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Impact of export market orientation on export performance

Impact of EMO
on export
performance

A relational perspective

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Abstract

Purpose – The purpose of this paper is to explore the mediating role of export market orientation (EMO) in the relationship between inter-organizational relationships and export performance, and the moderating role of degree of internationalization in the relationship between EMO and export performance.

Design/methodology/approach – The authors sent questionnaires to the 1,000 largest manufacturers listed in *CommonWealth* magazine (2009), and a random sample of 500 machinery manufacturers listed in the Taiwan Association of Machinery Industry Directory. The authors received 244 completed questionnaires through which to examine the hypotheses.

Findings – The findings show that trust and social interaction positively influence EMO, which then enhances export performance. However, the moderating effect of degree of internationalization has no significant impact on the EMO and export performance relationship.

Research limitations/implications – Future studies should conduct two-way research on focal firms (manufacturers) and overseas partners (agents or distributors) through common variables including trust, commitment, satisfaction, etc. The results indicate that the content validity of the present study is somewhat inadequate, possibly due to the cultural differences involved.

Practical implications – Overseas information exchange between exporters and partners fosters firms' export performance. Thus, closer relationships with channel partners or customers via trust and social interactions may help firms to conduct appropriate EMO activities to access overseas market information and improve export performance.

Originality/value – By investigating Taiwanese exporters, who tend to emphasize relational capital, the authors determine that EMO is important in understanding how inter-organizational relationships influence export performance. The authors also contribute a more comprehensive view to the literature.

Keywords Internationalization, Export market orientation, Inter-organizational relationships

Paper type Research paper

1. Introduction

Firms pursue internationalization in order to obtain the benefits of production at lower costs, reduced risk and the exploration of new markets (Czinkota and Ronkainen, 2001). Johanson and Wiedersheim-Paul (1975) cited lack of knowledge and resources as the most formidable obstacles to achieving internationalization (see also Luostarinen, 1979). These obstacles can be reduced through incremental decision making and learning about



foreign markets and operations via exporting, which is the most common entry mode favoured by firms when embarking on internationalization (Luostarinen, 1979), due to advantages such as lower risks, flexibility of entry and withdrawal, lower demands on human and financial resources, and the possibility of reaching foreign customers without an actual physical presence, in contrast to foreign direct investment (Murray *et al.*, 2007). Currently, firms rely heavily on their export intermediaries, partners or network members to gain rich and useful information about foreign markets (Morgan and Hunt, 1994; Elg, 2008). When studying international firms, export market orientation (EMO) is regarded as a key factor affecting export performance (Cadogan *et al.*, 1999, 2001, 2003). EMO requires that firms constantly monitor their customers, competitors and market environments in order to develop and sell goods and services perceived as valuable by customers in export markets. Cadogan *et al.* (2002) asserted that market-oriented activity refers mainly to the collection, dissemination and application of market information. Samiee and Walters (1990) suggested that successful exporters are motivated to initiate export activities based on proactive reasons, since maintaining exports on a sustained basis reflects a higher level of export involvement and monitoring of changes in the market environment. Export-information-related management practices in firms are bound to lag behind their domestic information-management practices (Johanson and Wiedersheim-Paul, 1975; Albaum *et al.*, 1994) due to local familiarity. Specifically, firms need a fresh understanding of the factors that affect EMO and enhance export performance.

Prior research has indicated some of the benefits related to exporting, such as lower risks, fewer demands on human and financial resources, flexibility of entry and withdrawal, and the possibility of reaching foreign customers without having a physical presence in the target country (Francis and Collins-Dodd, 2000). It is also possible for exporters to utilize the services of various types of intermediaries if they do not want to invest in establishing a subsidiary in the foreign market to perform marketing activities (Brouthers *et al.*, 2009). However, exporting has its own drawbacks, such as sensitivity to import regulations and changes in the market environment, including the behaviour of consumers and competitors. Among these challenges, an exporter's performance largely depends on the cooperation and efficiency of the various actors providing vital support. These actors include providers offering services such as logistics, banking, product-related services, etc. Other participants include intermediaries including importers, export-management companies, distributors and retailers. The most important challenge to exporters is how to obtain vital customer feedback, the various types of target market data and the information necessary for strategic decision making, in order to achieve a satisfactory performance level.

Export performance is a multi-dimensional construct that is defined in terms of degree of economic and non-economic achievement in export markets (Cadogan *et al.*, 2009). Earlier studies have focused on the market orientation – export performance relationship (Hyvönen and Tuominen, 2007) and EMO – export performance relationship (Cadogan *et al.*, 1999, 2003; Murray *et al.*, 2007), and suggested a positive correlation between both. Yet few studies have explored the antecedents of EMO. Cadogan *et al.* (2001) highlighted that while antecedents of market-oriented behaviour are formed based on the domestic level, the formation of antecedents of export market-oriented behaviour should be based on the export level. They also pointed out the likelihood of domestic bias if antecedents of market orientation are constructed on the basis of a non-exporting context. In the past, firms have largely focused on managing domestic market intelligence, and have been less concerned with managing foreign

market intelligence. However, the question of whether a firm's market orientation has the same impact on both domestic and foreign markets deserves further study. In addition to shifting the focus of orientation from domestic to foreign markets, previous relevant studies on EMO attribute the antecedents of structure and situations of enterprises as shaping and strengthening EMO (e.g. export experience, dependence, coordination, systems or structure) (Cadogan *et al.*, 2001, 2002). However, the relational or behavioural perspective put forward by Styles *et al.* (2008) has not yet been fully discussed. Inter-organizational relationships can enable all parties to bring their major strengths to the table and emerge with better products, services and ideas than they can produce on their own (Czinkota and Ronkainen, 2001). Such a relational network acts as a bridge connecting domestic and international markets (Zou and Ghauri, 2010).

Based on the discussions of the abovementioned scholars, this paper adopts a relational perspective on manufacturer EMO so as to offset shortcomings identified in the extant literature. With EMO as a key channel for obtaining external information, inter-organizational relationships must be characterized by stability and mutual trust in order to ensure the close interactive relationships conducive to obtaining and understanding shared information (Kohli and Jaworski, 1990). Prior studies have emphasized the importance of inter-organizational relationships; although firms can enhance performance through partnerships, little attention has been paid to the relationship variables affecting firms' market orientation (Elg, 2008). This study explores how relationships between exporters and their partners influence market-oriented behaviour.

A number of relevant studies have paid great attention to the impact of market orientation on organizational performance. Many scholars maintain that the effective use of market orientation is conducive to improving business performance or gaining competitive advantage (e.g. Armario *et al.*, 2008). Nevertheless, when it comes to the relationship between market orientation and performance, some prior studies have asserted a partially positive correlation (Jaworski and Kohli, 1993; Baker and Sinkula, 1999; Cadogan *et al.*, 2002, 2009; Armario *et al.*, 2008), while others have asserted no correlation (Cadogan *et al.*, 2003; Atuahene-Gima *et al.*, 2005; Hyvönen and Tuominen, 2007) and still others have found a negative correlation (Grewal and Tansuhaj, 2001; Zhou *et al.*, 2009). These inconclusive findings indicate the possibility of other factors that may moderate (Slater and Narver, 1994) or mediate (Zhou *et al.*, 2009) the relationship between market orientation and performance. Likewise, as pointed out by Cadogan *et al.* (1999), several studies have discussed the effect of market orientation on firms' domestic operations; however, no study has explicitly dealt with the effect of market orientation on the performances of multinationals. Similarly, few studies have clarified whether EMO has a significant positive effect on export performance (Cadogan *et al.*, 2009), or whether mediation or moderation effects from other variables exist. These are critical issues in developing a more realistic picture of market orientation nomological networks, particularly in the context of international marketing activities (Albaum *et al.*, 1994). Incorporating this degree of internationalization into a market orientation – export performance relationship model constitutes a pivotal step because such a model is unique to the international marketing context (Murray *et al.*, 2007; Cadogan *et al.*, 2009). Following the extant literature (Cadogan *et al.*, 2002), we use degree of internationalization as a moderating variable to ascertain whether it can intensify the effect of EMO on export performance. The conceptual framework of this study is shown in Figure 1.

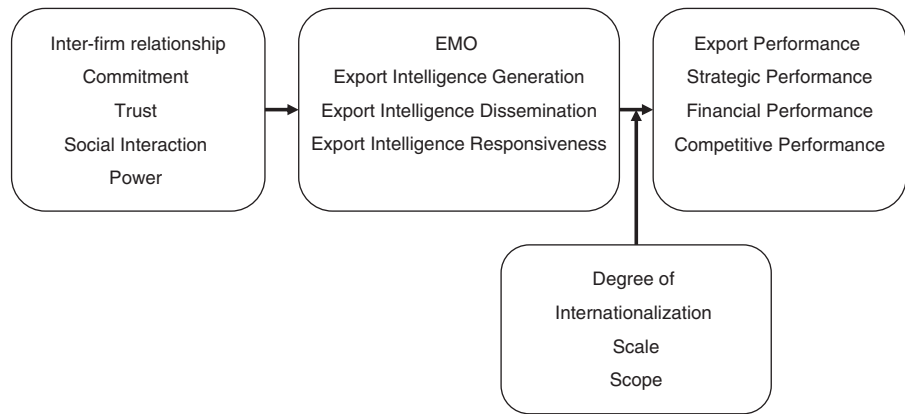


Figure 1.
Conceptual framework

2. Literature review and hypotheses development

2.1 *Inter-organizational relationship*

The relationship between inter-organizational relationships and market orientation is often embedded in a paradoxical situation. Do the inter-organizational relationships of a firm affect its market-oriented behaviours, or does the market orientation improve its inter-organizational relationships? Previous studies have pointed out that firms' market-oriented behaviour contributes to the improvement of their long-term customer relationships (Helfert *et al.*, 2002), as well as commitment and relational closeness to other firms (Taylor *et al.*, 2008). The potential utility of inter-organizational relationships is that these relationships help to obtain market intelligence (Kohli and Jaworski, 1990), provide superior customer value (Narver and Slater, 1990) and yield relational quasi-rents (Dyer and Singh, 1998). In addition to direct relationships, Chung (2012) proposed that a firm's managerial ties with its foreign stakeholders may potentially play an important moderating role in shaping EMO – performance linkage. We hold that managerial ties are a platform and supporting mechanism for increasing firms' internal resources and testing the quality and authenticity of information. As the development process of market-oriented behaviour is characterized by path dependency (van Raaij and Stoelhorst, 2008), the formation and implementation of market orientation depends on stimulation from antecedents. These antecedents are also particularly interesting from an implementation perspective, as they may provide clues on how to develop the market orientation of an organization (Kennedy *et al.*, 2003). Therefore, we regard inter-organizational relationships as the key antecedents of EMO. In other words, inter-organizational relationships should contain high relational attributes such as commitment (Morgan and Hunt, 1994; Cadogan *et al.*, 2001, 2006), trust (Morgan and Hunt, 1994; Elg, 2008), social interaction (Nahapiet and Ghoshal, 1998; Yli-Renko *et al.*, 2001) and power (Elg, 2008; Madlberger, 2009).

Commitment. Commitment can be defined as the degree to which an organization intends to maintain long-term relationships with its exchange partners. It is divided into two types (Morgan and Hunt, 1994; Bello *et al.*, 2003):

- (1) commitment formed as a result of sharing value via the process of first regarding oneself as a member of the organization and then incorporating the organizational values into one's own; and
- (2) a rational assessment and organization that continuously maintains the values embedded in the relationships.

This study focuses on the effect of affective commitment on organizational information processing. Commitment plays a vital role in developing inter-firm relationships (Morgan and Hunt, 1994). Madlberger (2009) pointed out that information sharing relies heavily on inter-firm agreements and their shared commitments. In other words, higher inter-firm commitment indicates a greater willingness on the part of the involved parties to invest in and share information (Uzzi, 1997). Inter-organizational commitment implies that firms and their partners are more willing to cooperate and jointly devote efforts to the sharing of derivative market data and inside information so as to disseminate that information within their respective organizations. The intent is that this will be effectively reflected in their export markets (Elg, 2007). Therefore, we propose the following hypothesis:

H1. There is a positive correlation between inter-firm commitment and firm EMO.

Trust. Trust may be regarded as the governance mechanism of an embedded relationship, and the shared belief between exchange partners that there is no self-interest between them (Uzzi, 1997). In previous studies, inter-organizational trust has been defined as both parties assuming their counterpart to be reliable and acting in good faith, and with each party believing that an exchange of resources arising from mutual recognition will pose no threat to the other party. The belief is that both parties are dedicated to solving any problem through concerted communication and adherence to the principle of reciprocity and fair dealing (Langerak, 2001). If two parties build a relationship based on mutual trust, they develop common goals, norms and reciprocal expectations (Nahapiet and Ghoshal, 1998). This trust could be regarded as a governance mechanism (Uzzi, 1997) that remedies the inadequacies of a formal governance mechanism; given the high cost of sharing “know-how” in inter-organizational relationships, an effective mechanism is needed to prevent free-riding behaviours (Dyer and Singh, 1998). Firms and their partners should have more incentives, such as trust, to share information. This will mean more effort to assimilate and utilize knowledge (Yli-Renko *et al.*, 2001). Therefore, we propose the following hypothesis:

H2. There is a positive correlation between inter-firm trust and firm EMO.

Social interaction. Interaction is a key element in most inter-organizational activities. Howcroft *et al.* (2003) suggested that interaction is composed of two parts: content and process. The content of interaction can be classified as economic and information exchange, while the process of interaction includes frequency and duration, which have a trade-off relationship. This study focuses more on information exchange and frequency of interactions. Lin (2005) pointed out that not all interactions promote effective knowledge acquisition. High-quality interactions have four characteristics: frequent, adequate, amiable and constructive.

The information channels comprising social relationships and other ties reduce the time and investment required for information collection (Nahapiet and Ghoshal, 1998). Intense and repeated interactions not only contribute to knowledge acquisition, but also enhance the capability of firms to confirm and assess external knowledge from key customers. Yli-Renko *et al.* (2001) pointed out that through repeated social interactions, network firms effectively assimilate knowledge and information exchanged and have more incentive to invest in regular knowledge sharing. In other

words, more social interactions result in more intensive, more frequent and broader information exchanges. Therefore, we hypothesize that:

H3. Inter-firm social interactions are positively related to firm EMO.

Power. French and Raven (1959) pinpointed reasons why A can have power and influence over B. From B's viewpoint: A has the ability to reward B; A has ability to punish B; A has the legal power to instruct B to do certain things; B agrees with A; and A is equipped with special knowledge or expertise. Kamann and Drijker (1992) stated that any long-term interaction belongs to the network relationship, where asymmetry of power among network members may encourage current network members in disadvantageous positions to use all feasible means by which to change the power relationships they face.

Madlberger (2009) argued that the promotion and cultivation of information sharing is a process in which firms with greater power influence decision making on information sharing with other firms. The extension of an inter-firm power structure creates dependence. In other words, due to the demand for professional knowledge, resources and market information (Styles *et al.*, 2008), some parties with relatively weak power will rely on other parties with more power (Atuahene-Gima *et al.*, 2005). Strong inter-dependence between parties renders them more willing to invest in market adjustment (Elg, 2008). In the network tie, firms with stronger power will have a higher status in a network with an important structural hole. This will enable them to connect with more partners and gain access to more information (Burt, 1992). In other words, if an important structural hole exists in the relationship between firms, more powerful firms will be able to provide information with greater accuracy and better quality, and thus become more credible. This will cause the members to build up reciprocity and share information. Exporters could also interpret the information or attribute meanings to it so as to efficiently respond to customers and competitors in the export market (Elg, 2007, 2008). Therefore, we hypothesize that:

H4. The relative power of any exporting firm positively correlates with its EMO.

2.2 EMO

Some of the literature indicates that a firm with intensive orientation towards the domestic market cannot have a high orientation towards export operations (Cadogan *et al.*, 2001). Rose and Shoham (2002) conceptualized market orientation at the organizational level and confirmed a significant difference, in terms of market orientation, between a firm's home market and its export activities. Specifically, studies on market orientation for multinationals remain at the primary stage. Cadogan and Diamantopoulos (1995) pioneered the study of EMO. After integrating views regarding two main kinds of market orientation (Narver and Slater, 1990; Jaworski and Kohli, 1993), they applied these views to export markets. Cadogan *et al.* (1999) subsequently devised scales to measure export market-oriented behaviour and conceptualized dimensions in terms of variables such as export-intelligence generation, export-intelligence dissemination and export-intelligence responsiveness. Taking into consideration Cadogan *et al.* (1999, 2001, 2009) on measures of EMO, this study defines EMO as an organizational process whereby the organization collects information regarding customers and competitors in export markets, spreads the information to all departments within an organization and responds to its export markets.

Firms with export market-oriented behaviour gather information regarding export customer needs and requirements, and provide products and services in accordance

with the requirements of the export markets to augment export performance. In other words, in order to achieve sustainable competitiveness in overseas markets, firms make greater efforts to develop export market-oriented behaviours (Cadogan *et al.*, 2002, 2003). According to the resource-based view, firms effectively utilize resources to gain competitive advantage (Barney, 1991). Export market-oriented behaviours are intangible assets of exporters that cannot be purchased in any market or otherwise exchanged for other resources. Export market-oriented behaviour is related to culture, and is deeply rooted in the values and norms of organizational members. It can never be represented in words or documents, and it has a characteristic ambiguity (Hunt and Morgan, 1995). High-level export market-oriented behaviour enables firms to generate export market information; this information is used to understand and satisfy customer preferences and requirements, to consolidate the firm's position in export markets, and to gain continuous competitive advantages, which will contribute to long-term export performance (Cadogan *et al.*, 2009). In other words, export market-oriented behaviours are very valuable. It can therefore be concluded that in fiercely competitive foreign markets, firms with strong export market-oriented behaviour are more competitive and gain better export performance compared to those with weak EMO. The corresponding hypothesis is therefore proposed as follows:

H5. Export market-oriented behaviour positively correlates with export performance.

2.3 Degree of internationalization as moderator

The internationalization of firms is based on the concept of continuous development. Firms gradually internationalize along with the evolution of their product lifecycles. Some scholars define internationalization as the degree and style of commitment adopted by firm management with regard to overseas sources of income (Piercy, 1981). Reactive small- and medium-sized enterprises are likely to view internationalization as a necessary response to unfavourable conditions in current markets, and as a means of coping with internal problems (Albaum *et al.*, 1994). Owing to lack of knowledge about foreign countries, and a propensity for avoiding uncertainty, firms usually start with a low-risk indirect exporting mode, where the first intermediary is located in the domestic market of the exporter. They then move to direct exporting, within which the first intermediary is located in the target foreign market, or to their own exporting, where the exporting firm establishes a sales subsidiary located in the export market (Luostarinen, 1979). After reviewing the various conceptualizations of internationalization in the literature, Cadogan *et al.* (2009) posited that the degree of internationalization of export-oriented firms should include scale of export operation and scope of export activities. Scale of export operation refers to the ratio of its volume of exports to its overall operations, while scope of export activities refers to the scope in terms of geographic locations and countries in which the firms operate (Luostarinen, 1979; Tallman and Li, 1996).

Cadogan *et al.* (2009) pointed out that internationalization of a firm emanates not only from a change of internal strategies, but also from the complexity of the environments. After engaging in internationalization, a firm must both increase logistical costs and learn the laws, language and culture of competitors in the relevant overseas markets (McDougall and Oviatt, 1996). Through the process of internationalization, firms improve their management, marketing competence and skills, thereby leading to competitive advantages. The degree of internationalization explicitly demonstrates an exporter's state of development in overseas markets on the one hand, and the effects of

export market-oriented behaviour on export performance on the other. Exporters with a low degree of internationalization have fewer markets to manage and monitor, which leads to lower demand for export market-oriented behaviour, and results in their inability to fully meet the demands and preferences of their overseas customers. In the long term, increasing familiarity with international markets, and the benefits of serving diversified markets, will decrease a firm's risk below the previous "domestic-only" market level, and increase profitability (Czinkota and Ronkainen, 2001). We hold that the degree of a firm's internationalization intensifies the impact of EMO on its export performance. Therefore, we propose the following hypothesis:

- H6.* The degree of internationalization strengthens the relationship between firm export market-oriented behaviour and export performance.

3. Research methodology

3.1 Questionnaire sampling and design

Since most empirical studies correlate EMO with the performance of large firms in developed and emerging countries such as Canada (Francis and Collins-Dodd, 2000), Finland (Cadogan *et al.*, 2002, 2009), Hong Kong (Cadogan *et al.*, 2003), Turkey (Akyol and Akehurst, 2003), China (Murray *et al.*, 2007), Australia and Thailand (Styles *et al.*, 2008) and the USA (Cadogan *et al.*, 2002), this study uses the Taiwanese manufacturing sector as the object of empirical study. In emerging economies, firms typically grow both domestically and internationally in order to accommodate institutional peculiarities. This also applies to Taiwan, where exporters are major players in the economy. The Taiwanese manufacturing sector thus provides a suitable setting for research on EMO behaviour and export performance.

Due to constraints of time and space, we selected a convenience sampling method. Questionnaires were sent to the top 1,000 manufacturers listed in *CommonWealth* (2009) magazine. This was complemented by a random sampling of 500 machinery manufacturers selected from the Taiwan Association of Machinery Industry Directory. In addition, we randomly selected 100 firms from Taichung Industrial Park and Changhua County, and polled business leaders or supervisors familiar with export business. In the survey instructions, we reminded respondents to fill out questionnaires using their most important partners in overseas markets as study units. The respondents were asked to choose their primary partners on the basis of cooperation, experience and duration. We sent out 1,600 questionnaires in total, and received 244 completed ones, yielding a response rate of 15.25 per cent. After 12 invalid questionnaires were eliminated, the remaining 232 represented an effective response rate of 14.5 per cent. In order to confirm the representativeness of the sample adopted, we tested the samples based on collection time in two rounds. An extrapolation procedure was used to assess non-response bias. Several *t*-tests were conducted to test the null hypothesis that the means of the answers across the two groups were the same. No significant differences were found in the number of characteristics between early and late respondents.

Machinery products account for most (21.6 per cent) of the industrial distribution, followed by metallurgy and non-metal mineral products (15.9 per cent), textile and leather products (8.2 per cent), petrification materials, heavy chemicals and chemical fertilizers (6.5 per cent), photoelectricity (6.0 per cent), and semiconductors (5.2 per cent). The 232 valid questionnaires represent companies with 10-20 years of export trade experience (29.3 per cent), 20-30 years (22.4 per cent), 5-10 years (19.4 per cent),

30 or more years (18.1 per cent) and 1-5 years (10.8 per cent). Overall, 66 manufacturers have capital of <80 million TWD dollars (28.8 per cent) while 163 (71.2 per cent) have capital of more than 80 million TWD.

3.2 Measurement

Most factors in the questionnaire were self-developed to suit practices in the industry. All variables were measured on a seven-point Likert scale and assessed using multiple measures. Inter-organizational relationships were factored into the broad concepts of trust, relationship commitment, social interaction and power. We used goodwill trust to evaluate the trust of a manufacturer in its partners in the export markets, and developed six items in this regard (Ganesan, 1994; Kumar *et al.*, 1995). Four measures of relationship commitment were gleaned from Allen and Meyer (1990), Verhoef *et al.* (2002) and Styles *et al.* (2008). Social interaction was defined as frequent, proper and amicable contact, and/or links between the firm and other members, which facilitate information exchange. A three-item scale was adopted from Tasi and Ghoshal (1998) and Yli-Renko *et al.* (2001) for this dimension. Coercive power was the source of power most commonly used by firms to control partner behaviour; a four-item scale was adopted from Matanda and Freeman (2009) in this regard.

EMO has been widely studied (e.g. Cadogan *et al.*, 2002, 2006; Murray *et al.*, 2007). We adopted Cadogan and Diamantopoulos' (1995) measures of EMO: export market-intelligence generation, dissemination and responsiveness. EMO was plotted on an 18-item scale. Following Akyol and Akehurst (2003) and Cadogan *et al.* (2002, 2003, 2009), we employed the following multi-dimensional methods to measure export performance: financial, strategic and competitive indicators (comparisons with competitors), along with an overall performance indicator. In relation to degree of internationalization, we applied Tallman and Li (1996) measures, including two key factors of firms' strategic export activities: scale and scope. Export scale was rated according to share of exports, while export scope was evaluated with reference to the number of countries or regions to which the firm exports. Measures from Cadogan *et al.* (2009) were adopted to standardize the scores of the three measurement indicators, and to calculate overall internationalization. All of the scales used for model testing are listed in the Appendix.

3.3 Measurement assessment and construction

To gauge the reliability and validity of the scale, we employed confirmatory factor analysis and LISREL 8.54 (Jöreskog and Sörbom, 1993) to verify both the convergent and discriminant validity. Fornell and Larcker (1981) designated the standards of convergent validity criteria as follows: standardized factor loading higher than 0.5; average variance extracted (AVE) higher than 0.5; and composite reliability (CR) higher than 0.7. The evaluation standard for discriminant validity is the square root of AVE for one dimension being greater than its correlation coefficient with any other dimension(s).

Table I shows that the AVE for all dimensions was above the threshold value of 0.5, except for the dimension of power, which was slightly lower (0.487). The CR values of all dimensions exceeded 0.7. As suggested above, all items in the measures of exogenous variables were significantly explained, suggesting that the items converged to this factor, and hence to their corresponding dimensions. Therefore, the scale had convergent validity to some extent. Finally, as also shown in Table I, the correlation

Table I.
Measurement information
and correlation matrix

Variables	1	2	3	4	5	6	7	8	9	10	11
Com.	(0.713)										
Trust	0.590**	(0.728)									
SI	0.508**	0.502**	(0.807)								
Power	-0.013	-0.082	-0.074	(0.698)							
EIG	0.538**	0.458**	0.520**	-0.007	(0.782)						
EID	0.549**	0.534**	0.525**	0.037	0.667**	(0.778)					
EIR	0.532**	0.576**	0.491**	-0.088	0.583**	0.722**	(0.742)				
FEP	0.292**	0.260**	0.318**	0.004	0.311**	0.256**	0.256**	(0.898)			
SEP	0.267**	0.255**	0.268**	-0.043	0.319**	0.196	0.223**	0.722**	(0.787)		
CEP	0.270**	0.314**	0.218**	0.054	0.267**	0.221**	0.287**	0.632**	0.732**	(0.918)	
DOI	0.137	0.076	0.178*	-0.009	0.277**	0.262**	0.145*	0.168*	0.218**	0.223**	1.000
Mean	5.357	5.554	5.718	3.445	5.560	5.614	5.553	4.200	4.142	4.155	0.008
SD	0.845	0.658	0.834	1.163	0.849	0.827	0.873	1.316	1.106	1.22	0.785
α	0.799	0.856	0.841	0.732	0.885	0.884	0.901	0.925	0.868	0.939	na
AVE	0.508	0.530	0.651	0.487	0.612	0.606	0.550	0.807	0.620	0.842	na
CR	0.800	0.850	0.850	0.740	0.890	0.860	0.790	0.930	0.870	0.940	na

Notes: SI, social interaction; EIG, export intelligence generation; EID, export intelligence dissemination; EIR, export intelligence responsiveness; FEP, financial export performance; SEP, strategic export performance; CEP, competitive export performance; DOI, degree of internationalization. $\chi^2 = 179.7$; $df = 84$; $\chi^2/df = 2.14$; GFI = 0.908; AGFI = 0.869; CFI = 0.933; RMIR = 0.069; RMSEA = 0.067. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

coefficients of the dimensions were all less than the square root of AVE, suggesting that each dimension in this study had good discriminant validity.

4. Results

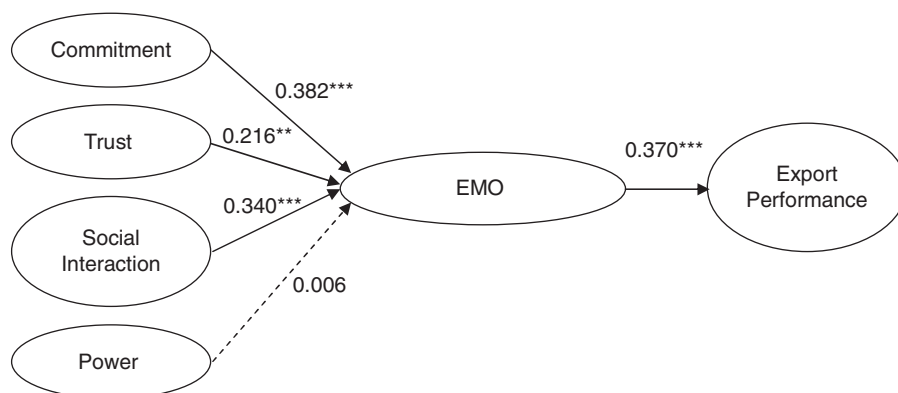
Statistical analysis with structural equation modelling (SEM) and multiple regression models proceeded in two phases. First, to verify the main effect, SEM analysed the causality between the dimensions in *H1-H5*. Second, multiple regression models further explored the moderating effect of internationalization on the relationship between export market-oriented behaviour and performance.

4.1 Main effect analysis of the structural model

Path analysis attested that the standardized path coefficient of inter-organizational commitment to EMO reached statistical significance ($\gamma = 0.382$, $p < 0.001$), thus supporting *H1*. Similarly, the standardized path coefficient of inter-organizational trust in EMO also attained statistical significance ($\gamma = 0.216$, $p < 0.05$), thereby supporting *H2*. The standardized path coefficient of inter-organizational social interaction for EMO reached statistical significance ($\gamma = 0.340$, $p < 0.001$), which supported *H3*. However, the standardized path coefficient of inter-organizational relative power for EMO failed to reach statistical significance ($\gamma = 0.006$, $p > 0.001$), suggesting that *H4* was not supported. The results of the SEM path analysis show the standardized path coefficient of EMO to export performance also reached statistical significance ($\gamma = 0.370$, $p < 0.001$), which supported *H5* (Figure 2).

4.2 Degree of internationalization as a moderating variable

The empirical results (Table II) indicate that the effects of EMO on competitive, financial and strategic export performance were positive and statistically significant. The effect of the moderating variable's dependence on the interaction of EMO and internationalization was not significant. Model 4 showed that the effects of the interactions on financial ($\beta = -0.058$, $p > 0.01$), strategic ($\beta = -0.044$, $p > 0.01$) and competitive export performance ($\beta = -0.062$, $p > 0.01$) failed to reach significance. This implies that internationalization does not moderate the positive effect of EMO on overall performance. In general, the moderating effect of internationalization on the hierarchical regression models did not reach a level of significance, suggesting that *H6* was not empirically supported.



Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Figure 2.
Path analysis

Table II.
Examination of
moderating variable

	Model 1			Model 2			Model 3			Model 4		
	FEP	SEP	CEP	FEP	SEP	CEP	FEP	SEP	CEP	FEP	SEP	CEP
Export experience	-0.049	-0.015	0.053	-0.042	-0.009	0.059	-0.076	-0.057	0.009	-0.080	-0.060	0.005
Firm size	-0.028	0.175	-0.11	-0.027	0.176	-0.010	-0.044	0.152	-0.034	-0.040	0.155	-0.031
Capital	0.317***	0.150	0.217*	0.248**	0.086	0.150	0.263**	0.107	0.173	0.255**	0.101	0.164
EMO				0.306***	0.290***	0.300***	0.283***	0.258***	0.266***	0.269***	0.247***	0.251***
DOI							0.092	0.132*	0.137*	0.103	0.140*	0.149*
EMO × DOI												
F-value	5.47***	6.38***	3.65**	9.58***	9.81***	7.72***	7.99***	8.56***	6.91***	6.76***	7.18***	5.88***
Adj. R ²	0.065	0.077	0.040	0.151	0.154	0.122	0.153	0.164	0.133	0.152	0.161	0.132

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.0$

4.3 Mediating role of EMO

Following Baron and Kenny (1986), we used the regression equations of the following three models to determine the existence of the mediating effect. Based on the results, we argue that if a variable is to be considered a mediator, three conditions must be fulfilled. It can be seen from Model 1a of the regression analysis results in Table III that inter-organizational commitment ($\beta = 0.201$, $p < 0.01$), inter-organizational trust ($\beta = 0.147$, $p < 0.05$) and inter-organizational social interaction ($\beta = 0.4501$, $p < 0.01$) had significant positive effects on EMO. However, in Model 2, only inter-organizational trust ($\beta = 0.145$, $p < 0.1$) and inter-organizational social interaction ($\beta = 0.194$, $p < 0.05$) had significant positive effects on export performance. In Model 3, which added EMO, the results show that EMO exerted a significant positive effect ($\beta = 0.169$, $p < 0.05$) on export performance. However, the previous significant positive effects of inter-organizational trust and inter-organizational social interaction on export performance were insignificant. Moreover, the β values of inter-organizational commitment and power also decreased from 0.085 and -0.030 to 0.045 and -0.023 , respectively. To sum up, for the individual variables, EMO satisfies the verification conditions provided by Baron and Kenny (1986) for the full mediating role between trust export performance and social interaction. Our hypotheses regarding the mediating effect of EMO on the relationship between inter-organizational relationship (including commitment, trust, social interactions and power) and export performance were partially supported.

5. Discussion

According to the empirical results of this study, while commitment, trust and social interactions between an exporter and its export partners have positive effects on EMO, the relative power between exporters has no significant effect. Since inter-organizational commitment, trust and social interactions constitute the capital and structural dimensions of social capital, our results suggest that the establishment of organizational social capital helps to generate export market-oriented behaviour. This study verifies that the relationship with external partners is an important resource for organizations in developing their market orientation (Elg, 2007). Such external relationships are the driving forces for market-oriented behaviour and cultural awareness. In contrast, the relative power in inter-organizational relationships does not affect the generation of export market-oriented behaviour. When the relative power between organizations becomes overly unbalanced, maintenance of their cooperative relationships is determined based on the benefits arising from their transactions. Once

	EMO Model 1	Dependent variables Export performance	
		Model 2	Model 3
Commitment	0.201***	0.085	0.045
Trust	0.147**	0.145*	0.116
Social interaction	0.450***	0.194**	0.106
Power	-0.036	-0.030	-0.023
EMO			0.195**
F-value	45.45***	7.923***	7.516***
Adj. R^2	0.445	0.127	0.128

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Table III.
Examination of the
mediating role of export
market orientation

a better cooperative partner appears, their partnership is likely to end. When the relative power between organizations is unbalanced, it can prevent the two parties from integrating overseas market intelligence, and from making an effective response.

According to the empirical results of this study, export market-oriented behaviours have a significantly positive effect on financial, strategic and competitive export performances; these results are in line with Akyol and Akehurst's (2003) study. Export market-oriented behaviours cannot only increase export sales and improve competitiveness of products, but also help firms to build strategic layouts in overseas markets. Furthermore, degree of internationalization does not exert a significant effect on the positive relationship between EMO and export performance. Consistent with Cadogan *et al.* (2009), this study further proves that the relationship between EMO and export performance is not affected by the degree of internationalization. There are two reasons why there is no moderating effect from the degree of internationalization on the positive relationship between EMO and export performance. First, a large proportion of our sample firms account are older exporters; they have rich export experience and a large export scale, but are likely to be less flexible in their efforts to enter international markets. Younger export firms may be more malleable in adapting their operations and resources to meet the requirements of international expansion (Carr *et al.*, 2010); they tend to acquire relevant experience of internationalization from successful competitors, and use this knowledge to configure their resources into capabilities that lead to growth and survival (Autio *et al.*, 2000; Brouthers *et al.*, 2009). We suspect that the degree of internationalization reflected by the older sample firms reduced the overall impact on the relationship between EMO and export performance. Second, over-internationalization may constrain other strategic opportunities, thereby hindering firms' overall performance. Although EMO is the most effective weapon in improving export performance, it has its own drawbacks. Exporters intensively focusing on EMO will be more competitive, and will easily achieve superior export performance (Cadogan *et al.*, 2002, 2003, 2009) in areas such as sales volume, profits, market share and customer satisfaction. With the expansion of international markets, exporters need more resources to invest in the maintenance and development of EMO. Such investment in export expansion may reduce their opportunities to implement other strategic behaviour orientations, which would result in financial expenditures, resource investments and opportunity costs being much higher than the relevant benefits, thus inhibiting firm growth. Therefore, a balance of strategic behaviours should be maintained by firms in order to keep the development of various strategic behaviour orientations open so that they are able to adopt different strategies to respond to different situations, competitors and customers (Cadogan *et al.*, 2003).

This study partially supports the idea that EMO has a mediating effect on the relationship between inter-organizational relationship (trust and social interaction) and export performance. In conclusion, instead of directly improving an organization's performance, inter-organizational relationships may gradually increase performance through knowledge assimilation, as well as the integration of certain characteristics and situations as mediators (Rothaermel and Deeds, 2004). Our results suggest that trust and social interaction can improve export performance through EMO behaviours; however, we also show that neither commitment nor power are significant predictors of export performance, which means that there is no mediating effect of EMO on commitment or power, and export performance. From the resource-dependence perspective, exporters who commit to developing overseas export markets will rely on

information provided by distributors or importers, which will result in decreasing relative power. Thus, it has no significant impact on export performance (Gulati and Sytch, 2007). Moreover, high commitment indicates a high relationship-specific investment. A change of partners will lead to economic and non-economic restrictions and costs (Styles *et al.*, 2008), namely switching costs (Patterson, 2004; Patterson and Smith, 2003). This is likely to have a negative effect on export performance. Thus, the positive effect of commitment or power may be offset by the negative effect, which would negate the impact on export performance.

5.1 Managerial implications

This study suggests that exporters should establish good relationships with their channel partners or customers in overseas markets. More specifically, they should establish trusting relationships with these partners based on close interactions. Trust is capital accumulated over time in a long-term relationship. When constructing a trust mechanism, firms should thus consider long-term interests and avoid conflicts with short-term interests. Firms and their partners should achieve a win-win situation based on an attitude of mutual support and co-development. In terms of interactions, firms can utilize technological and electronic equipment, such as video phones, video conferences and so on, to overcome the limitations of time and space and enhance mutual communication and knowledge exchange. They should also send relevant business personnel to local markets on a regular basis in order to communicate with their partners face to face and gain an understanding of the local markets. In other words, firms should coordinate common interests and resolve conflicts with their channel partners via close interactions in formal and informal ways. Trust and close interactions with partners may enhance firms' EMO, which in turn may improve their performance.

Furthermore, our results verify the positive relationship between EMO and export performance. This implies that cultivating managers' abilities to generate, disseminate and respond effectively to export intelligence is the most critical task for exporters. In order to generate export intelligence, exporters should allocate resources equally across markets, based on their scale and potential; establish local offices or strategic business units to facilitate market research and analysis; promote communication with customers, distributors and suppliers; and expand direct channels in order to get access to, and make effective use of, valuable market intelligence. In order to collect export intelligence from the external environment and share this intelligence more effectively throughout the organization, exporters must have sufficient knowledge for interpreting it. The process of interpretation relies on the knowledge base of the organization. Moreover, formal (such as the integrated information system, electronic communication system and internet computer system) and informal (inter-departmental private relationships, banquets and hall talks designed to integrate internal activities) information-sharing channels should be established within the organization. This helps all members to understand the connotations of the export market intelligence and increase their willingness to share this intelligence with others (Armario *et al.*, 2008). Export-intelligence responsiveness can be divided into formal and informal processes (Song *et al.*, 2010). It has been pointed out that when customer preferences and segment composition are relatively stable, the informal process, combined with the existing market knowledge base, can help in the development of marketing strategy. Moreover, when customer demand is formed, formal market-information processing will facilitate firms to quickly identify new trends of customers,

and to employ this information in developing new products and marketing activities (Armario *et al.*, 2008). To sum up, the greater a firm's ability to generate, disseminate and respond to export intelligence, the better its export performance will be.

Although our study reveals that degree of internationalization has no positive moderating effect on the relationship between EMO and export performance, the development of international export markets has inevitable trends (Murray *et al.*, 2007). In the technology-intensive and export-intensive Taiwanese manufacturing sector, market competition has shifted from scant competition to strong competition, and from single-market competition to multi-market competition. Taiwan's exporters must painstakingly learn, adapt and develop new capabilities such as branding, innovation, distribution, human capital and social capital (Wu and Chen, 2013). According to Baker and Sinkula (1999) and Slater and Narver (1995), exporters should maximize performance by: identifying the necessary values to create a learning organization; focusing on customers' existing and potential demands; and striking a balance between adaptive and creative learning. However, export market-oriented behaviour gained from diversified information due to a high degree of internationalization may not be enough to process, disseminate and use this information completely. Firms should thus build learning organizations that enable members to interpret diversified information systematically, as well as to perfectly match products to the demands of overseas market customers. In other words, if a firm's EMO focuses too much on the interests of overseas markets, it may neglect short-term customer demand. In this case, a high degree of internationalization may not further improve the impacts of EMO on export performance.

5.2 Limitations and future research

Prior studies on the antecedents of EMO have mainly focused on the internal mechanisms of organizations; very few have explored firms' relationships with external partners. Although inter-organizational relationships have been discussed here, there are many other important inter-organizational factors, such as coordination, relationship tension and long-term relationships. Most prior research has considered the understanding of only one party in the mutual relationship; therefore, the cognitive differences between the two parties have been ignored. Future studies should conduct two-way research on both focal firms (manufacturers) and overseas partners (agents or distributors) through additional variables such as trust, commitment, satisfaction and so on.

Moreover, the results show that the content validity of this study is somewhat inadequate, possibly because it was affected by cultural differences. The study also used a sample from exporting companies based in Taiwan (the manufacturing industry). When convenience sampling is adopted as the sampling method, the representativeness of the samples may be a problem. In order to explore whether industry and country-of-origin effects have played a significant role in determining the results observed in this study, multi-country or -industry studies are also warranted.

Since quantitative research also has its shortcomings, it is recommended that future researchers conduct in-depth interviews or case studies to correlate between inter-organizational relationships and manufacturer market-oriented behaviour. Furthermore, this study adopted a scale developed by previous scholars to measure the power dimension. In this measurement, the relative power between the other party (cooperative partner) and the focal party (sample manufacturer) serves as a measure. This study considers the content validity of this dimension as inadequate, possibly due to cultural differences. Styles *et al.* (2008, p. 892) argue that, "In certain cultures, such as

in the East, the emphasis on relationships may typically be more explicit". Influenced by subjective factors, such as culture, some respondents may glamorize their relative power. Therefore, it is suggested that future research investigate the effects of power-related dimensions, such as relationship tension, power asymmetry and dependence, or take advantage of multiple informants using a qualitative methodology in order to avoid subjective bias. Finally, exporters can offer competitive products to overseas markets only by meeting customer needs, predicting technological trends, understanding government regulations and sensing the actions of competitors in each individual market. In order to carry out export market-oriented activities, firms may have to allocate large amounts of resources and expenditures, which could impair their overall performance if the costs of export market-oriented activities outstrip the benefits generated (Cadogan *et al.*, 2003). Firms should also consider other moderating factors, such as market maturity, market turbulence and competitive intensity, in deciding to carry out export market-oriented activities. For example, firms should make greater efforts to build good relationships with their channel partners or customers, and carry out more export market-oriented activities so as to stabilize their presence in overseas markets. Future studies are also encouraged to investigate the moderating effects of these factors.

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Appendix. Measurement items used for model testing

EMO behaviour (seven-point scales, 1 = "very strongly disagree", and 7 = "very strongly agree")

Export market-intelligence generation:

- (1) We generate a lot of information concerning trends (e.g. regulation, technological developments, politics and economy) in our export markets.
- (2) We constantly monitor our level of commitment and orientation to serving export customer needs.
- (3) We are quick to detect fundamental shifts in our export environment (e.g. technology, regulatory, economy).
- (4) We periodically review the likely effect of changes in our export environment (e.g. technology, regulation).
- (5) We generate a lot of information in order to understand the forces which influence our overseas customers' needs and preferences.

Export-intelligence dissemination:

- (1) Too much information concerning our export competitors is discarded before it reaches decision makers.^R
- (2) Information which can influence the way we serve our export customers takes forever to reach export personnel.
- (3) Important information about our export customers is often "lost in the system".^R
- (4) Information about our export competitors' activities often reaches relevant personnel too late to be of any use.^R
- (5) Important information concerning export market trends (regulation and technology) is often discarded as it makes its way along the communication chain.^R

Export-intelligence responsiveness:

- (1) Our export business strategies are driven by our beliefs on how we can create greater value for export customers.
- (2) Our export strategy for competitive advantage is based on our understanding of export customer needs.
- (3) Our export business objectives are driven primarily by ensuring customer satisfaction.
- (4) We pay close attention to after-sales service in our export markets.
- (5) If a major competitor were to launch an intensive campaign targeted at our foreign customers, we would immediately implement a response.
- (6) We are quick to respond to significant changes in our competitors' price structures in foreign markets.

- (7) We are quick to respond to important changes in our export business environment (e.g. regulation, technology and economy).
- (8) We rapidly respond to competitive actions that threaten us in our export markets.

Inter-organizational relationship (seven-point scales, 1 = “very strongly disagree”, and 7 = “very strongly agree”)

Relationship commitment:

- (1) It is pleasant working with this partner; that is why we continue the relationship.
- (2) Strong social bonds exist between this partner and us.
- (3) We have a strong sense of loyalty with this partner.
- (4) We are patient with this partner when they make mistakes that cause us problems.

Trust:

- (1) This partner has made sacrifices for us in the past.
- (2) This partner is like a friend.
- (3) This partner does not make false claims.
- (4) When making important decisions, the partner is concerned about our welfare.
- (5) Though circumstances change, we believe that the partner will be ready and willing to offer us assistance and support.
- (6) When we share our problems with the partner, we know that they will respond with understanding.

Social interaction:

- (1) We maintain close social relationships with this partner.
- (2) We know this partner’s people on a personal level.
- (3) We are willing to discuss items of cooperation with our partners.

Coercive power:

- (1) Even if we disagree with this partner we have to comply with their request.^R
- (2) In case of disagreement, our partner could penalize us.^R
- (3) This partner is able to make decisions that can alter our profit levels.^R
- (4) This partner can adversely influence the way we operate.^R

Export performance (seven-point scales, 1 = “very strongly dissatisfied”, and 7 = “very strongly satisfied”)

How satisfied are you with your performance?

Financial performance:

- (1) Export sales volume for the company over the three years.
- (2) Export profit for the company over the three years.
- (3) Export sales growth for the company over the three years.

Strategic performance:

- (1) Satisfaction with export market share.
- (2) Satisfaction with export market entry.
- (3) The competitiveness of products in the international market.
- (4) Overall arrangement of the foreign market.

Competitiveness performance:

- (1) Compared to our major competitors, satisfaction with export sales volume.
- (2) Compared to our major competitors, satisfaction with export market share.
- (3) Compared to our major competitors, satisfaction with rate of new export market entry.

Degree of internationalization:

- (1) Percentage of total sales turnover derived from exports.
- (2) Number of export destination countries.
- (3) The regions to which the firm exports: Western Europe (including Scandinavia), Russia and Baltic countries, Asia, Eastern Europe, North America, Africa and Middle East, South/Central America.

Note: ^RReverse coded.

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