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Determinants and consequences of price-leadership strategy: Evidence from Chinese manufacturer exporters

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Abstract

This research investigates the antecedents of the price-leadership strategy (PLS), and its impacts on export performance with the moderating role of export target markets. Drawing from the contingency theory and strategy management framework, the authors adopt structural equation modelling (SEM) to analyse the survey data collected from 155 Chinese manufacturer exporters. The empirical results suggest that the PLS negatively affects export performance. Firms are more likely to adopt the PLS when competitive intensity and technological intensity are high but less likely to adopt the PLS when product popularity is high. The negative impact of the PLS on export performance is stronger when firms export to other emerging (vs. developed) markets. With the unique perspective from emerging markets, the authors theoretically discuss and empirically examine the antecedents-PLS-performance link. This research suggests that emerging-market firms rationally adopt the PLS and actively cultivate technology and innovation capability, product popularity and international marketing competence on export businesses.

Keywords: Price-leadership strategy; Emerging markets; Export performance; Marketing strategy; Export pricing.

Introduction

Emerging markets have considerable impact on world economy due to their huge economic volume, rapid growth and wide distribution. On the one hand, firms located in developed countries moves their product lines into emerging

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markets in order to reduce costs in labour and raw material. On the other hand, emerging economies benefit from learning advanced technology, improving income and consumption, and accelerating economic development. Today's emerging economies share much in common with pastime emerging economies such as high growth and high return. According to the data from the World Bank, the real GDP growth of emerging economies in 2013 is 4.8%, higher than developed countries (1.3%) and world average (2.2%). In particular, the real GDP growth in China consistently maintains double-digit in 2005-2007[6].

However, emerging markets in today's world embrace a number of unique characteristics. First, many emerging economies are "countercyclical" to business cycles. Because emerging countries governments take different economic, fiscal and monetary policies, emerging economies react irrelevant or even opposite to business cycles in developed countries. Second, emerging economies actively engage in international trade and cooperation because of the development of informational communication and technology (ICT). Finally, despite the advantages mentioned above, emerging markets are still immature and face several structural problems. Consequently, firms located in emerging and developed countries faces widely different circumstances. Therefore, examine the differences of export firms located in developed and those located in emerging countries are of paramount importance to the success of a firm's international business.

Studying the relationship between pricing strategies and export performance in the context of emerging markets is both necessary and highly valuable. On the one hand, pricing strategy is crucial to a firm's success due to its direct impact on performance (Sousa & Bradley, 2009). Firms located in emerging markets have unique understandings on export pricing strategies because of market environments and industrial foundations (Griffith, Cavusgil, & Xu, 2008), which makes the impacts of pricing strategies more complex and inconclusive. Moreover, country and cultural differences add more complexity to the pricing-performance relationship. While some studies find that competitive pricing enhances export performance (e.g., Lado, Martínez-Ros & Valenzuela, 2004; Chryssochoidis & Theoharakis, 2004), other studies suggest that pursuing a low price strategy is detrimental to export performance (e.g., Brouthers & Xu, 2002; Brouthers, O'Donnell, & Hadjimarcou, 2005). Some studies also find non-significant relationships between price competitiveness and export performance (e.g., Cavusgil & Zou, 1994; Katsikeas, Piercy, & Ioannidis, 1996; Shoham & Kropp, 1998; Albaum & Tse, 2001). Therefore, examining the impacts of pricing strategies is desirable to guide firms' export practices and extend the academic research in the field of international business.

[6] http://data.worldbank.org/topic/economy-and-growth

Many exporters located in emerging markets take advantage of low cost of labour and raw material and choose price leadership strategy (hereinafter, PLS) to penetrate targeting markets. However, the PLS is not without limitations. First, low price relies on low unit costs, which often cause slim margins and vulnerability to market fluctuation (Porter, 2011). Second, existing research suggests that low price alone is not sustainable for a firm's export profitability and long-term success (Leonidou, Katsikeas, & Samiee, 2002). Third, over-reliance on the PLS brings the risk of a price war because competitors can easily emulate the low price (Lawton, 1999). Thus, the grim consequences on vulnerability to market fluctuation, unsustainable growth, and accompanying risk of price wars all endanger firms to survive the international competition. Unfortunately, to date, few studies have considered the pricing-performance link in the context of emerging economies (Leonidou et al., 2002; Myers, Cavusgil, & Diamantopoulos, 2002). Also, a managerial perspective still requires further insights into the effect of pricing strategies on international markets.

Because inconclusive results have emerged from the existing literature, together with the scarcity and complexity regarding the PLS in the context of emerging markets, this study aims to tackle the following questions:

(1) Does the PLS enhance or endanger emerging-market firms' export performance?

(2) What are the antecedent factors of the PLS?

(3) Which contextual factors influence this PLS-performance relationship?

Our research contributes to both the empirical investigation of the pricing-performance relationship and a better understanding of the various impacts of the PLS in diverse business circumstances. The remainder of the paper proceeds as follows. The next section outlines the conceptual and theoretical background of the current work and presents the research framework and hypotheses. The ensuing section discusses the research methodology and presents the specific measures used to test the theoretical model. Subsequently, a section on the data analysis and the results precedes the final section, which lays out the primary discussions, the implications and the directions for future research.

Theoretical Background

Why does the PLS matter?

Why is the PLS so pervasive among the firms located in emerging markets? First, firms located in emerging economies are concentrated at light and labour-intensive industries. The low cost of labour and raw material provide them with the opportunity to reduce cost and gain competitive advantage through low price and standardization. Second, despite turbocharged growth, emerging-market firms are constraint by limited capability in technology and innovation,

which prevents them from exporting high value-added products. Third, data from the World Band and Interbrand suggests that emerging economies generate 40% of global GDP, but their firms own only four of the top 100 brands. Thus, weak brand power also inhibits emerging-market firms to pursue a high price strategy. Therefore, a considerable number of firms located in emerging markets adopt the PLS on international markets.

Export firms located in developed markets, however, present widely different characteristics. Influenced by historical and capital reasons, many developed-market firms prefer direct investment when expand into new markets. Strong innovation capability and advanced technology allows them to produce high-end products. Also, because developed economies are concentrated in high value-added industries such as service and information technology, their firms tend to compete with a differentiation strategy on international markets. Supported by adequate capital, efficient management and rich experience, they pursue optimal allocation of resources and profit maximization. Especially with the progress of globalization, firms located in developed markets consider the international markets from a synergistic view, in order to maintain their leading position and achieve sustainable growth.

Pricing strategy is an essential but complex part in strategy framework, especially for export firms who have to take various markets into consideration (Jain, 1989; Myers et al., 2002). In their framework of export pricing, Tan and Sousa (2011) summarizes pricing-related studies according to their nature and provide four classifications of pricing strategies: competitive posture, price-setting philosophy, pricing process, and pricing practices. Similarly, Leonidou et al. (2002) classified pricing-related decisions into six categories: pricing method, pricing strategy, sales terms, credit policy, currency strategy, and pricing adaptation. Both of these two meta-analyses posit that pricing strategy often refers to set low prices, through which export firms could use to penetrate foreign markets. Existing empirical results also suggest that low price strategy is positively relates to performance except profit (e.g., Leonidou et al., 2002). Nonetheless, the above-mentioned analysis mainly investigated firms located in developed markets. It is both important and intriguing to examine the effects of the PLS in the context of emerging markets.

Theoretical foundation: Contingency Theory and the Resource-Based View

Our conceptual framework is primarily rooted in contingency theory and the strategy management framework. Contingency theory claims that the relationship between marketing strategy and export performance is contingent on a firm's internal and/or external context (Hultman, Robson, and Katsikeas, 2009), which is an important theoretical basis used by the vast majority of pricing-performance studies (Tan & Sousa, 2011). Zeithaml and Zeithaml (1988)

posit that there are three types of contingent variables: (1) contingency variables (environmental and organizational factors); (2) response variables (export strategies and practices); and (3) performance variables (specific measurements of export performance). Contingency theory is implemented in the context of international marketing as fit theory, which implies that the various degrees of congruence between the market environment and a firm's business strategy lead to various performance outcomes (Cavusgil & Zou, 1994; Myers, 2004; Griffith, 2010). Thus, to achieve satisfactory performance on international markets, firms must ensure that the export strategy is fit with the specific export market.

Our research framework also draws on the resource-based view, which emphasizes that various endowments of strategic resources can finally decide a firm's competitive advantages (Zou & Cavusgil, 2002). Specifically, strategic resources are described as valuable, rare, inimitable, and not substitutable, and these resources could help firms achieve a superior performance (Hunt & Morgan, 1995; Griffith, Yalcinkaya, & Calantone, 2010). Research on the pricing-performance relationship (e.g., Zou, Fang, & Zhao, 2003) introduces the resource-based view into the export pricing strategy and summarizes two levels of resources: country-specific resources and firm-specific resources. Country-specific resources such as the education system, well-established communications marketing infrastructures, and high labour productivity provide a lower overall marketing cost and hence allow firms to produce products with a low price or high quality. On the other hand, firm-specific resources such as marketing and operation capability help firms achieve economies of scale and thereby allow them to adopt a competitive pricing strategy (Nath, Nachiappan, & Ramanathan, 2010).

Export Pricing Strategy Framework

Our conceptual framework of export pricing strategy is based on the existing framework of both exports marketing studies and the pricing literature (Myers et al., 2002; Leonidou et al., 2002; Tan & Sousa, 2011). The proposed model addresses the relationships between export pricing strategy and contingent variables, and links export pricing strategy to a firm's export performance (see Figure 1).

Antecedents of the PLS

In line with established frameworks (e.g., Tan & Sousa, 2011; Cavusgil & Zou, 1994), we classified the antecedent factors that could influence the firm's export pricing decisions into four categories: (1) export market factors, (2) industry characteristics, (3) product characteristics, and (4) firm and management characteristics. Since this study aims to investigate the PLS mechanism in the context of emerging markets, we also take the indigenous characteristics of emerging markets into consideration when select specific contextual variables.

Export Market Factors

Foreign market characteristics act as most influential factors to exporters' pricing decisions from both micro and macro perspectives (e.g., Lages, Jap, & Griffith, 2008). In the current study, we choose competitive intensity to represent environmental factors on export markets because of its direct impact on pricing strategies (e.g., Powers & Loyka, 2010; Lages & Montgomery, 2004) and its prevalence in export pricing studies (Tan & Sousa, 2011).

Industry Characteristics

Industry characteristics include industry competition, regulation, as well as technology orientation (Cavusgil & Zou, 1994; Zou & Stan, 1998). Due to limited capability of research, development and innovation, technology plays a critical role for emerging-market firms' pricing strategy. Therefore, we choose technology intensity to represent the characteristics of industry.

Product Characteristics

Export products are key determinants of export pricing strategies. Exporters pay considerable attention to products' costs, features, types, product life cycle, etc. and make pricing decisions according to those characteristics (e.g., Tzokas, Hart, Argouslidis, & Saren, 2000; Myers & Cavusgil, 1996). Export products from emerging markets also own unique characteristics such as homogeneity and standardization, which brings them with the advantages of the scale of economy but also endangers firms because those products can be easily substituted. Under this circumstance, we introduce product popularity to describe product characteristics of emerging-market exporters.

Firm and Management Characteristics

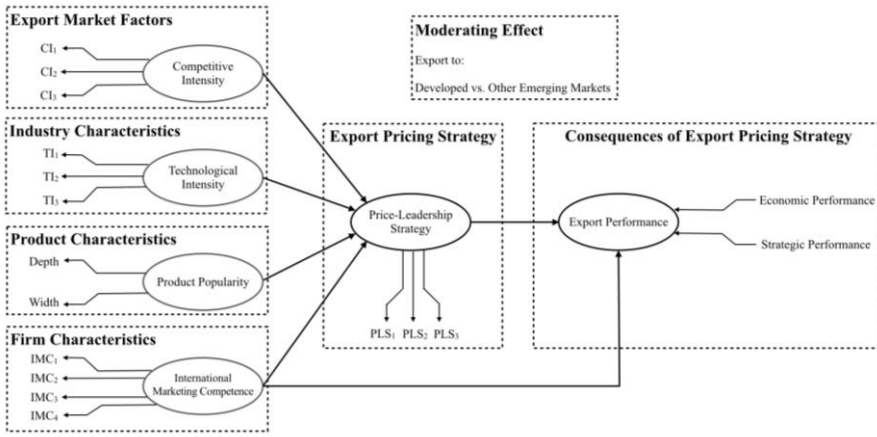
Firm characteristics refer to relevant assets and skills that may bring firms competitive advantages on international markets (Cavusgil & Zou, 1994). The literature posits that management capabilities are critical to the success of export business (e.g., Lages et al., 2008). In line with this review, we choose international marketing competence to represent emerging-market firms' characteristics. In addition, firm size and international experience are most frequently used to describe a firm's characteristics. Therefore, we also take these two variables into consideration when examine the PLS mechanism.

Consequences of the PLS

There are several indicators to measure the effect a firm's strategy. Among them, export performance is pervasively accepted as the consequences of export pricing strategy, which refers to the extent to which a firm's objectives are achieved (Myers & Cavusgil, 1996). Consistent with former studies, we investigate firm's performance from both economic and strategic perspectives (e.g.,

Tan & Sousa, 2011; Myers & Harvey, 2001). We will discuss this issue in more detail at section four. Cavusgil and Zou (1994) also argue that from a resource-based view, export performance is determined by export marketing strategy and a firm's capability to implement the chosen strategy. Therefore, in the current research framework, the PLS and international marketing competence jointly affect the firm's export performance. Our proposed model of summarized relationships is shown in Figure 1.

Fig. 1 Conceptual Framework and Proposed Model



Hypothesis Development

Antecedents of the PLS

Competitive Intensity

Export markets' competitive intensity is the extent to which businesses must strive to outdo each other to gain the economic rents (Lages & Montgomery, 2004). The number of competitors, price competitiveness and service/delivery are various aspects of market competition. Along with a firm's own production curve, the comparison with key competitors can provide useful reference for exporters to determine pricing strategies for various export markets. Thus, rather than a specific point, firms set prices within a range formed by their competitors' prices in the export market.

Previous research in the international marketing field has mainly discussed the relationship between the competitive intensity of the export markets and the standardization/adaptation strategy. Some research suggests that the level of market competition is positively related to price adaptation by arguing that, as the competition level escalates on export markets, firms are under increased pressure to differentiate their offerings and maximize their value delivery (e.g., Cavusgil & Zou, 1994; Lages & Montgomery, 2004; Lages, et al., 2008). On the

other hand, Powers and Loyka (2007) propose a positive relationship between competitive intensity and the standardization strategy and emphasize that the economic, cost-saving advantages of standardization are greater in highly global and competitive markets (Porter, 2011; O'Donnell & Jeong, 2000). Comparative advantage, as one of the most original premises of international economics, states that lower price, higher quality or both motivates global trade (Feenstra, 2003). Furthermore, the demand for high quality or competitively priced products will increase with the increasing competition level on the international market (Levitt, 2002).

The underlying effects of competitive intensity converge to a firm's further exploitation of its own comparative advantages and the increasing demand of products with a high price-quality ratio. Firms located in emerging markets treat lower price as their main competitive advantage because they lack strong R&D resources and established market position (Young, Smith, & Grimm, 1996). In addition, the PLS can meet the demand of increasing competition by providing similar products at a competitive price. Combining these two advantages, firms from emerging markets tend to adopt the PLS as the intensity of competition increases in the export markets. Thus, the authors offer the following hypothesis:

H1. Emerging-market firms are more likely to adopt the PLS when the competitive intensity of the export market is high.

Technological Intensity of Industry

As an indispensable external force in export studies, industry characteristics fail to draw as much attention as do other forces. Both Cavusgil and Zou (1994) and Zou and Stan (1998) emphasize the importance of the technological characteristics of the industry and argue that further research is needed before drawing definite conclusions. An industry's technological characteristics consist of three dimensions: (1) technological sophistication and complexity (Bello & Gilliland, 1997); (2) technological orientation (Cavusgil & Zou, 1994); and (3) technological turbulence (Powers & Loyka, 2007; 2010). Cavusgil and Zou (1994) indicate technological orientation's positive impact on price competitiveness. Moreover, previous studies also indicate that technological intensity is positively related to export performance (Holzmüller & Stöttinger, 1996; Ito & Pucik, 1993).

Advanced technological features help firms produce more innovative and technology-intensive products. Thus, high technology intensity constitutes export products' high added value. Moreover, high value-added products are assumed to have higher prices, which leads to the contrary direction compared to the PLS. Thus, high technology intensity allows firms to gain more competitive

advantages that are sustainable and unique compared to the low price advantage.

We propose that firms located in emerging markets are more likely to adopt the PLS in industries with high technological intensity. Due to limited capital and international experience, exporters located in emerging markets possess weaker innovation and technology capability than their global competitors located in developed markets. Consequently, the export products of emerging-market firms are concentrated on the lower end of the technology spectrum. Increasing technological intensity leaves emerging-market firms two options: reduce the price or retreat from the high technology industry. As a matter of fact, many emerging-market firms prefer to learn the advanced technology from developed markets in order to decrease the R&D cost and avoid potential risks of new product failure. From a dynamic perspective, only after surviving the fierce competition on international markets can the firms further invest in technological development. Therefore, the authors offer the following hypothesis:

H2. Emerging-market firms are more likely to adopt the PLS when the technological intensity of the industry is high.

Product Popularity

Product characteristics are the core elements of export business because they influence every aspect of marketing activities, which mainly include the cost of products, product type, and product life cycle (Myers and Cavusgil 1996). Although researchers agree that product characteristics are of great importance to export pricing strategy (e.g., Tzokas et al., 2000; Myers et al., 2002), the effects of product factors have been greatly overlooked by empirical studies in recent years. In their review of export pricing, Tan and Sousa (2011) find only one study (Waheeduzzaman & Dube, 2003) that examined the effect of product characteristics (product life cycle) on pricing strategy.

Because emerging markets' export products are often homogeneous and standardized, the popularity becomes influential to a firm's pricing decisions. Therefore, the authors introduce product popularity into the research framework. We define product popularity as the extent to which a product is acknowledged and preferred compared to its substitutions, which represents in two aspects: depth and width of the popularity. The depth of product popularity is the extent to which foreign consumers know and accept the firm's export product; the width of product popularity is the number of markets to which a firm exports its products.

The authors expect high product popularity to reduce the likelihood of PLS adoption for three reasons. First, high product popularity leads to greater value. Product value equals the ratio of the benefit it brings to the customers and the cost paid by customers (Kumar, Scheer, & Kotler, 2000). By emphasizing the

benefit over the cost, product popularity translates into increasing product value and hence customers' preference and loyalty toward the product. Therefore, exporters do not have to rely on low price to attract consumers if their product is popular. Second, high popularity represents customers' acceptance of a product's quality and design and hence constitutes the exporter's product advantages (Leonidou et al., 2002). This product-based advantage is a unique that competitors cannot easily imitate. Compared to the PLS, product popularity provides another option for exporters to achieve higher producer surplus and sustainable development. Third, product popularity allows firms to set price higher by enhancing customers' willingness to pay (WTP). The concept of WTP is rooted in the theory of price in classic economics and is strengthened in the context of marketing science. Knowledge of consumers' WTP is central to any pricing decision, particularly in the areas of product development and competitive strategy (Jedidi & Jagpal, 2009). The highest price that customers are willing to pay is the customers' perceptual value of this product. Popularity improves consumers' perception of the product through superior quality and word-of-mouth effect and hence increases consumers' willingness to pay. Consequently, instead of the PLS, firms can set the price higher as a result of product popularity.

In summary, product popularity helps a firm form its unique and intangible equity and hence enriches competitive advantages instead of reducing price alone.

H3. Emerging-market firms are less likely to adopt the PLS when the popularity of an export product is high.

International Marketing Competence

Previous research in the marketing field emphasizes the importance of a firm's competence due to its potential influence on planning and the execution of strategy as well as the accumulation of sustainable competitive advantages (Aaker, 2008). While one stream of marketing competence focuses on the capabilities and resources that allow firms to operate in international markets (e.g., Zou & Cavusgil, 2002), the other stream extends the competence of the marketing mix (such as price, product, promotion and distribution) to the international arena (e.g., Moen & Servais, 2002). Both streams suggest that stronger international marketing competence positively relates to export performance. Cavusgil and Zou (1994) find that a firm's export marketing strategy and the capability to implement the chosen strategy determine the performance of an export venture.

The authors suggest that the effect of a firm's international marketing competence is reflected in three aspects: (1) identify export market characteristics;

(2) develop appropriate export strategies; and (3) execute export strategies effectively and consistently. Specifically, strong international marketing competence helps a firm find its position in the export markets much more accurately. At the same time, firms are able to execute the established strategy efficiently through outstanding international marketing competence. In addition, international competence helps exporters respond to market turbulences and risks by effectively collecting and analysing information. With a lack of technological support or capital accumulation, low-price is the main competitive advantage for many firms in emerging markets. Therefore, the PLS is suitable if this strategy fits with the emerging-market exporters' idiosyncratic characteristics. Moreover, compared with market-based or product-based strategies, firms can easily implement the PLS in international markets due to its simplicity. Concluding from the analysis above, the authors propose that:

H4a. PLS adoption has a positive relationship with international marketing competence.

H4b. Export performance has a positive relationship with international marketing competence.

Performance effect of the PLS

Along with Myers and Cavusgil (1996), the authors define export performance as the extent to which a firm's objectives (including economic and strategic objectives) are achieved through the planning and execution of their export marketing strategy. Among measurements of performance, economic performance includes profitability, sales, growth, export intensity, etc., and strategic performance includes market share, management satisfaction, objective achievement, etc. (Myers & Harvey, 2001). Both economic and strategic performance is of particular importance for evaluating the effect of certain export strategies. We choose both economic indicators (sales growth and profitability) and strategic indicators (export goal achievement and management satisfaction) to measure export performance. Introducing multiple measurements of performance is also consistent with previous studies (e.g., Reimann, Schilke, & Thomas, 2010; Sousa & Bradley, 2009).

The relationship between export pricing strategy and export performance is equivocal. Many studies find that competitive pricing (or low pricing) enhances a firm's performance in terms of export sales (Lado, Martínez-Ros, & Valenzuela, 2004; Chryssochoidis & Theoharakis, 2004), sales growth (Chang 1995) and profitability (Koh, 1991). On contrary, some researchers find that the adoption of competitive price is detrimental to export performance in terms of export growth and export intensity (Cooper & Kleinschmidt, 1985), profitability (Sriram & Manu, 1995), and satisfaction with export performance (Brouthers & Xu, 2002; Brouthers, O'Donnell, & Hadjimarcou, 2005). Some studies also

show non-significant relationships between price competitiveness and export performance (e.g., Shoham & Kropp, 1998; Albaum & Tse, 2001). Chang (1995) finds that low pricing enhances sales growth but inhibits profitability.

The authors propose that the PLS negatively affects export performance. First, on the domestic front, low prices mainly result from price-sensitive domestic environments in emerging markets (Ghauri & Cateora, 2010). However, this price-sensitive circumstance could also limit a firm's export performance in terms of profitable and sustainable development. Moreover, the low cost of labor that allows emerging-market firms to adopt the PLS has been quickly vanishing with the increasing wages and decreasing labour force in recent years. Second, emerging-market firms' price advantage has been severely challenged by both developed and other emerging markets in recent years. In response to the PLS, developed-market firms also reduce their prices. In addition, other less developed countries join the competition by providing even lower prices for similar products (Brouthers & Xu, 2002). Third, although price reduction increases the sales in the short term, over-reliance on price competition will result in a thinner margin and less producer surplus in the long run (Mankiw, 2014). Consequently, fierce competition, vanishing margins, and a pessimistic vision of future development all negatively affect export performance. Therefore, the authors propose that:

H5. PLS adoption negatively affects emerging-market firms' export performance.

Moderating effects of exports markets

Developed markets are different from developing markets in three major aspects. First, by the nature of being developed and developing, these two markets have different levels of economic development and hence different levels of purchasing power. Therefore, the PLS effect is more salient to price-sensitive consumers in developing markets. Second, developed markets tend to be more competitive in terms of the numbers of substitutions and competitors. Due to efficient competition, price elasticity in developed markets is greater than in developing markets. Flexible price elasticity allows consumers to easily choose substitute products when prices change. However, consumers in developing markets must absorb the price turbulence due to the inflexible elasticity of price. Finally, developed markets are more mature and intact than developing markets. Hence, instead of price alone, consumers can identify and distinguish various product characteristics based on product features, brand images, and customization, etc. In developing markets, the incomplete competition limits consumers' knowledge about products. Hence consumers have to treat price as an important signal of product characteristics.

In summary, because firms must meet the idiosyncratic characteristics of the developing markets (i.e., increasing competition on price and decreasing outcome on performance), the PLS results in a worse performance outcome in developing markets than in developed markets. Therefore, the authors propose that

H6. Compared to developed markets, the effect of the PLS on export performance is more negative when firms export to developing markets.

Methodology

Field Interviews

To better understand the PLS and export performance through both academic and practice lenses in the context of emerging markets, the authors conduct in-depth interviews with 12 executive managers of manufactures who are in charge of the export business. Combining export marketing theories and real situations in emerging markets, the managers provided valuable suggestions on the efficiency of measuring items and variables that pertain to research objectives. They also offered substantial help in articulating the expressions that bridge academic terminology and practical business expressions. In the following step, the authors invited three marketing professionals to evaluate the content and constructs of the proposed scale to improve its validity and reliability from an academic standpoint.

Questionnaire development and measures

Based on the interviews conducted with both marketing academics and practitioners, the authors designed a standardized questionnaire and first translated the English questionnaire into Chinese based on the existing literature regarding the key constructs of current research. Furthermore, the authors asked 20 MBA students translate this Chinese version back into the English version and interviewed them about the expression and fluency of the Chinese questionnaire. After checking the accuracy and validity of the translated questionnaire, the authors confirm the final version of the Chinese questionnaire, which contains six parts: measuring the PLS, export performance, the competitive intensity of export markets, the technological intensity of the industry, product popularity and international marketing competence. In the last section of the questionnaire, the authors ask the respondents about the firm-related data (sales, sales growth, numbers of employees, export experience, etc.).

Price-Leadership Strategy (PLS)

Consistent with the previous discussion, the PLS is defined as firms that provide consumers with equal or similar quality products and services with lower price than their competitors. The authors follow Myers et al. (2002) and

Zou et al. (2003) to measure the PLS in three ways: "compare price with competitors," "treat the PLS as a competitive advantage" and "use the PLS in the main export markets." These three aspects cover the main concept of the PLS and its evaluation.

Competitive intensity of exports markets

Competition in export markets is vital for firms' strategic decisions and further development. A large number of studies emphasize the importance of export market competitiveness (e.g., Jaworski & Kohli, 1993; Cavusgil & Zou, 1994; Lages & Montgomery, 2004; Powers & Loyka, 2007; 2010) from various angles. The authors follow Jaworski and Kohli (1993) to measure competitive intensity with three items: "Our export markets are noted for competition between companies," "There is substantial competition among companies in our export markets," and "The competition in our export market is very fierce."

Technological intensity of industry

The existing literature describes the technology intensity of an industry with three dimensions: (1) technological sophistication and complexity (Bello & Gilliland, 1997); (2) technological orientation (Cavusgil & Zou, 1994); and (3) technological turbulence (Powers & Loyka, 2007; 2010). The authors follow Bello and Gilliland (1997) and Cavusgil and Zou (1994) to measure this construct in the following ways: "the technology intensity in export products," "the update/change rate of technology" and "the technology orientation in the industry."

Product popularity

Product popularity is a new construct in the international marketing field. The literature focusing on product characteristics is relatively scant and existing studies are focusing on product adaptation/standardization and product life cycle (e.g., Myers et al., 2002). The authors develop scales to measure this construct from two dimensions: popularity in width (the numbers of export markets) and depth (the extent to which foreign markets know and accept the export product). Product popularity, together with adaptation/standardization and product life cycle could enrich the product characteristics in international marketing discipline as it elaborates the unique feature of export products from emerging markets.

International marketing competence

International marketing competence represents a firm's comprehensive capability to conduct business and pursue further development in international markets. Existing studies consist of two types of measurements regarding international marketing competence: the capabilities and resources that allow firms to operate on international markets (e.g., Cavusgil & Zou, 1994; Zou &

Cavusgil, 2002); and the competence of the marketing mix (such as price, product, promotion and distribution) to the international field (Moen & Servais, 2002). The authors follow the latter stream to measure a firm's international marketing competence through the lens of the marketing mix.

Export performance

In their review work, Katsikeas, Leonidou, and Morgan (2000) classify the measures of export performance into three types: economic measures (includes sales, profits and market share), noneconomic measures (such as product-related or market-related items) and generic measures (satisfaction and strategic market performance). In line with this discussion and existing measurements (Vorhies & Morgan, 2005; Sousa & Bradley, 2009; Reimann et al., 2010; Morgan, Katsikeas, & Vorhies, 2012), the authors treat export performance as a two-dimensional second-order construct with economic indicators (sales growth and profitability) and strategic indicators (export goal achievement and management satisfaction). Our questionnaire contains six parts mentioned above, and each construct was presented on five-point Likert scales (1 = "fully disagree" and 5 = "fully agree").

Data Collection

China is an ideal context for this study. The enormous export volume and quick growth in recent years make China one of the most representative emerging markets in the world.

Sampling procedure

Initially, the authors draw samples from the Directory of Foreign Economic and Trade Enterprises of China (2003-2004) (a database from the Chinese Department of Foreign Trade Ministry of Commerce) and Alibaba (the largest internet-based e-commerce company in China). We used three criteria: (1) firms must export to international markets; (2) firms must have more than 50% Chinese ownership; and (3) firms must have complete contact information. The authors selected 1100 firms and sent the Chinese version of the questionnaire to them. The survey targets the primary strategic business units (SBU) of export business. The chief executive officer or a key manager, such as the manager of export business or marketing, answered the questionnaire. Excluding 221 undeliverable and 30 unqualified samples during the mailing process, 849 samples were successfully delivered. The authors received a total of 155 usable questionnaires, which represents an 18.3% response rate. Moreover, to check the validity of the responses, the authors randomly called 30 informants and asked the questions regarding the key constructs of the questionnaire. The answers of the follow-up interviews are consistent with those from the returned surveys.

Company characteristics

Our investigation targeted at Chinese manufacturers who actively engaged in international businesses. The samples come from mainly four industry categories: electrical and electronic components, processing machinery, chemicals and manufacturing, and home appliances. More specifically, these four categories consist of 21 sub-industries that highly involve export activities. Enterprises with less than 200 employees account for 37.4% of the whole data, enterprises with 201-500 employees account for 20.6% of the data, enterprises with 501-1000 employees account for 18.1% of the data, enterprises with 1001-5000 employees account for 14.8% of the data, and enterprises with more than 5000 employees account for 7.7% of the data, with one invalid value. As for export ages, 49.7% of the responses have been engaged in export business for less than five years, 31% have been engaged in export for 6-10 years, and 3.2% have been engaged in export for 11-15 years. Firms that have been engaged in export for more than 20 years account for 3.9% of the data, with 12 invalid values. As for geographic distribution, firms from Zhejiang Province occupy the largest proportion (21.9%), followed by Guangdong Province (19.4%), Jiangsu Province (13.5%), Hebei Province (13.5%), and Beijing (12.3%). Further, 17.4% of the firms come from other provinces in China. As for the product category, 43.2% of the export products belong to consumer goods, and 49.7% of them are industrial goods.

It is worth to mention the classification of targeting markets. According to the World Bank's classification of economies for the current 2015 fiscal year, developed economies are defined as those with a GNI per capita of more than $12,746, while emerging economies' GNI per capita are less than $12,746 in 2013[7]. In line with this classification, we divide our data into two subgroups according to firms' major export markets. There are also exporters simultaneously target at both developed and other emerging countries. In this case, we asked managers to identify "the country/market your most important market/client located in" in our questionnaire and classify their target markets accordingly. As a result, 49% of the export businesses emphasize on developed countries, and 47.1% of the businesses mainly export to other emerging countries, with six invalid values.

Nonresponse bias and common method bias

Armstrong and Overton (1977) suggest researchers pay attention to potential bias of nonresponse. Following their procedure, the authors compare the early and late respondents by receiving time and could not find significant differences according to the t-test result. The authors also compare the firms' characteristics of the early and late respondents, but neither the size (number

[7] http://data.worldbank.org/about/country-and-lending-groups

of employees) nor the export involvement (export years) appears to be significantly different, which indicates that a nonresponse bias is not a major problem for the current research.

Common method bias is another potential bias in survey-based data that concerns the correlations between multiple constructs. First, the authors organize the questionnaire in such a way that the dependent variable (export performance) was hid amid the other constructs (Salancik & Pfeffer, 1977). In the following step, the authors conduct Harman's one factor test (Podsakoff & Organ, 1986) and the result failed to extract a single factor. Finally, according to MacKenzie, Podsakoff, and Fetter (1993), the authors re-ran the structural model with an unmeasured latent factor. No significant result appears regarding the indicators and latent factors.

Estimation approach

The authors use a structural equation model (SEM) to analyse the data. A SEM is an appropriate approach to analyse this framework in a comprehensive manner, which combines causal assumptions and statistical data effectively. Specifically, the authors use LISREL to conduct a confirmatory factor analysis (CFA) and path analysis. In addition, the authors also used the LAVAAN package in R to test and confirm the proposed structural model and CFA analysis.

Results

Measure assessment

Table 1 provides detailed information on the contract means, standard deviations, and the correlation matrix between the constructs. Although the χ^2 value is significant, which could imply model rejection (χ^2 =163.99, *df* =153), because of its sensitivity to sample size, the authors suggest considering other indicators as well. The root mean square error of approximation (RMSEA) indicates a good model fit compared to the populations covariance matrix with the consideration of the numbers of parameters (Byrne, 2013). The CFA model's RMSEA value is .04, which is within the confidence interval of .02 to .06. The standardized root mean square residual (SRMR) value is .05, the comparative fit index (CFI) is .97, and the adjusted goodness-of-fit (GFI) statistic is .98, all of which suggest that the CFA model has a good fit-of-population sample. Table 1 shows an overview of the standardized estimates and z-values of the scale items.

According to the composite reliability test, the CR values ($\rho_{(\eta)}$) of the constructs are all beyond .70, which represents a qualified reliability level (Bagozzi, 1980; Hair, Black, Babin & Anderson, 2009). The authors use Cronbach's alpha to examine internal consistency of the measurement model. Significant and

large factor loadings (the average loading size was .75) evidence the convergence validity. The authors use both correlations and average variance extracted (AVE) to evaluate discriminate validity.

Table 1. Measurement models and Confirmatory Factor Analysis (CFA) results

	$\alpha/\varrho_{vc(\eta)}/\varrho_{(\eta)}$	Standardized Loading	Z-value
EXPORT PERFORMANCE *Source: Cavusgil & Zou (1994) Reimann et al. (2010)*	.91/ .69/ .92		
Please evaluate the economic performance of your export business over the past year relative to your major competitors.			
Growth rate of sales volume.		.90	14.16
Profitability of export business.		.73	10.35
Please evaluate the strategic performance of your export business over the past year relative to your major competitors.			
Export business achieved our anticipated export strategic goal.		.86	13.13
Our firm is satisfied with the management of export performance.		.93	14.96
Please evaluate the overall performance of your export business over the past year relative to your major competitors.			
Overall performance		.73	10.37
PRICE-LEADERSHIP STRATEGY Source: *Myers et al. (2000) Cavusgil et al. (2003)*	.83/ .69/ .87		
Compared with major competitors, we set our prices very low		.83	9.13
On major export markets, price is our major competitive advantage		.84	11.43
On major export markets, we adopt price leadership strategy		.83	11.24
COMPETITIVE INTESNTIY OF EXPORT MARKETS *Source: Jaworski & Kohli (1993)*	.75/ .62 / .83		
Our export markets are noted for competition between companies.		.74	8.25
There is substantial competition among companies in our export markets.		.87	10.47
The competition in our export markets is very fierce.		.75	7.29

	$\alpha/\varrho_{vc(\eta)}/\varrho_{(\eta)}$	Standardized Loading	Z-value
TECHNOLOGICAL INTENSITY OF INDUSTRY Source: *Bello & Gilliland (1997) Cavusgil & Zou (1994)*	.74/ .56 / .79		
Technology changes rapidly in our industry.		.80	8.25
Technical intensity is very high in our industry		.84	10.47
Our export products have high technological features.		.60	7.30
PRODUCT POPULARITY	.81/ .64/ .78		
Our main export products enjoy a high popularity on export markets.		.93	11.83
Our main export products are widely accepted on international markets.		.66	7.52
INTERNATIONAL MARKETING COMPETENCE Source: *Moen & Servais (2002)*	.83/ .59 / .85		
We can set price efficiently on the export markets.		.61	7.77
We can build and manage our distribution network effectively.		.84	11.68
We can effectively advertise and promote our product on export markets.		.84	11.77
We can adopt differentiation strategy by marketing approaches.		.76	10.39

Note: *The survey was conducted in 2005-2006 and the original questionnaire was in Chinese. [a: Cronbach's alpha, ϱvc(η): Average Variance Extracted (AVE), ϱ(η): Composite Reliability – Source: Cronbach (1951), Fornell and Larcker (1981), Bagozzi (1980)]*

All the correlations between the constructs are less than one, and the highest correlation is between international marketing competence and performance, which indicates qualified discriminant validity. In addition, all the constructs' AVE values ($\rho_{vc_{(\eta)}}$) are beyond .50 and greater than the squared correlations with other constructs, which satisfies the requirement for the ensuing analysis (Fornell & Larcker, 1981).

Structural model

The authors examine the structural model after establishing confidence in the appropriateness of the measures. In specific, this structural model contains six constructs (PLS, export performance, competitive intensity, technological

intensity, product popularity, and international marketing competence), 20 observable indicators and 155 observations. The model fit measures are as follows: $\chi^2 = 340.3$, RMSEA= .06, CFI= .92, SRMR= .06, TLI= .89. The key fit indices suggest a good model fit. The results of the direct and indirect effects of the structural paths are shown in Table 3.

Table 2 Means, Standard Deviations, and correlations among latent constructs (AVE values on diagonal)

Construct	Mean	SD	Min	Max	pls	expper	comp	tech	prod	intcom
Price-leadership Strategy (pls)	2.98	0.83	1	5	0.69					
Export performance (expper)	4.32	1.30	1	7	-0.14	0.69				
Competitive intensity (comp)	3.51	0.74	1	5	0.23	-0.08	0.62			
Technological intensity (tech)	3.32	0.80	1	5	0.11	0.18	0.13	0.56		
Product popularity (prod)	2.08	0.09	1	5	-0.16	0.20	-0.02	-0.04	--	
International marketing competence (intcom)	3.05	0.57	1	5	0.07	0.60	0.17	0.25	0.14	0.59

The path coefficients indicate the overall support for the proposed model. Competitive intensity has a positive relationship with PLS adoption ($\beta = .22$, $p < .01$), which supports H1. The technology intensity of the industry shows a significant impact on PLS ($\beta = .15$, $p < .05$), which supports H2. Product popularity is negatively correlated with PLS adoption ($\beta = -.12$, $p < .01$), which supports H3. International marketing competence does not show a significant impact on PLS adoption, which fails to support H4a. However, international marketing competence has a great positive influence on export performance ($\beta = .61$, $p < .01$), which supports H4b. As expected, the PLS negatively affects export performance ($\beta = -.29$, $p < .01$), which supports H5. We also take firm size and their export experience into consideration when examine the PLS mechanism. As the results show, export experience is positively related to

the PLS ($\beta = .28$, $p < .01$). This result is reasonable as more experienced firms are involved in export business earlier when emerging markets were focused on exporting labour-intensive products. Consequently, more experienced firms are more likely to adopt the PLS on international markets. However, export experience did not show significant impact on performance, neither did firm size matter to the PLS adoption or export performance.

Table 3 Structural Model Results: Antecedents and Consequences of Price-Leadership Strategy

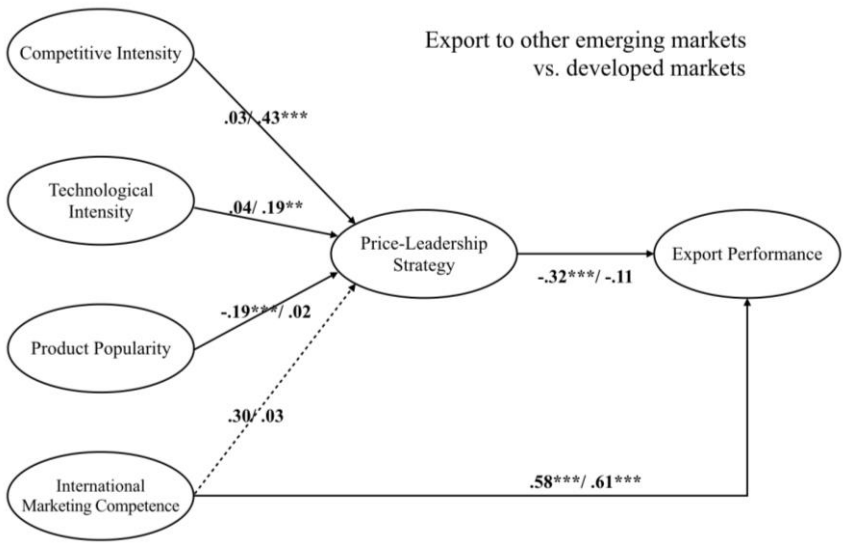
	Path Coefficient (β)	Significance (*Z* - value)	Support
Hypothesized paths:			
H1: Competitive Intensity → Price-Leadership Strategy	.22***	2.14	Yes
H2: Technological Intensity → Price-Leadership Strategy	.15**	3.45	Yes
H3: Product Popularity → Price-Leadership Strategy	-.12***	-3.25	Yes
H4a: International Marketing Competence → PLS	.04$^{n.s.}$	0.73	No
H4b: International Marketing Competence → Export Performance	.61***	4.21	Yes
H5: Price-Leadership Strategy → Export Performance	-.29***	-2.94	Yes
Control paths modeled:			
Firm Size → PLS	-.05$^{n.s.}$	-1.23	
Export Experience → PLS	.28**	2.57	
Firm Size → Export Performance	.08$^{n.s.}$	1.29	
Export Experience → Export Performance	-.07$^{n.s.}$	-0.89	
Overall model fit:			
$\chi 2$	340.3**		
RMSEA	.06		
CFI	.92		
SRMR	.06		
***p* < .1; **p* < .05; ****p* < .01; n.s. not significant**			

Comparison of target markets

The results for the structural model from two subsamples (targeting at other emerging markets vs. developed markets) appear in Figure 2. The negative impact of the PLS on export performance is significantly greater when firms export to other emerging markets ($\beta = -.32$, $p < .04$). However, there is no significant relationship between the PLS and exporters' performance when firms export to developed markets. This finding supports H6. In addition, interesting

comparisons also arise among the antecedents of the PLS. Competitive intensity (β= .43, p < .01) and technological intensity (β= .19, p < .03) significantly motivates PLS adoption on developed markets; similar results fail to appear on emerging market circumstance. Product popularity prevents firms from choosing the PLS on other emerging markets (β= -.19, p < .01) but does not show significant impact when firms export to developed markets. International marketing capability significantly enhances export performance on both types of markets.

Fig. 2 Structural Model Results with Moderating Influence of Targeting Markets



Discussion

According to Porter's competitive theory (Porter, 2011), differentiation and cost-leadership are highly influential on the development and choice of firms' business strategies. At the same time, the concept and application of pricing strategy also extends from domestic markets to global circumstances. Moreover, complexity arises with foreign markets' uncertainty and ambiguity. Hence, export pricing becomes an indispensable topic in international marketing research (Myers et al., 2002). Many firms choose to enhance export performance at a lower price level, which represents the philosophy of the PLS: achieve sales growth by providing similar products/quality at a competitive price. Therefore, the PLS has become one of the most dominant strategies that is frequently adopted by firms that pursue business success in international markets.

However, the performance effects of the PLS are still inconclusive and even conflict. Despite the growth in the initial phase by adopting the PLS, many firms realize a diminishing margin in the long run. Unlike other competitive strategies, the PLS is easy for competitors to imitate and hence bring firms the risk of a price war. In addition, the idiosyncrasies of emerging add complexity to the PLS effects. Although the comparatively low cost of raw material and labor allows firms to adopt the PLS, the diminishing margin and fierce competition should make firms become prudent when choosing the PLS over other strategies.

The authors attempt to provide reasonable implications of this intriguing issue under the circumstances of emerging markets. In taking the proposed approach, the authors answer three research questions mentioned at the beginning: (1) what are the antecedents of the PLS? (2) What is the role of the PLS for export performance? (3) Do targeting markets affect the impact of the PLS?

What are the effects of antecedents of the PLS?

Competitive intensity of exports markets

Our empirical results suggest that competition intensity positively affects PLS adoption. This finding is consistent with the expectation that fierce competition calls for firms' emphasis and reliance on its own competitive advantage. The core advantage of the PLS is to provide similar quality products/services at lower prices, which increases the price-quality ratio to meet such demand. In addition, this effect is particularly significant in the emerging market context because many emerging-market firms treat the PLS as their main competitive advantage. Hence, the PLS is a more appropriate choice in a highly competitive market.

Technological intensity of industry

Consistent with H2, technological intensity positively affects PLS adoption. This effect is reasonable in the context of emerging markets because many firms are competitive in neither current technology capability nor potential R&D capacity. The authors conduct a robustness check to support this finding: by adding export intensity (the percentage of export volume to the overall sales volume) to the structural model, the results show that technology intensity negatively relates to export intensity ($\beta = -.54$, $p < 0.01$). Thus, export products of emerging-market firms are still concentrated on the lower range of technology spectrum. As the intensity of technology increases, emerging-market firms focus on exporting lower technological products with lower prices. Therefore, the intensity of technology and PLS adoption has a positive relationship in the context of emerging markets.

Product popularity

Our empirical results support the negative impact of product popularity on the PLS. Consistent with our hypothesis, popularity represents consumers' acceptance of a product's quality and design, which translates into higher loyalty and willingness to pay. These advantages allow firms to achieve price premiums instead of choosing the PLS. The authors suggest that this finding is of particular importance to emerging-market firms. Many firms from emerging markets choose to export popular products rather than cultivate the popularity of their own export products. One disadvantage of this strategy is that too many competitors provide similar or identical products, which puts a downward pressure on price. Although popular products enhance sales volume in the short run, firms still suffer from thinner margins and fierce competition in the future. Another potential risk of exporting popular products is that the popular trend changes. Following the popular product in the current period might leave the firms with large inventory and depreciation expenses if the product is not popular in the future. On the contrary, firms can solve this dilemma from a sustainable perspective: instead of following popular products, firms can cultivate their own product popularity, which is more suitable to long-term development.

International marketing competence

The results on the relationship between international marketing competence and the PLS are intriguing. On the one hand, a firm's marketing competence on the international business does not have a significant effect on PLS adoption. On the other hand, strong international marketing competence directly and significantly enhances export performance. The authors provide possible explanations for this mixed picture. In the preceding discussion, the authors suggested that strong international marketing competence enhances a firm's international operation in terms of accurate positioning in foreign markets, effective execution of established strategy, and responsive adjustments to market turbulence. However, strong international marketing competence does not specifically motivate PLS adoption for the firms located in emerging markets. First, emerging-market firms are more likely to follow established competitors' moves instead of independently seek competitive positions in foreign markets. As a matter of fact, many emerging-market firms directly choose the prevalent low-price strategy in international markets. Second, strong international marketing competence helps a firm implement the planned marketing strategy effectively both at home and abroad. This strategy fits with firms' internal and external circumstances, but it does not always refer to a specific and certain strategy (in our case, PLS). Thus, strong international marketing competence helps firms choose the PLS if this strategy best fits the internal and external environments. However, firms with superior marketing competence also dy-

namically identify and adjust pricing strategies from period to period. Therefore, the competence of international marketing is not strategic-specific but directly enhances a firm's export performance through the three aspects mentioned above.

What is the role of the PLS for export performance?

Our empirical results show that the PLS negatively affects emerging-market exporters' performance. Despite the tentative growth, competitive forces from both home and abroad challenge the expected effect of the PLS. First, the advantage of low-cost labor, which the PLS heavily relies on, is vanishing with increasing wages and decreasing labor force in emerging markets. Second, the competitive advantages created by the PLS are challenged by both developed and other emerging markets. Specifically, competitors from other emerging markets provide similar products at even lower prices, and established market leaders from developed markets could also reduce prices in response to fierce competition. Finally, thinner margins and exhausting fierce price competition inhibits performance at both the economic (long term sales and profit growth) and the strategic level (management satisfaction and pessimistic vision of future development). Therefore, the PLS negatively influences export performance of firms located in emerging markets.

Do targeting markets affect the impact of the PLS?

Instead of arbitrarily reaching to the conclusion that the PLS pervasively hurts export performance for all emerging-market firms, our empirical results show that export markets' heterogeneity significantly affects the extent to which the PLS inhibits export performance. Our empirical findings support H6 and reveal that the negative relationship between the PLS and export performance is stronger when firms export to other emerging markets (vs. developed markets). Thus, by adopting the PLS, firms that export to other emerging countries face even lower performance outcome compared to firms that export to developed markets. As a matter of fact, the economic backgrounds of other emerging markets are closer to Chinese market, where local firms also take advantages of low costs and low prices to pursue better performance. Consequently, simply relying on the PLS cannot lead to outstanding performance. In addition, the PLS will reduce the profit margin and lead to less sustainable growth. Moreover, the over-reliance on the PLS can be harmful to brand equity and reputation, which in turn advances long-term profit from the future.

Theoretical implications

Our study contributes to the export marketing literature in three aspects. First, while the literature has long highlighted the importance of export pricing strategy, this topic received scant attention from an emerging-market perspective. We identify four distinct aspects of export pricing antecedents and offer

empirical evidence from indigenous exporters located in Chinese markets. While the empirical results are specific to emerging market context, our conceptualization of the PLS also provides insights for firms' competitive advantages and strategic implementation for the broader pricing strategy literature. Second, our research offers a new conceptualization of product popularity and measures two distinct dimensions of the construct. Although product factors are vital to the success of export business, the literature pertaining to this aspect is still limited (Tan & Sousa, 2011) and mainly concentrates on product type (Tzokas et al., 2000) or product life cycle (Myers & Cavusgil, 1996). Theoretically, product popularity is a comprehensive representation of product quality, functionality and design. In addition, popularity is also closely connected to innovation and uniqueness of export products that relies on new product development. Further, our empirical results also reveal the importance of product popularity in the PLS adoption. Third, the PLS mechanism on different export markets also deepens our understanding of export pricing strategies. Prior research has identified that developed and emerging markets are widely different from almost every aspect of export marketing strategies (e.g., Brouthers & Xu, 2002). Under the background of globalization, exporters can simultaneously target both markets. However, few studies has focused on the comparison of the pricing strategy effects when export to different markets. Our study provides insights into this research gap and suggests that firms should avoid adopting identical pricing strategies across various target markets.

Practical implications

In light of our research framework and empirical results of the antecedents and the consequences of the PLS, the authors provide three managerial recommendations.

First, firms should distinguish the limitations of the PLS from its pervasive existence. Although the PLS is still a dominant pricing strategy in export businesses, the authors do not recommend emerging-market firms to reduce price unconditionally due to its potential disadvantages to export performance and sustainable growth. Export activities also face the trade-off between profit maximization and market expansion. Firms should choose the pricing strategy that best fits their internal and external forces rather than simply following the competitors' move or pursuing short-run growth.

The second recommendation that pertains to the findings of the antecedents of the PLS is three-folded. First, the authors suggest that firms from emerging markets should consider external (export markets and industrial characteristics) and internal (product- and firm-level characteristics) forces jointly when establishing a pricing strategy on export markets. This approach gives the firm a comprehensive view of their current position, avenues for future development, and a comparison across various periods and their peer competitors. Second,

the authors suggest that emerging-market firms pay more attention to rising competitive powers such as technology and product popularity. According to economic theories (e.g. Mankiw, 2014), growth comes from capital and technology when markets are highly developed. As a matter of fact, emerging-market firms such as Huawei and Lenovo have already realized the critical role of technology and have been making considerable commitments (such as global R&D team) to these sustainable competitive advantages. Third, the authors suggest emerging-market firms actively engage globalization by strengthening their competence in international marketing. As the empirical model shows, international marketing competence enhances export performance substantially by providing effective support through positioning, strategy establishment and implementation, and continuous adjustments. Due to the breakout of the financial crisis and market fluctuations, firms from emerging markets are provided with the increasing opportunities and risks of large-scale merger and acquisition, as well as international cooperation, which increase the need for improved management skills and competitive advantages through international marketing competence.

The third recommendation comes from the moderating effect of targeting markets. Since the PLS-performance link is particularly salient when export to other emerging markets, firms should try to avoid over-reliance on the PLS in these markets. Instead, emerging-market firms should cultivate product- and firm-level competitive advantages such as high quality and reliable brands to achieve a superior performance outcome in similar markets. On the other hand, firms should consider the PLS and other competitive strategies in a comprehensive manner in developed markets.

Limitations and future research

The current research still has great potential. First, current research mainly focuses on the performance effect of export pricing strategy. However, exploring the impact of pricing strategy on entry mode is another promising issue. Second, the PLS mechanism heavily depends on context. Our classification of targeting markets provides a general perspective to analyze this issue. More detailed context factors (i.e., market segmentation) are expected to be introduced into the PLS mechanism to avoid a "one shoe fits all" conclusion. Third, current study pays little attention to the differentiation strategy and its impact on export performance. Therefore, another promising research question is what choice exporters should make to maintain balance between the PLS and the differentiation strategy. Forth, current research covers export markets environment and technical characteristics as external factors. Nevertheless, export markets' legal systems, government regulations and cultural similarities are also important influential external factors for future research. In addition to product popularity and international marketing capability, incorporating firms' vision of

globalization and learning ability is also necessary. Finally, the authors used cross sectional data to analyse the data. However, strategic choices and implementations are dynamic processes. Therefore, longitudinal data are desirable for analysing the dynamic relationship between strategic choices and export performance.

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