEO/senior executive of engineering and industrial consulting firms in India with more than ten professional employees listed in the members directory of Consulting Engineers Association of India (CEAI), an apex body of Consulting Engineers in India (www.ceaindia.org) and Consultancy Development Centre, a non-profit registered society, supported by Department of Scientific & Industrial Research (DSIR) and Ministry of Science and Technology, Government of India (www.cdc.org.in).

A total of 350 questionnaires were mailed. This was followed up by telephone calls and personal meetings (for respondents in Delhi and Mumbai). 172 responses were received out of which 167 were usable. Responses were received from all throughout India: National Capital Region (Delhi, Gurgaon, NOIDA) 63; Mumbai & Pune 50; Chennai, Kolkata & Bangalore 33 and others 21 (see *Figure 1* for a description of the survey sample). Others include Hyderabad, Ahmedabad, Vadodra, Kanpur, Lucknow and Jaipur. The Kaiser-Meyer-Olkin (KMO) statistic was used to measure sampling adequacy. The overall KMO statistic was > 0.70 .

The questionnaire enquired about number of full time professionals employed, number of years in business, overseas consulting assignments in last two years, firm's emphasis on establishing & developing international business relations, influence

FIGURE 1
SURVEY SAMPLE DESCRIPTION



of social networks/personal relations on exports, perceptions towards exporting, barriers to exporting and domestic environment. Most of the questions were asked using five-point rating or bi-polar scales.

To examine each research proposition, factor analysis was used to group the measures appropriately for the situation being examined. Principal components factor analysis with varimax rotation was used for the extraction of factors, each consisting of items that load (factor loading > 0.5) on only one factor. Only factors with Eigenvalue > 1 and acceptable Cronbach's alpha coefficient (> 0.7) were retained. Factor means were examined to determine relative importance of the different factors.

Differences between exporters and non-exporters were explored, using multivariate analysis of variance (MANOVA) and *t*-tests where appropriate. MANOVA tests were used to compare the means of each factor to see which ones were significantly different between the two groups. Mean scores of each factor for the two groups (exporters and non-exporters) were also computed. Since five-point rating scales were used for each item in the survey, the calculated factor means scores also have the same range. MANOVA tests were used to see whether the groups of factors identified, all together, significantly differentiated

between the exporters and non-exporters for the situation being examined. Hotelling's Trace is the most common and traditional test when there are two groups formed by the independent variable (James and Maxwell, 1985). The larger the Hotelling's Trace, the more the given effect contributes to the model. Wilk's Lambda and Pillai's Trace are also reported in MANOVA analysis.

Results

Around one-third of the respondents (32.6%) had carried out three or more overseas consulting assignments in the last two years and hence considered as exporters in this study. Majority of the firms sampled (67.4%) were not exporting their consulting services. The different sectors served by the respondent firms were civil construction & infrastructure, manufacturing, energy, environment, transport, mining & metallurgy, etc. Some of respondent firms were multidisciplinary in nature, i.e. served various sectors. The preferred mode of export by respondent firms in order of importance was (i) achieving a temporary market presence through exporting key personnel (and know-how) on a term basis, (ii) provide services through overseas branch office, (iii) subcontractor for other organizations, and (iv) through joint ventures with foreign consulting firms. The exporting firms in the sample consisted of Indian private owned consulting firms; government owned/supported consulting firms; wholly owned subsidiaries of foreign consulting firms; and lastly, joint venture between Indian and foreign consulting firms. It is interesting to note that wholly owned subsidiaries of foreign consulting firms contribute around 35 per cent of exporting firms in the sample.

Establishing & Developing International Business Relations

To determine firm's emphasis on establishing & developing international business relations, respondents were asked to indicate on a five-point rating scale how often they carried out certain activities to establish and develop international business relations. The scale used was 1 = "never", 2 = "occasionally", 3 = "fairly many times", 4 = "very often" and 5 = "always".

Factor analysis provides two factors: (i) Effort, and (ii) Resource commitment made by firms. Table 1 provides a description of the factors like items included with factor loadings, per cent of variance

explained, alpha and sample means. Both factors have reliability of 0.86 and above. When ranked on the basis of mean scores of items included, the factor "Effort" has a higher mean score than the factor "Resource commitment".

MANOVA analysis (Table 2) shows that both factors differentiate between consultancy service exporters and non-exporters, supporting **research proposition 1**. As expected it is seen that consultancy service exporters make greater effort and commit higher resources, i.e. place

TABLE 1
EMPHASIS ON ESTABLISHING/DEVELOPING INTERNATIONAL BUSINESS RELATIONSHIPS

<i>Factor</i>	<i>Items included (factor loadings)</i>	<i>Per cent of variance explained</i>	<i>Alpha</i>	<i>Sample mean</i>
Effort	Assign responsibility for managing business relationship (0.87)	42	0.890	2.19
	Regularly communicate with our overseas clients/associates (0.82)			
	Scan specialized foreign journals and trade publications (0.82)			
	Attend technical conferences and seminars in foreign markets (0.76)			
Resource commitment	Visit industrial fairs and exhibitions in foreign markets (0.89)	35	0.861	1.67
	Advertise in foreign journals (0.84)			
	Regular visits to foreign markets (0.69)			
	Use third party organizations (0.61)			

Note: Measuring scale 1 = 'never', 2 = 'occasionally', 3 = 'fairly many times', 4 = 'very often' and 5 = 'always'.

TABLE 2
COMPARISON OF EXPORTERS AND NON-EXPORTERS – EMPHASIS ON ESTABLISHING & DEVELOPING INTERNATIONAL BUSINESS RELATIONS

<i>Means (S.D.)</i>	<i>Exporters N = 54</i>	<i>Non-exporters N = 113</i>	<i>Hotelling's Trace F Value</i>	<i>Wilks' Lambda F Value</i>	<i>Pillai's Trace F Value</i>
<i>Factors</i>			<i>Sig. (p ≤)</i>	<i>Sig. (p)</i>	<i>Sig. (p)</i>
Effort	3.39 (0.9)	1.62 (0.6)	20.799 418 0.000	0.019 250 0.000	1.557 143 0.000
Resource commitment	2.16 (0.8)	1.44 (0.7)	11.75 236 0.000	0.044 152 0.000	1.395 93 0.000
MANOVA analysis			53.132 521 0.000	0.005 268 0.000	1.742 134 0.000

greater emphasis to establish and develop international business relations as compared to non-exporters. The factor "Effort" shows the widest difference between exporters and non-exporters. It includes items like regular communication with potential clients; assigning responsibility within organization for business development, attending conferences & seminars for networking; using foreign journals & trade publications for business development. The other factor "Resource commitment" shows a narrower difference in mean scores between exporters and non-exporters. It consists of items like visit to foreign markets, industrial fairs & exhibitions; advertising in foreign journals; using services of third party organizations, etc.

Social Networks and Personal Relationships

Exporting firms were asked to indicate on a five-point rating scale, "When your firm gets a foreign consulting assignment, how likely it is as a result of referral by foreign business associates, individuals known to senior managers, past clients or employees". The scale ranged from 1 = "un-likely" to 5 = "highly likely". Mean score of exporters (N = 54) is 3.93 with SD 0.8 indicating that the above statement is quite likely, thus supporting **research proposition 2**.

Firm Specific Factors

Research proposition 3 regarding the influence of firm size and age on their propensity to export is partially supported by the findings. A *t*-test shows the average number of full-time professional employees (used as a measure of firm size) to be significantly different between exporters and non-exporters at $p = 0.000$ ($F = 96$). However, a *t*-test shows the average number of years in business (used as a measure of firm age) is not significant between exporters and non-exporters.

Managerial Perceptions towards Exporting

To determine managerial perceptions towards exporting, respondents were asked to indicate on a five-point Likert scale the extent to which they agree or disagree with various attitudinal statements. The scale ranged from 1 = "strongly disagree", to 5 = "strongly agree". Factor analysis provides two factors that describe managerial perceptions towards exporting, (i) Benefits, and (ii) Risk/Cost. Table 3

provides a description of the factors. Both factors have reliability of 0.79 and above. When ranked on the basis of mean scores of items included, the factor "Risk/Cost" has a higher mean score than the other factor "Benefits".

MANOVA analysis (Table 4) shows that both the attitudinal factors discriminate between consultancy service exporters and non-exporters, supporting **research proposition 4**. Consultancy service exporters perceive benefits from exporting to be higher and risk/cost associated with exporting to be lower as compared to non-exporters. Perceptions regarding the benefits of exporting show the widest difference between exporters and non-exporters.

TABLE 3
PERCEPTIONS REGARDING EXPORTING

<i>Factor</i>	<i>Items included (factor loadings)</i>	<i>Per cent of variance explained</i>	<i>Alpha</i>	<i>Sample mean</i>
Benefits	Exporting is potentially more profitable (0.90)	50	0.939	2.99
	Exporting is a desirable task for my firm (0.88)			
	Exporting can make major contribution to my firm's growth (0.86)			
	International client base is good for my firm's image / reputation (0.81)			
	Exporting can help to diversify market risk (0.72)			
Risk/Cost	Exporting involves higher cost (0.95)	29	0.798	3.92
	Exporting involves greater risk (0.80)			
	Getting started requires high initial investment (0.49)			

TABLE 4
COMPARISON OF EXPORTERS AND NON EXPORTERS – PERCEPTIONS REGARDING EXPORTING

<i>Means (S.D.)</i>	<i>Exporters N = 54</i>	<i>Non-exporters N = 113</i>	<i>Hotelling's Trace F Value</i>	<i>Wilks' Lambda F Value</i>	<i>Pillai's Trace F Value</i>
<i>Factors</i>			<i>Sig. (p)</i>	<i>Sig. (p)</i>	<i>Sig. (p)</i>
Benefits	4.20 (0.7)	2.42 (0.5)	55.172 882 0.000	0.014 238 0.000	1.191 47 0.000
Risk/Cost	3.02 (0.8)	4.34 (0.6)	61.049 1648 0.000	0.015 385 0.000	1.039 59 0.000
MANOVA analysis			173.751 1704 0.000	0.001 695 0.000	1.866 276 0.000

Barriers to Exporting

Barriers to exporting were measured using five-point rating scales with bipolar descriptors. Respondents were asked, "To what extent has each of the following factors hindered your organization from exporting?" with scale 1 = "not hindered at all" to 5 = "hindered to a great extent".

Factor analysis provides four factors: (i) Know-how limitations & restrictions, (ii) risk, costs & differences, (iii) Resource limitations, and (iv) Lack of support & competition. Table 5 provides a description of the factors. All factors have reliability of 0.80 and above. When ranked on the basis of mean scores of items included, the factors risk, costs &

TABLE 5
BARRIERS TO EXPORTING

<i>Factor</i>	<i>Items included (factor loadings)</i>	<i>Percent of variance explained</i>	<i>Alpha</i>	<i>Sample mean</i>
Know-how limitations & restrictions	Travel and work restrictions in foreign markets (0.85)	30	0.935	3.35
	Lack of knowledge of business opportunities (0.82)			
	Lack of contacts in foreign markets (0.80)			
	Do not possess state-of-art technical know-how (0.76)			
	Restrictive foreign government regulations (0.75)			
	Lack of knowledge and expertise to access foreign markets (0.75)			
	Prejudice against foreign consultancy firms (0.56)			
Risk, costs & differences	Political and financial risk in foreign markets (0.79)	19	0.897	3.47
	Adjusting to foreign business practices (0.78)			
	High cost of international business development (0.71)			
	Legal difficulties in overseas markets (0.69)			
	Different language and culture (0.64)			
Resource limitations	Lack of capital to finance expansion (0.86)	18	0.868	2.90
	Inadequate skilled technical manpower (0.84)			
	Inadequate commitment of resources (0.78)			
Lack of support & competition	Lack of government support (0.90)	16	0.800	2.35
	Unstable demand (0.75)			
	Competition from overseas firms (0.67)			

differences (3.47) and Know-how limitations & restrictions (3.35) have higher mean scores compared to resource limitations (2.90) and Lack of support & competition (2.35).

MANOVA analysis (Table 6) shows that all the factors differentiate between consultancy service exporters and non-exporters. All the barriers to exporting were perceived to be higher by non-exporters than the exporters thus supporting **research proposition 5**. All the factor scores are below 3.0 (the midpoint) in a five-point scale for exporters.

The factor "Risk, costs & differences" (3.89) presents the largest perceived obstacle for non-exporters. The factor consists of items like political and financial risk; adjusting to foreign business practices; high cost of international business development; legal difficulties and different language & culture. This is closely followed by the factor "Know-how limitations & restrictions" (3.86) including items like travel & work restrictions; lack of knowledge about business opportunities; lack of foreign contacts; lack of state-of-art technical know-how; restrictive foreign government regulations; lack of expertise to access foreign markets and prejudice against foreign consultancy firms. The factors "Resource limitations" (2.67) and "Risk, costs & differences" (2.61) present the largest perceived obstacle for exporters.

TABLE 6
COMPARISON OF EXPORTERS AND NON-EXPORTERS – EXPORT BARRIERS

<i>Means (S.D.)</i> <i>Factors</i>	<i>Exporters</i>	<i>Non-exporters</i>	<i>Hotelling's Trace</i>	<i>Wilks' Lambda</i>	<i>Pillai's Trace</i>
	<i>N = 54</i>	<i>N = 113</i>	<i>F Value</i> <i>Sig. (p)</i>	<i>F Value</i> <i>Sig. (p)</i>	<i>F Value</i> <i>Sig. (p)</i>
Know-how limitations & restrictions	2.29 (0.8)	3.86 (1.0)	74.107 836 0.000	0.008 224 0.000	1.357 48 0.000
Risk, cost & differences	2.61 (0.7)	3.89 (0.9)	49.985 799 0.000	0.010 285 0.000	1.466 88 0.000
Resource limitations	2.67 (0.8)	3.01 (0.9)	15.287 412 0.000	0.055 117 0.000	1.051 60 0.000
Lack of support & competition	1.67 (0.9)	2.68 (1.1)	17.443 470 0.000	0.037 228 0.000	1.283 97 0.000
MANOVA analysis			53.132 1909 0.000	0 1658 0.000	1.953 347 0.000

Motivations for Exporting

Respondents who were exporting were asked to indicate the importance level of different possible motivators in their firm's decisions to export on a five-point scale ranging from 1 = "not important" to 5 = "extremely important". Factor analysis provides three factors: (i) Globalizing clients & growth opportunities, (ii) Incentives & management desire, and (iii) Contacts & information. Table 7 provides a description of the factors. All factors have reliability of 0.80 and above.

When ranked on the basis of mean scores of items included, the factor "Contacts & information" (3.69) has the highest mean score. The factor includes items like foreign business contacts and information about potential business opportunities. The factor "Incentives & management desire" (2.72) has the second highest mean and includes items like export incentives and programmes; management's commitment to exporting; eased foreign government regulations and to be known as an international service provider. The factor "Globalizing clients & growth opportunities" (2.50) follows closely and includes items like following globalizing client base; attractive profit and growth opportunity; intensifying domestic competition and transferable competitive advantage.

TABLE 7
MOTIVATIONS FOR EXPORTING

<i>Factor</i>	<i>Items included (factor loadings)</i>	<i>Per cent of variance explained</i>	<i>Alpha</i>	<i>Sample mean</i>
Globalizing clients & growth opportunities	Following our client base (0.95)	36	0.939	2.50
	Opportunity to increase number of markets (0.86)			
	Intensifying domestic competition (0.83)			
	More of our clients are working globally (0.82)			
	Transferable competitive / price advantage (0.81)			
Incentives & management desire	Attractive profit and growth opportunities (0.68)	33	0.935	2.72
	Export promotion programmes (0.94)			
	Attractive export incentives (0.92)			
	Eased foreign government regulations (0.87)			
	To be known as an international service provider (0.78)			
Contacts & information	Management's commitment to exporting (0.73)	12	0.500	3.69
	Business contacts in foreign markets (0.81)			
	Information about potential business opportunities (0.76)			

External Support Systems

Respondents who were exporting were asked to indicate the importance level of different external support systems that will help their firms to market its consultancy service in the international arena on a five-point scale ranging from 1 = “not important” to 5 = “extremely important”. A total of twelve possible support activities and systems were given in the questionnaire (Figure 2).

The top five external support activities and systems indicated by the consultancy service exporters (ranked in descending order of mean scores) are (i) Promoting the Indian service sector brand image (4.65); (ii) Foreign market intelligence reports (4.24); (iii) Financial support to bid for international projects (4.17); (iv) Directory of Indian consulting firms circulated to foreign chambers of commerce (3.89); and (v) Mechanism for forming consortium to bid for specific international projects (3.85).

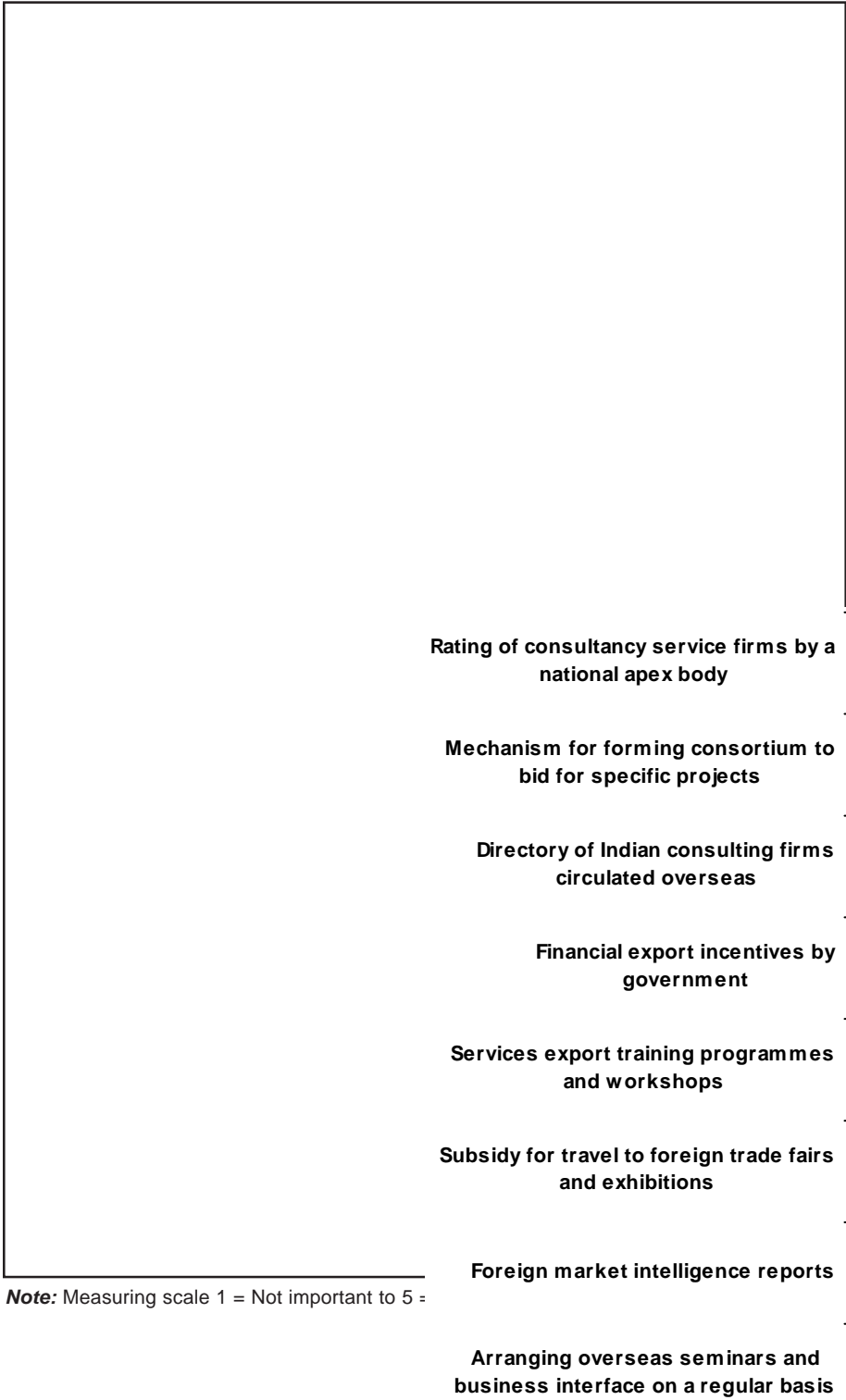
Discussion and Managerial Implications

The empirical support for **proposition 1** clearly indicates that professional services exporters understand that international business network development is critical to their internationalization. Unlike non-exporters they invest greater time and resources to develop international business networks with an eye on future business opportunities. Business networks improve understanding of new markets and how to overcome institutional and cultural barriers in order to conduct business there; contribute to development of new knowledge and competencies and serve as bridges to new clients/partners, etc. Therefore, it is important that firm’s top management recognize that business network development must be an ongoing activity and a critical component of the firm’s overall internationalization strategy.

Empirical support of **proposition 2** provides valuable insight regarding importance of social networks and personal relationships in the internationalization of professional service firms. We can perhaps surmise, non-exporting firms are unable to exploit foreign business opportunities due to absence of these personal contacts besides other factors.

Social networks and personal relationships contribute to the process of firm’s internationalization in terms of access to privileged resources

FIGURE 2
EXTERNAL SUPPORT SYSTEMS & ACTIVITIES



Note: Measuring scale 1 = Not important to 5 =

such as information on business opportunities and potential partners. It is important that firms recognize the need to “internalize new network connections” by acquiring additional team members who have particular network resources required for the internationalization of the firm. In other words, firms should seek to hire those senior managers who by virtue of their international experience and contacts can help the firm to obtain international assignments.

Partial empirical support for **proposition 3** indicates larger firms have a greater propensity to export their services. This may be because larger firms have greater financial resources and specialized human capital at their disposal which reduces the risk associated with internationalization. However, the sample throws up quite a few smaller firms that are regularly engaged in exporting. These smaller firms are found to have specialized domain expertise and offer niche services like industrial project consultancy in specific product areas.

Empirical support for **proposition 4** indicates that the senior management of exporting and non-exporting firms perceive the benefits and risk associated with exporting quite differently. Consultancy service exporters perceive benefits from exporting to be higher and risk/cost associated with exporting to be lower as compared to non-exporters. Perceptions regarding the benefits of exporting show the widest difference between exporters and non-exporters. The results are in line with earlier findings (Javalgi, Griffith and White 2003; Winsted and Patterson 1998; Kedia and Chhokar 1986). Consultancy service firm’s management attitude positively relates to its international activity. When firm’s senior managers are positively inclined towards international activity, they provide the necessary impetus for the firm to internationalize.

Empirical support for **proposition 5** indicates that the senior management of exporting and non-exporting firms perceive barriers to exporting quite differently. The results show that all the barriers to exporting were perceived to be higher by non-exporters. This is in line with earlier studies like (i) Ramaswami and Yang (1990) who explain that exporters perceive fewer barriers than non-exporters, and (ii) Winsted and Patterson (1998) who analyze that most of the barriers to exporting were perceived to be significantly greater obstacles by the non-exporters than by the exporters. The study indicates important

barriers perceived by non-exporters consists of lack of knowledge about foreign business opportunities; lack of foreign contacts; travel & work restrictions; different language & culture; political and financial risk; high cost of international business development, etc.

In order to induce more of non-exporters to export their services, trade promotion and facilitation activities have to address the market knowledge/information lacunae. Non-exporters themselves have to invest time and effort to gain country specific market knowledge and business opportunities. Also, non-exporters may take the help of professional consultants in order to mitigate the procedural barriers. The larger issues of restrictions, i.e. travel, regulatory, legal, etc. can be only through bilateral and multilateral Free Trade Agreements (FTA) by respective governments. Finally, it all depends on firm's senior managers' export commitment and motivations. When firm's senior managers feel the barriers are insurmountable, the firm is likely not to be involved in international activity.

A closer look at the principal export motivations in this study (Table 7) shows that the export motivations are a combination of both proactive and reactive elements. In the factor "Contacts & information" both items are proactive stimuli elements. In the factor "Incentives & management. desire" out of the five items included four are proactive and only one item is a reactive stimuli element. In the factor "Globalizing clients & growth opportunities" out of the six items, only two are proactive and rest four are reactive stimuli elements. This shows that perhaps it is possible that the underlying reasons stimulating export decision of consultancy service exporters are of a more proactive and less reactive in nature.

An important stream of research concentrates on investigating whether or not firms take the initiative to seek, identify and exploit export market opportunities. In this regard, a distinction has been pursued between proactive and reactive export stimuli (Katsikeas 1996; Leonidou 1995; Katsikeas and Piercy 1993; Czinkota and Johnston 1981). Proactive stimuli are those associated with the firm's aggressive behaviour and deliberate search for export opportunities. Review of export motivation empirical literature reveals a wide range of factors that can play an important role in stimulating export activity. These factors pertain to: attractive profit and growth opportunities overseas, managerial commitment, export promotion programmes, export

incentives, existence of transferable competitive advantage/price advantage and so on. Reactive stimuli are those connected with the firm's reaction to changing conditions and reflect a passive attitude in looking for foreign market opportunities. Major factors of this type may be adverse domestic market conditions, opportunity to increase the number of country markets and reduce the market-related risk, globalization of existing clients, favourable currency movements, etc.

Czinkota and Johnston (1981) and Katsikeas (1996) have investigated differences in export motivations between two distinct groups of exporters based on level of export development, i.e. regular and sporadic exporters. They suggest that both proactive and reactive elements stimulate the firm's decision to continue and maintain exporting. Katsikeas (1996) reports that out of five export stimulus items held in relatively high regard by respondents three were proactive in nature and other two were reactive in nature.

In the ranking of various external support systems by consultancy service exporters, "Promoting the Indian service sector brand image", secures *the top rank*. According to La *et al.* (2005), "a positive country of origin effect enhances the firm's image, which in turn strengthens perception of performance". If country of origin or brand image plays a significant role in providing tangible cues to shape the service perception and to assess its quality in an international context, then Indian professional consultancy service firms may be at a disadvantage. India as a nation is perceived by the world at large, as a developing nation that does not have access to state-of-the-art technology and business practices. On the other hand, India has acquired an image of being service providers to the world (mainly in information technology areas) with a large pool of English speaking, technically qualified personnel. The respondents perhaps wish industry bodies and government departments to reinforce the "Engineered in India" Proposition similar to the one carried out by NASSCOM for software services and "Made in India" shows for manufactured goods by Confederation of Indian Industry (CII).

The Government of India had introduced a "Served from India" scheme in October 2007 and set up a Services Export Promotion Council. Membership list of the Services Export Promotion Council shows that its members are dominantly hotels & tourism service providers, healthcare service providers, entertainment & education service

providers rather than consultancy service providers. This may be because former sectors have practical utility of duty free scrip against foreign exchange earnings to import capital equipment used in their line of business.

The *second* important support system ranked by consultancy service exporters is “foreign market intelligence reports”. Respondents feel accurate and timely foreign market intelligence reports are important to spot potential business opportunities. Reports by industry associations and export promotion organizations perhaps need to be reinforced by inputs from foreign industry bodies, professional consultants, market survey and research firms, etc.

The *third* important support system ranked by consultancy service exporters is “Financial support to bid for international projects”. Respondents feel it is important to have access to financial support in order to bid for international assignments. Institutions like Exim Bank of India provide financial guarantees to Indian companies who bid for international projects. However, the scope and quantum of financial assistance may not be enough. *Lastly*, legal and financial issues need to be ironed out so as to ease the process of consortium formation in order to bid for large-scale international projects.

Limitations and Future Research

This study is a cross-sectional one that examines the differences between exporters and non-exporters within one knowledge intensive professional services industry, i.e. engineering and industrial consulting in one country. Further research is required to generalize the findings to other professional services industry and in other countries. Patterson and Cicic (1995) have developed a classification scheme for internationally traded services which highlight different characteristics among services based on two key dimensions: degree of tangibility and degree of face-to-face contact required for service manufacture and delivery, resulting in a four cells typology of service types. Typically, engineering consulting is a location bound customized service (cell 2). Results from this study may not be generalized for other service types without further research.

This study does not take into account “domestic environmental conditions” that may also differentiate between exporters and non-exporters. Typically, domestic environmental conditions may consist

of competitive intensity, technological turbulence, etc. In their study Winsted and Patterson (1998) report that views about domestic competitive intensity also differentiate between exporters and non-exporters of engineering consultancy services.

Dimitratos and Plakoyiannaki (2003) suggest that an international entrepreneurial culture embodies various dimensions including (i) risk attitudes, which refers to a firm's willingness and desire to undertake significant and risky resource commitments in pursuit of new opportunities in foreign markets, and (ii) learning orientation, which centers on gathering, interpreting and disseminating intelligence about foreign markets and the alertness to opportunities that exist in these markets. Perhaps these two dimensions of international entrepreneurial orientation may also explain differences between exporters and non-exporters of professional services and hence there is a need to empirically examine these factors.

REFERENCES

- Aaby, N.E. and Slater, S.F. (1989), "Management influences on export performance: a review of the empirical literature, 1978-1988", *International Marketing Review*, Vol. 6 (4), pp. 7-26
- Ali, A. and Swiercz, P.M. (1991), "Firm size and export behaviour: lessons from the Midwest", *Journal of Small Business Management*, Vol. 29, pp. 71-78.
- Andersen, O. (1997), "Internationalization and market entry mode: a review of theories and conceptual frameworks", *Management International Review*, Vol. 37 (2), pp. 27-42.
- Axinn, C.N. (1988), "Export performance: do managerial perceptions make a difference?" *International Marketing Review*, Vol. 5 (2), pp. 61-71.
- Bonaccorsi, A. (1992), "On the relationship between firm size and export intensity", *Journal of International Business Studies*, Vol. 23 (4), pp. 605-36.
- Booz Allen Hamilton and National Association of Software & Service Companies (2006, August), "Globalization of Engineering Services – The Next Frontier for India" research report, New Delhi.
- Burgel, O.; Fier, A.; Licht, G. and Murray, G. (2001), *The Rapid Internationalization of High-Tech Young Firms in Germany and the United Kingdom*, Anglo-German Foundation, London.
- Chetty, S. and Campbell-Hunt, C. (2000), "The Evolution of Internationalization Capability through Business Relationships", *Marketing in a Global Economy Proceedings*, University of Wellington, New Zealand, pp. 144-149.

- Czinkota, M.R. and Johnston, W.J. (1981), "Segmenting U.S. firms for export development", *Journal of Business Research*, Vol. 9 (4), pp. 353-365.
- Consultancy Development Centre (2008), www.cdc.org.in (accessed April 2008)
- Coviello, N.E. and Martin K.A. (1999), "Internationalization of Service SMEs: An Integrated Perspective from the Engineering Consulting Sector", *Journal of International Marketing*, Vol. 7, pp. 42-66.
- Coviello, N.E. and Munro, H.J. (1995), "Growing the entrepreneurial firm networking for international market development", *European Journal of Marketing*, Vol. 29 (7), pp. 49-61.
- Dimitratos, P. and Plakoyiannaki, E. (2003) 'Theoretical foundations of an international entrepreneurial culture', *Journal of International Entrepreneurship*, Vol. 1 (2), pp. 187-215.
- Ellis, P. (2000), "Social Ties and Foreign Market Entry", *Journal of International Business Studies*, Vol. 31 (3), pp. 443-469.
- Engineering News-Record (2010), "The top 200 international design firms" <http://enr.construction.com/toplists> (accessed May 2010).
- Erramilli, M.K. and Rao, C.P. (1993), "Service firms' international entry-mode choice: a modified transaction-cost analysis approach", *Journal of Marketing*, Vol. 57 (3), pp. 19-38.
- Forsman, M., Hinttu, S. and Kock, S. (2002), "Internationalization from a SME Perspective" *Proceedings of the 18 th. IMP Conference, Dijon*, pp. 1-10.
- Gluckler, J. (2006), "A relational account of international market entry in management consulting", *Journal of Economic Geography*, Vol. 6 (3), pp. 369-393.
- Gluckler, J. (2004), "A Relational Account of Business Service Internationalization and Market Entry – Theory and Some Evidence", WPSSS15 - Working Papers on Services Space, Society; University of Birmingham.
- Javalgi, R.G., Griffith, D.A. and White, D.S. (2003), "An Empirical Examination of Factors Influencing the Internalization of Service Firms", *Journal of Services Marketing*, Vol. 17 (2&3), pp. 185-201.
- James, B.H. and Maxwell, S.E. (1985), *Multivariate analysis of variance, Quantitative applications in the social sciences*, Series #54, Sage Publications, Thousand Oaks, CA.
- Johanson, J. and Mattsson, L.G. (1993), "Internationalization in Industrial Systems – A Network Approach", in Buckley P.J. and Ghauri P.N. (eds.), *Internationalization of the Firm: A Reader*, Academic Press, London.
- Johanson, J. and Mattsson, L.G. (1988), "Internationalization in Industrial Systems - A Network Approach", in Hood and Vahlne, J.E. (eds.), *Strategies in Global Competition*, Croom Helm, New York.

- Johanson, J. and Mattsson, L.G. (1987), "Interorganizational Relations in Industrial Systems: A Network Approach Compared with the Transaction-Cost Approach", *International Studies of Management and Organization*, Vol. 17 (1), pp. 34-48.
- Johanson, J. and Vahlne, J. E. (1990), "The Mechanism of Internationalization," *International Marketing Review*, Vol. 7 (4), pp. 11-24.
- Johanson, J. and Vahlne, J.E. (1977), "The internationalization process of the firm – a model of knowledge development and increasing foreign market commitment", *Journal of International Business Studies*, Vol. 8, pp. 23-32.
- Katsikeas, C.S. (1996), "Ongoing export motivation: differences between regular and sporadic exporters", *International Marketing Review*, Vol. 13 (2), pp. 4-14.
- Katsikeas, C.S. (1994), "Exporter competitive advantages: the relevance of firm characteristics", *International Marketing Review*, Vol. 11 (3), pp. 33-35.
- Katsikeas, C.S. and Piercy, N.F. (1993), "Long-term export stimuli and firm characteristics in a European LDC", *Journal of International Marketing (USA)*, Vol. 1 (3), pp. 23-47.
- Kedia, B.L. and Chhokar, J.S. (1986), "Factors inhibiting export performance of firms: an empirical investigation", *Management International Review*, Vol. 26 (4), pp. 33-43.
- La, V.Q., Patterson, P.G. and Styles, C.W. (2005), "Determinants of service performance across service types: a conceptual; model", *Journal of Services Marketing*, Vol. 19 (6), pp. 379-391
- Leonidou, L.C. (1995), "Export stimulation research: review, evaluation and integration", *International Business Review*, Vol. 4 (2), pp. 133-156.
- Loane, S. and Bell, J. (2006), "Rapid internationalization among entrepreneurial firms in Australia, Canada, Ireland and New Zealand: An extension to the network approach", *International Marketing Review*, Vol. 23 (5), pp. 467-485.
- Nguyen-Hong, D. (2000), "Restrictions on Trade in Professional Services", *Productivity Commission Staff Research Paper*, AusInfo, Canberra, August.
- O'Farrell, P. N., Wood P. A., and Zheng J., (1998), "Internationalization by Business Service SMEs: An Inter-Industry Analysis," *International Small Business Journal*, Vol. 16 (2), pp. 13-31.
- Patterson, P. and Cicic, M. (1995), "Typology of service firms in international markets: an empirical investigation", *Journal of International Marketing*, Vol. 3 (4), pp. 57-83.
- Peng, M. and Luo, Y. (2000), "Managerial ties and firm performance in a transition economy: the nature of micro-macro link", *Academy of Management Journal*, Vol. 43 (3), pp. 486-501.
- Ramaswami, S.N. and Yang, Y. (1990), "Perceived barriers to exporting and export assistance requirements", in Cavusgil, S.T. and Czinkota, M.R. (eds.),

- International Perspectives on Trade Promotion and Assistance*, Quorum Books, Westport, CT, pp. 187-206.
- Reserve Bank of India (2010, March), "Invisibles in India's Balance of Payments – An analysis of trade in services, remittances and income", Monthly Bulletin.
- Samiee, S. and Walters, P. (1991), "Segmenting corporate exporting activities: sporadic versus regular exporters", *Journal of the Academy of Marketing Science*, Vol. 19 (2), pp. 93-104.
- Scholl, D. (2006), "A Review of Internationalization and Network Concepts: Implications for the Role of Personal Relationships", TU-91.167 *Seminar in Business Strategy and International Business*, Helsinki University of Technology.
- Westhead, P. (1995), "Exporting and Non-Exporting Small Firms in Great Britain," *International Journal of Entrepreneurial Behavior & Research*, Vol. 1, pp. 6–36.
- White, D.S., Griffith, D.A. and Ryans, J.K. Jr (1999), "Profiling exporting and non-exporting service firms: critical differences to decision-makers", *Thunderbird International Business Review*, Vol. 41 (2), pp. 195-213.
- White, D.S., Griffith, D.A. and Ryans, J.K. Jr (1998), "Measuring export performance in service industries" *International Marketing Review*, Vol. 15 (3), pp. 188-204.
- Winsted, K.F. and Patterson, P.G. (1998), "Internationalization of services: the service exporting decision", *Journal of Services Marketing*, Vol. 12 (4), pp. 294-311
- Yli-Renko, H., Autio, E. and Tontti, V. (2000), "Social Capital, Knowledge, and the International Growth of Technology-Based New Firms", Working Paper Series, Helsinki University of Technology, pp. 1-30.
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