IDENTIFYING MANAGERS’ MENTAL MODELS OF EXPORT DEVELOPMENT STIMULI IN THE MARKET OF DEVELOPING COUNTRIES

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Abstract. Managers form their mental models of a competitive environment, and differences in mental models lead to different managerial decisions and performance levels for the firm. Despite the repeated requests of researchers in the literature, little is known about market actors’ mental models. On the other hand, considering the role of export in the economic growth and development of countries, researchers have begun to analyze emerging and developing markets in recent years. Thus, the present study aims to identify the mental model of export stimuli belonging to managers of Iranian firms active in the dairy industry. The contribution of this study is entering the theory of mental models into international marketing studies and explaining perceptual differences based on this theory. To this end, interviews with experts continued until saturation point using theoretical sampling. Based on the data resulting from semi-structured interviews analyzed using thematic analysis in MAXQDA, six mental models were identified among chief managers of 12 dairy firms: these models include government-based, benefit-based, firm-based, brand-based, manager-based, and environment-based. Results showed that government-, benefit-, and brand-based mental models are the most prominent models in this study, respectively. Moreover, the points raised in the government-based mental model refer to potential export stimuli, while the points raised in other mental models point to actual export stimuli.

Keywords: Mental model, Export stimuli, Export performance, Developing countries

Introduction. Today, export is one of the most important sources of foreign exchange revenue in every country. In some countries with single-product economy, the major source of foreign currency is export. Export requires accurate long-term policies which can continuously control the foreign market. Therefore, it needs planning and foresight (MirGhorbani Ganji, 2013). Furthermore, effective export supports require the correct understanding of factors which motivate managers to engage in export activities. Having an accurate understanding of export stimuli helps governments provide appropriate strategies for intervention in foreign commerce and financial supports for firms with different levels of export activity (potential, new, sporadic, and regular exporters). Therefore, the topic of export stimuli has attracted the attention of researchers on international business since the 1970s, and has remained an active research area in the recent years. (Revindo & Gan, 2016).

The literature on internationalization is mainly focused on firms in developed countries and major economies (Baldauf et al., 2000; Leonidou, 2000; Ojala & Tyrväinen, 2007), with little research conducted on this topic in developing countries and emerging markets (Le & Luong, 2009; Uner et al., 2013; Cahen et al., 2015). Considering the differences in business environments in different societies and perceptual differences of managers from a specific topic (Senge, 1992; Di Bindeto & Song, 2008; Gray & Wood, 2011; Uner et al., 2013), it seems that more exploratory and in-depth studies in this domain are necessary for achieving more accurate results.

On the other hand, internationalization has become a complex and multidimensional phenomenon, and a more complete picture of it can be attained by incorporating the roles of managers in this process (Sahym et al., 2012). The integration of mental models as a theoretical framework may lead to more effective efforts for understanding firm’s export behavior. Different topics related to business, including management cognition, knowledge management, decision-making, change management, consumer behavior, and competitive advantage, have employed the theory of mental models (Gray & Wood, 2011; Wiesner & Poole, 2009; Di Benedetto & Song, 2008; Calantone et al., 2010; Song et al., 2013; Ryden et al., 2015). Nyilasy et al. (2013) stated that marketing academics paid little attention to the mental models of experts in this domain. Finally, although it has been mentioned
in various studies that managerial factors and perceptions have a determining role in export behavior (Stolan, 2010; Katsikea et al., 2007; Hutchinson et al., 2006; Suarez & Alamo, 2005; Fernandez & Nieto, 2005; Manolova et al., 2002), no study has yet attempted to discover and identify the managers’ mental models of export stimuli, and the majority of studies have focused on export barriers. The noted points motivated the researchers to take a step to fill in the gaps and fortify the literature on these concepts. This study is one of the few which are conducted in an exploratory manner on the export behavior of firms active in developing markets. It attempts to discover and identify managers’ mental models of export stimuli. The main contribution of this study in advancing the existing literature is to enter the theory of mental models into international marketing studies and explaining export level differences based on this theory. Therefore, the aim of this study is to combine these two studied domains, i.e. mental models and perceived stimuli of export. The present study aimed to develop the use of mental model theory in the domain of export and international marketing. We try to enrich our understanding of the perceive experiences and meanings by managers of dairy firms regarding export stimuli.

**Review of literature**

**Necessity of exports**

In today’s business environment which has features such as globalization of markets and interrelation of economies, international strategies are of utmost importance. Even firms which are active exclusively in their local markets face the challenge of competition in international markets. In this regard, export is a major strategy for ensuring the survival and growth of firms (Navarro et al., 2010, 2014; Wood et al., 2015). Currently, export is among the fastest growing economic activities (Lages et al., 2006). In Iran, factors such as population growth, reduction in oil revenue as a result of reduced oil prices and, more importantly, the exhaustible nature of oil reserves, have made policy-makers and planners believe that the expansion of non-oil exports and moving away from single-product economy based on oil is an inevitable necessity (Khalilian, 2008). A country with a single-product export is at a higher risk and more vulnerable in economic evolutions or crises. Breaking free from the single-product economy and diversifying export goods, especially export expansion of industrial products, are specific necessities for Iran (Memarnejad et al., 2009).

Processing industries are one of the major stimuli for the economic growth of many developing countries, the most important of which are industries related to agriculture, e.g. Food industry (Shahmirzadi, 2008). In Iran, of $2,100,000,000 of food export in 2016, about $640,000,000 belonged to dairy industries which led to profitability and played a significant role in the expansion of Iran’s non-oil exports. This 30% volume justifies the importance of focusing on dairy product exports (SHATA, 2017). Unfortunately, some barriers have prevented this industry to find its place in the Iranian economy or receive a good portion of the growth national product (Khalilian, 2008). The examination and identification of these barriers and identification of factors which strengthen the economy help search for solutions to non-oil export problems and move towards the expansion of exports. Moreover, it paves the way for entering global markets and succeeding in competitive markets for Iranian firms (Mirghorbani Ganji, 2013).

**Mental models and decision-making.** The world of business has become increasingly complex, such that rational model of decision-making are inadequate for capturing market realities. As a result, managers use mental representations of reality to interpret the information of the external environment. These mental representations mirror reality through perceiving the external world accessible to the mind. In fact, mental models are predefined representations which are employed by managers for interpreting complex business phenomena (Karakaya and Yannopoulos, 2010).

Managers’ mental models are a simplified knowledge structure or cognitive representations of how business environments work. There is considerable evidence for the effects of mental models on decision-making (Gray & Wood, 2011). Mental models make managers perceive market inputs, including interactions between businesses and customers, competition, export barriers and stimuli in different manners. According to Ryden, Ringberg and Wilke (2015), mental models are used both as constructs with which people think and as mental barriers which potentially prevent a dynamic adaptability to changes and their exploitation (Reiden Ryden, Ringberg and Wilke, 2015). Karakaya and Yannopoulos (2010) argued that the information required for rational and structured decision-making is rarely available to managers, and attempts to achieve it would delay the decision-making process. This has made a fully conscious decision-making very difficult for managers. As a result, managers make decisions based on their own mental models and perceptions instead of analyzing the options in a comprehensive and structured manner (Karakaya and Yannopoulos, 2010).

Mental models imply that managers form their cognitive representations of the complex competitive environment which help them interpret information for decision-making. These representations are the result of managers’ interactions and experience with the external environment (Mezias et al., 2001; Song et al., 2002).
Managers used their knowledge and experience of their competitive environment to concentrate on specific information which they consider important for decision-making, and then measure their performance based on their decisions (Porac & Thomas, 1990). Mental models affect the whole organization and managerial decision-making. Based on their dominance over the whole organization, mental models are expected to be used in strategic decision-makings, e.g. decisions regarding entrance to foreign markets. Therefore, in the framework of the theory of mental models, the following questions can be posed and analyzed: Why do firms export? Why do they stop exporting? Why do they fail to achieve their export goals? In this framework, one can claim that the initiation and continuation of exports are the result of export motivators and its stopping or lack of development result from the effects of perceptual export barriers.

Managers’ perception of export stimuli and the firm’s export performance. As decision-making in many firms and economic agencies depend on the perception of the manager-owner, decisions related to the growth of foreign market are realized when the manager has a positive attitude towards potential opportunities and barriers to international expansion (Stolan, 2010; Wood et al., 2015). Simpson and Kujawa (1974) argue that managerial perception helps explain a firm’s export performance. The motivation of a firm for exports depends on the perceived attractiveness of foreign markets by its managers (Leonidou et al., 2007). Export stimuli are factors which stimulate the firm to initiate or continue export activities. These stimuli may be the result of intra-organizational goals and resources (such as marketing goals, marketing advantage, exploiting idle capacity, advantage in production or design) or the pull/push of external environment stimuli (such as governmental incentives, competitive pressure, and attractiveness of foreign markets) (Hasangholipour et al., 2010).

If managers perceive different economic stimuli and estimate their power as high, they may accept export as a strategy and initiate it. Based on previous studies, exporters perceive that engagement in foreign markets is more profitable than sales in the domestic market (Simpson & Kujawa, 1974), and this managerial perception of exports is a determining factor in export performance (Axinn, 1988). It does not suffice to know a set of export barriers and stimuli in order to determine a firm’s export behavior. Rather, export behavior depends on how managers perceive these barriers and stimuli and how they feel about exports (Stolan, 2010).

In the export marketing literature, there are several theories which explain export stimuli. Bradley examined the relationship between level of motivation, cognitive style, and firm growth. According to Jones, motivation explains how a behavior is done, strengthened, maintained, directed, and eventually stopped. Vroom states that motivation is a process determining the choice one makes from among various available options. What these two theories have in common is that motivation is related to factors which strengthen one’s behavior, direct it, and perpetuate it (as cited in Nategh & Niyakan, 2009). Based on expectancy theory, motivation for initiating exports is a subjective evaluation of whether attempts lead to the expected outcome (Lunenberg, 2011). Based on expectancy theory, decisions of management for exports require a positive managerial attitude that the firm's efforts will affect the outcomes of export (expectancy). The manager must think that initiating exports promotes organizational goals (instrumentality). Also, the management must prefer the improvement of performance outcomes resulting from exports (valence).

In exports, some studies have provided evidence for the effects of positive managerial attitudes towards internalization on export activities, an effect which is, in most cases, direct (Wood et al., 2015). Johanson and Vahlne (1977) referred to the importance of manager’s positive attitudes towards exporting as a pre-requisite for the allocation of resources to exporting. Several other preliminary studies have provided empirical support for the relationship between positive managerial attitudes and expert behavior (Morgan & Katsikeas, 1997; Cavusgil & Nevin, 1981; Cavusgil, Bilkey, & Tesar, 1979). Researchers have recently showed that strengthening managerial international orientations can increase export activities (Dichtl et al., 1990). A positive opinion regarding international opportunities are the most important factor to explain export activities. A positive estimation of the risk and reward of internationalization increases the firm's overall estimation of export success (Eshghi, 1992). This mental schema is distinct from the evaluation of resource accessibility. These results indicate the managerial motivations play a major role in decisions regarding initiating or expanding planned export activities.

Experimental literature of the study. The available literature differs on the conceptualization and typology of export stimuli. For instance, in one typology, export stimuli were divided based on their source to two groups of internal and external stimuli (Brooks & Rasson, 1982; Cavusgil, 1981; Kaynak & Stevenson, 1982). Internal stimuli are factors related to the internal environment of firms, while external stimuli are rooted in the environment of the domestic or foreign country. Another framework proposed in the literature is the distinction between export stimuli based on their proactive or reactive nature (Johanson & Czinkota, 1982; Leonidou, 1988; Piercy, 1981). In this classification, proactive stimuli are those which result from internal and unique qualifications.
and capabilities of firms. These factors are known as pull factors. Reactive stimuli or push factors, on the other hand, are those which make the firm engage in exports in order to respond to the pressure or stimulation of environmental factors (Morgan, 1997).

Table 1. Review of researches on export stimuli

<table>
<thead>
<tr>
<th>Authors</th>
<th>Objectives</th>
<th>Methodology/Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leonidou (1995)</td>
<td>Export stimuli from the viewpoint of non-exporters Cyprus</td>
<td>Results showed that key factors affecting the initiation of export are factors of external and effective natures, not internal or passive; for instance, unsolicited foreign orders which are the most important and effective factor in stimulating firms to initiate export activities. According to Leonidou, the second and third most important factors are the existence of production capacity surplus in the organization and existence of limited commercial opportunities in domestic markets.</td>
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<td>Suarez and Alamo (2005)</td>
<td>Examination of determining managerial and organizational factors in various aspects of the export process development Spain</td>
<td>The sample comprised general managers of Spanish firms in the wine industry. Student’s t-test, factor analysis, one-way ANOVA, contingency tables, and Chi-square test were used. Results showed that the intention for exports has a positive correlation with the competitive status of the firm in developing a new product and managerial perception regarding the advantages of exports for the firm, improvement of global competitiveness, and firm's performance. Export propensity is positively influenced by the firm's experience in the geographical expansion of markets and the manager’s foreign language skills. Export intensity has a positive correlation with the firm’s experience in the geographical expansion of markets, the manager’s foreign language skills, and foreign experience. However, it is negatively affected by the importance managers attach to the lack of internal resources.</td>
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<tr>
<td>Fernandez et al., 2005</td>
<td>Examining to what extent managerial perception of exports affects export decision Spain</td>
<td>The sample comprised SME managers. Various analyses, including ANOVA, contingency tables, chi-square test, factor analysis, and SEM were used. Results showed that managerial perception of export barriers and advantages are a key factor in determining the engagement of small businesses in exports. The most important perceived advantages of exports was cost and risk diversification. According to managers, exports has more advantages. No definite conclusion regarding the difference between perceived pros and cons of exports was found between family and non-family businesses.</td>
</tr>
<tr>
<td>Hutchinson et al. (2006)</td>
<td>Discovering the role of managerial characteristics in the international development of SMEs UK</td>
<td>It conducted a multiple-case study on 9 international retail SMEs. Results showed the significance of managers’ objective and subjective characteristics as a determining factor in preliminary decisions for initiating activities in foreign markets and international development. In terms of managers’ subjective characteristics, a combination of the entrepreneur’s positive attitude towards internationalization while considering its risks plays a pivotal role.</td>
</tr>
<tr>
<td>Boubbakri et al. (2013)</td>
<td>Examining the effect of export stimuli on export performance Tunisia</td>
<td>One-hundred twenty firms of mechanic and electronics, clothing, tile production, and food industry in Tunisia were the sample. Results indicated that the perception of export stimuli differs based on firm size, but does not differ based on the sector in which they operate. Based on findings, only proactive stimuli such as existence of special managerial interest, possession of exclusive information on foreign markets and favorable exchange rate affect export performance. Moreover, 20 export stimuli were</td>
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</table>
Table-1 shows that experimental studies on export stimuli have achieved different results. Different stimuli have been reported based on countries, industries, and firm size. Therefore, instead of accepting export stimuli as given, some authors used an exploratory approach for analyzing export stimuli. Despite rich conceptual discussions and experimental evidence for export stimuli, previous studies have mainly focused on firms in developed countries, and little evidence is available from firms active in developing countries, especially Iranian firms. In addition, only one article on the use of the theory of mental models in exports has been found by searching databases. This study was conducted by Yannopoulos and Kefalaki (2010) which examined the difference in perceived export barriers among managers of small businesses in Canada experimentally and with a quantitative approach. This study collected data through surveys. The sample comprised firms with fewer than 500 employees. In this study, the mental model of managers was assessed based on 10 questions extracted from the literature.

**Methodology.** This study was conducted based on the interpretive paradigm. This paradigm is the only paradigm which allows us to perceive the world of others and is where the concept of mental model is located. Therefore, based on this approach and using thematic analysis, the nature of managers’ mental model of export stimuli is examined and described in order to obtain the perception of this phenomenon by those who have experienced it. In what follows, the research method used in this study is briefly discussed in Table-2 based on the onion model proposed by Saunders, Lewis, and Thornhill (2009).

<table>
<thead>
<tr>
<th>Philosophy of the study</th>
<th>Approach of the study</th>
<th>Strategy of the study</th>
<th>Selection of method</th>
<th>Time horizon</th>
<th>Data collection and analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpretive</td>
<td>Inductive</td>
<td>Thematic analysis</td>
<td>Multi-method</td>
<td>Cross-sectional</td>
<td>Semi-structured interviews, projection techniques, MAXQDA</td>
</tr>
</tbody>
</table>

**Statistical population and sample**

This study focused on the dairy industry as it is ranked the first in the Iranian food industries. Chief managers in the domains of business, sales, and exports in firms active in the dairy industry comprised the statistical population. Data were collected using in-depth and semi-structured interviews based on phenomenology and projection techniques. Twelve managers were selected through theoretical sampling from Pak, Parishad, Choopan, Damdaran, Daity, Danone, Domino, Sabah, Sadr Alborz, Fajr, Manizan, and Mimas firms. Theoretical sampling is a type of purposeful sampling which helps the researcher in creating or discovering theories or concepts whose theoretical relationship with the developing theory is proven (as cited in Hadavinejad, 2011). Danaeifard and Emami (2007) consider saturation as the criterion of sufficiency of theoretical sampling. Therefore, interviews were continued until
theoretical saturation. Interviewees differed widely in terms of age and education. Their educational background included agricultural engineering, food industry engineering, economy, and management. Firm sizes ranged from small to large. Some firms had extensive export activities while some were active only in the domestic market. To ensure the reliability and validity of data with the criteria of qualitative research, the methods of transcript approval by interviewees and triangulation through interviews with different groups were used. Thematic analysis in MAXQDA was employed to analyze the data and prepare the managers’ mental model of export stimuli. During analysis, the constant comparative method was employed to code the transcripts and coding was done based on the inductive method.

**Results.** Saturation was achieved after 8 interviews. However, to be on the safe side, 12 interviews were conducted. Table-3 presents the demographic characteristics of interviewees, and Table-4 shows the characteristics of the studied dairy firms.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Education</th>
<th>Age</th>
<th>Work experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>30-39</td>
<td>40-49 50 and above</td>
</tr>
<tr>
<td>Male</td>
<td>diploma</td>
<td>8</td>
<td>3 1</td>
</tr>
<tr>
<td>Female</td>
<td>B.A./B.S.</td>
<td>6</td>
<td>4 1</td>
</tr>
<tr>
<td></td>
<td>M.A./M.S.</td>
<td>50</td>
<td>8 3</td>
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<tr>
<td></td>
<td>PhD</td>
<td>8.3</td>
<td>4 2</td>
</tr>
<tr>
<td>Number</td>
<td>11 1</td>
<td>66.7</td>
<td>25 8.3</td>
</tr>
<tr>
<td>Percentage</td>
<td>91.7 8.3</td>
<td>33.4 8.3</td>
<td>33.4 58.3</td>
</tr>
</tbody>
</table>

Table-4. Demographic characteristics of dairy firms

<table>
<thead>
<tr>
<th>Size (number of employees)</th>
<th>Export history (years)</th>
<th>Number of target countries for exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>100&gt; 100-1000 1000-2000 &gt;2000</td>
<td>0 1-9 10-20 &gt;20</td>
<td>0 1-4 5-10</td>
</tr>
<tr>
<td>Number</td>
<td>2 5 2 3</td>
<td>2 4 2 2 6 4</td>
</tr>
<tr>
<td>Percentage</td>
<td>16.6 41.8 16.6 25</td>
<td>16.6 33.4 33.4 16.6 16.6 50 33.4</td>
</tr>
</tbody>
</table>

After interviews, full transcripts were loaded in MAXQDA and preliminary coding was conducted. In the next step, the primary codes were analyzed and reviewed and different codes were categorized based on their similarities. In this step, incomplete or irrelevant codes were discarded. Finally, 26 types of codes and 139 codes were categorized as main themes, leading to the final model of the study including 6 mental models of export stimuli (Figure-1). The extracted main themes, sub-themes, and primary codes are presented in Table-5.

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Sub-theme</th>
<th>Primary codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government-based mental model</td>
<td>1. Policy-making</td>
<td>Revision of export regulations, governmental interaction with other countries, competitive pricing, existence of free competition</td>
</tr>
<tr>
<td></td>
<td>2. Governmental incentives</td>
<td>Low-interest facilities, export reward, governmental subsidies</td>
</tr>
<tr>
<td>Benefit-based mental model</td>
<td>1. Direct benefits</td>
<td>Profitability, high liquidity</td>
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<tr>
<td></td>
<td>2. Indirect benefits</td>
<td>Tax-free exports, custom exemptions, priority in receiving facilities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brand-based mental model</th>
<th>1. Increasing brand credibility</th>
<th>Brand reputation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Brand expansion</td>
<td>Introducing the brand</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Firm-based mental model</th>
<th>1. Production capacity surplus</th>
<th>Surplus production capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Firm’s export experience</td>
<td>Firm history</td>
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<tr>
<td></td>
<td>3. Export volume</td>
<td>High export volume</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manager-based mental model</th>
<th>1. Manager’s objective characteristics</th>
<th>Manager’s experience, efforts, and will</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>1. Manager’s subjective qualities</td>
<td>Patriotism, gaining personal credibility from exports, attachment to the business</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment-based mental model</th>
<th>1. Geographical factors</th>
<th>Having land borders for exports</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2. Economic factors</td>
<td>Economic conditions of countries in the region</td>
</tr>
<tr>
<td></td>
<td>3. Customers</td>
<td>Unsolicited foreign demand, low purchasing power of domestic customers</td>
</tr>
</tbody>
</table>

**Figure-1. Mental models of export stimuli**

Figure-2 depicts the schematic view of the distribution of six mental models in terms of frequency provided by MAXQDA.

<table>
<thead>
<tr>
<th>Code System</th>
<th>Danone</th>
<th>Sani</th>
<th>Alborz</th>
<th>Demdaran</th>
<th>Daily</th>
<th>Domino</th>
<th>Sabah</th>
<th>Fajr</th>
<th>Manizan</th>
<th>Mimas</th>
<th>Pok</th>
<th>Perisah</th>
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</table>

**Figure-2. Frequency distribution of mental models among dairy firms**
As the government-based mental model is identified far more than other models, it is the dominant mental model among Iranian dairy firms. For a better comparison of other mental models in dairy firms, their schematic frequency distribution is presented in Figure-3 after removing the government-based mental model.

Below, the six mental models extracted from thematic analysis are explained in order of frequency. Also, for a better descriptive and explanation of discovered themes, samples of participants’ utterances are provided.

1. Government-based mental model: This mental model has sub-themes of “governmental policy-making” and “governmental incentives”. This mental model is by far the most frequently identified model among managers, with 57 out of 139 primary codes. According to these managers, the government can play a significant role in promoting the export of Iranian firms by increasing supports, improving policy-making, and correcting export regulations. Based on this idea, in spite of the relative improvement in work conditions, the current governmental supports of dairy firms are inadequate and much less than those in other countries. One manager said, “The government must support. That is, the government must really support exports. In many cases, little support is given to providers and they face problems. The major barriers at present are is the ones that the government could help to overcome in order for us to easily work in the market of other countries and export our products there” (Code 9).

According to managers with this mental model, increasing governmental supports of manufacturing industries is the most important export expansion stimulus because most dairy firms cannot invest on development and research projects or import advanced technologies due to financial problems and lack of financial liquidity. In the case of governmental incentives, export rewards can be a very effective stimulus for developing firms’ export activities. Currently, exporting firms do not benefit from this reward. One manager said, “Countries like Turkey and China give some percent of export reward to firms when they export, even before the goods are discharged from customs. It’s been over 10 years that export reward is not given to any firm in Iran” (Code 5).

In terms of governmental policy-making, an important point noted by some participants was that the development and improvement of relations with other countries and joint venture with advanced countries in dairy industries would pave the way for the export expansion of Iranian firms to trans-regional markets and act as an effective stimulus for export growth. One manager noted, “If I were a decision-maker, I’d try to establish relations with other countries and import their industries. We’re cast aside in the world. As if we’re on an island in a very traditional format. We have no access to anywhere. This is our politicians’ mistake that they've isolated us and we can’t see anything” (Code 9).

Another important point was that the creation of a free competition environment in Iran and removal of pricing limits enforced by the government can be an effective stimulus for motivating managers to enhance the quality of products and increase their export activities. Another manager believed, “If I could act freely in terms of pricing, I’d conduct research, I’d innovate to provide a new product with a better quality and higher price, and I wouldn’t worry about its price. This will lead to competition and quality. That’s when those who are stronger automatically flourish and even become international. But when they put these barriers, we nip ourselves in the bud automatically. We want to control prices with the pretext that we don’t want dairy consumption per capita to fall. But this is destroying the whole industry” (Code 4).

Based on Figure-4, this mental model exists in 92% of Iranian firms studied here, more prominent in Choopan, Manizan, and Danone.
2. Benefit-based mental model: This mental model includes two sub-themes of “direct benefits” and “indirect benefits”. This mental model is the second most frequent one among the managers of dairy firms, with 24 out of 139 primary codes. In this mental model, high liquidity and profitability resulting from exports are strong motivators for managers for engaging in export activities and increasing exports. One manager mentioned, “A considerable stimulus for firms is the injection of the highly acceptable liquidity and comfortable sales resulting from exports. That is, they can sell or even pre-sell an acceptable volume of products. This never happens in the domestic market. This can motivate many to take a look at export markets if they want cash injection” (Code 9). On the other hand, according to these managers, indirect benefits resulting from export activities (e.g. tax-free exports, customs exemptions, and prioritizing exporters when receiving facilities) can improve their motivation for increasing their exports.

The analysis of data in Figure-5 reveals that this mental model was the most prominent in Fajr, Damdaran, Mimas, Pak, and Parishad, and does not exist in Manizan, Domino, and Sadr Alborz.

3. First-based mental model: “Surplus production capacity”, “firm’s export experience”, and “volume of exports” are the sub-themes of this mental model. The motivation of many managers for engaging in export markets is the existence of unused production capacity in the firm and amortization of fixed costs through export sales. One manager stated, “Most manufacturing firms have surplus capacity which cannot be filled with the domestic market. Therefore, the best and only option for them would be export markets” (Code 4). On the other hand, according to these managers, the firm’s export experience in addition to a large volume of exports motivates them to increase exports and engage in the export process.

This mental model is more prominent in Danone and Fajr firms. Also, this model does not exist in Pak and Sadr Alborz (Figure-6).

4. Brand-based mental model: This mental model includes two sub-themes of “increasing brand reputation” and “brand expansion”. This mental model is the fourth most frequent one among managers of dairy firms. According to these managers, the introduction of the brand in the global market and the reputation for the brand resulting from export markets are stimuli for their engagement in export activities. One manager stated, “Export has many stimuli, at least in Iran. There is a global market in which you can introduce your brand, sell your products in the same place as other brands, and use this opportunity. When you’re near other firms you can grow and compete with them much more easily” (Code 11). Another manager said the following about brand reputation: “You can have an export market outside Iran which can turn you to a well-known brand inside Iran. Many dairy factories work primarily in the export market. When they have had the experience of export, their brand would be accepted in Iran much more easily. It’s a good resume, a good reputation” (Code 7).

Data analysis in Figure-7 shows that this mental model is more prominent in Fajr and Parishad firms. The extent of activity of these two firms is more limited than that of others. Therefore, the motivation of the managers of these firms for the geographical expansion of their brand and achievement of reputation is their stimulus for increasing export activities. This mental model does not exist in Manizan, Sadr Alborz, Damdaran, and Daity.
5. Manager-based mental model: This mental model turned towards the managers themselves, comprising two sub-themes of “manager's objective characteristics” and “manager’s subjective characteristics”. According to these managers, the export experience of managers, their efforts and will for making the firm growth, their attachment to the business, their patriotism, and the internal satisfaction resulting from export activities are motivators for investment on exports. One manager stated, “Our firm is loved by its stakeholders. They were stock-raisers from a long time ago, they’ve tried hard. They don’t want to shut the firm down. Because they want to do something for this country. Many firms were to help this country. They want to enjoy the fruits of the tree they've planted and see it grow” (Code 12). In terms of achieving personal reputation, one manager said, “When you talk to someone and say, ‘I export cheese to four countries in addition to Iran’, well, this is a good resume. This motivates me to continue this further” (Code 7). Based on Figure-8, this mental model is more prominent in Choopan, Fajr, and Sadr Alborz. Moreover, it is absent in Parishad, Manizan, Damdaran, Dadone.

6. Environment-based mental model: This mental model is the last model identified among the managers of studied dairy firms, including three sub-themes of “customers”, “political and economic factors”, and "geographical factors”. In this mental model, the existence of unsolicited foreign demand, low purchasing power of people in Iran, existence of land borders for exports, political and economic conditions of countries (not having dairy factories and the high tendency of people for dairy products) strengthen the managers’ motivation for exports. Based on Figure-9, this mental model is more prominent in Manizan. Furthermore, it is absent in the greater half of firms. In other words, these factors are not effective stimuli for most firms. This conclusion depicts the little importance of environmental variables for stimulating firms for exports.

Discussion. The present study examined a wide range of dairy firms, from those which had never exported, those which had some exports, and those with extensive activity in foreign markets. Based on interviews with the managers of 12 export and non-export dairy firms, six mental models of export stimuli were identified through thematic analysis. These models were: Government-, benefit-, firm-, brand-, manager-, and environment-based mental models, in order of frequency. The government-based mental model belonged to potential export stimuli, while the rest of the models were related to actual export stimuli.

The government-based model was identified as the dominant mental model in dairy firms. Forty-two percent of primary codes belonged to this mental model, existing in 92% of Iranian dairy firms. This mental model is the primary mental model of export stimuli in 75% of firms. According to managers, the government can provide a very effective stimulus for developing the export activities of Iranian firms and resolve many of the domestic export expansion barriers by establishing clear regulations in the domain of exports, providing low-interest facilities, governmental subsidies, custom and tax exemptions for exporting firms, and offering export rewards. This result is consistent with that reported by Revindo and Gan (2016) and Bubakri et al. (2013). Governmental supports were unfavorable in the study by Revindo and Gan (2016), standing as the last export motivating factor. This factor was also estimated at below average by Bubakri et al. (2013). According to managers, the current governmental supports for export are not adequate or effective. Therefore, the points discussed in this mental model were taken as potential export stimuli.

The benefit-based mental model was the second most frequent one and 17% of primary codes belonged to this model. This model existed in 75% of firms, being the dominant model for the managers in Damdaran firm. This indicates that, currently, the motivation of most managers for increasing their export activity is highly dependent on
the benefits gained in this way. In other words, if managers perceive that the expansion of exports to trans-regional markets is not profitable, they do not have a reason to invest on exports. They do not concede to losses in the first years, not even to expand their brand or increase brand reputation. This result is in line with that of previous studies reporting that exporters perceive that engagement in foreign markets is more profitable than sales in the domestic market (Simpson & Kujawa, 1974), and this managerial perception of exports is a determining factor in export performance (Axinn, 1988). Profitability is a very effective stimulus, discussed in numerous studies. Leonidou (1998) introduces sales and profitability as the most important motivation for export for small and medium-sized firms. Also, Stolan (2010) concluded that growth and profitability have a positive correlation with the extend of exports. Moreover, profitability has been introduced as the most effective export stimulus in Tunisian firms as reported by Bubakri et al. (2013). Moreover, profitability and further sales have been identified as the most effective export stimulus in small firms as reported by Leonidou et al. (2007). Currently, dairy products of Iranian firms do not have the competitive advantage for international markets due to the high production costs in terms of final costs. Therefore, the profitability of export sales in trans-regional markets is less than domestic sales. Based on the dominance of this mental model, business owners do not expand exports to trans-regional markets. The potential stimuli discussed in the government-based mental model play a major role in reducing supplementary production costs, providing the firm’s financial resources, and thus developing the export activities of Iranian dairy firms.

The third mental model of export stimuli was the firm-based model, active in 83% of dairy firms. In this model, surplus production capacity, firm’s export experience, and high volume of exports strengthen the motivation of managers for engaging in export activities and further investment on exports. In this with this result, unused production capacity is the most important stimulus for export in small and medium-sized firms in Canada as reported by Brooks and Rasson (1982). Leonidou (1995) identified surplus production capacity as the second export stimulus from the viewpoint of non-exporters. In the Norwegia market, Joynt (1982) concluded that using unused capacity is the second most important stimulus for export. From among studies conducted in the past decade, Leonidou et al. (2007) concluded that the use of unused production capacity is a stimulus with a major role in the exports of small firms. However, Boubakri et al. (2013), reported surplus production capacity to be of average importance. Moreover, in the study by Revindo and Gan (2016), this factor was not among the 22 export stimuli in Indonesia. In this study, the firm’s experience was identified as an export stimulus. Review of literature shows that, although experience has been known as a key factor in export performance, it had never been introduced as an export stimuli. Some managers of dairy products implied that the firm’s experience and history in export activities strengthen their motivation for expanding their exports. Results reported by Yannopoulos and Kefalki (2010) confirm this result. These researchers showed that the firm’s export experience plays a role in forming the mental model of managers.

The brand-based model was identified as the fourth most frequent mental model in 67% of dairy firms. This shows that the motivation of a considerable portion of managers for engagement in exports or increasing their export activities is increasing the reputation and expanding their brand to other countries. This mental model was dominant in Parishad and Domino. In other words, in these two firms, brand-based stimulus is more effective than government-based stimulus and provides further motivation exports for managers.

The manager-based mental model was the fifth model, present in 58% dairy firms. After the government-based model, this model is the dominant model in Sad Alborz, Fajr, and Choopen which are among non-exporters or those with limited exports. These results demonstrate the significance of the role of manager’s characteristics and motivations for expanding export activities in these firms. Similarly, Manolova et al. (2002) showed the importance of personal factors in relation to internationalization of small firms. Katsikea et al. (2007) also indicated that sales managers play the key role in export effectiveness. The managers’ benefit in exports, experience, and will are factors identified in previous studies are export stimuli. In the study by Katsikeas et al. (1996), the ill of managers and international experiences were the first and third stimuli for exports, respectively. Manolova et al. (2002) concluded that firm owners tend to rely on their own international experience, skills, and qualifications in the process of internationalization. Hutchinson et al. (2006) showed that managers’ objective and subjective qualities, including their international experience and positive attitude towards internationalization, play key roles in initiating export activities and international expansion of small and medium-sized firms. Recently, in the study by Boubakri et al. (2013), managerial interest has been identified as the third stimulus for export activities in Tunisian firms, while this factor was the final stimulus for Indonesian firms in the study by Revindo and Gan (2016).

The environment-based model was identified as the last mental model in 41% of dairy firms. This model is the dominant model in Manizan, after the government-based model. The motivation of some firms, including Manizan, Parishad, and Choopen, for exports is the unsolicited foreign demand, low purchasing power of domestic customers, political and economic conditions of countries in the region, and the tendency of people in these countries.
to consume dairy products. Wood et al. (2015) argue that, when an emergency like unwanted foreign order happens, the firm initiates exports. In case of success, the firm enters a cycle which motivates the manager for initiating planned exports (Wood et al., 2015). Moreover, Leonidou (1995) showed that receiving unsolicited orders is the most important and effective factor, and limited opportunities in domestic markets is the third factor to stimulate countries to initiate their export activity (Leonidou, 1995). From among recent study, the study by Revindo and Gan (2016) showed that receiving foreign demand is the most important stimulus for export in Indoneisan firms. However, this factor is among the least important ones in the study by Boubakri et al. (2013). Furthermore, domestic market saturation has been identified as the fourth important stimulus for export activities in Tunisian firms by Boubakri et al. (2013), while this factor was the least important export stimulus in the study by Revindo and Gan (2016). High transportation costs and weak transportation infrastructure are among important export expansion barriers in Iranian dairy firms. Therefore, having a land border for exports and small distance from target markets strengthen managers’ motivation for engagement in export activities. In the present study, this mental model was the least frequent one. Similarly, in the study by Revindo and Gan (2016), closeness to target markets is among the least important export stimuli.

Conclusion, Limitations, and Suggestions. The review of literature shows that export is a vital factor for growth and expansion in global markets (Sahym et al., 2012; Navarro et al., 2010, 2014; Wood et al., 2015). What is of utmost importance here is the maintenance and strengthening of managers’ motivation for maintaining foreign markets and continuously expand exports. Studies on firms’ export behavior were mostly focused on export barriers (Uner et al., 2013; Kahiya & Dean, 2014; Cahlen et al., 2015). Recently, the literature points to research gaps in the domain of managerial motivations for export (Wood et al., 2015). Moreover, the literature on internationalization is mostly focused on developed countries and major economies (Wood et al., 2015) with little attention towards export stimuli in firms active in developing countries. Despite the importance of managerial perception and mental models in decision-making, including decisions related to export activities, a relatively large portion of international business research has neglected the role of managers in decision-making and strategic choices (Aharoni et al., 2011). The noted points motivated the researchers to take a step to fill in the research gaps and extend the literature. This study is one of the few which are conducted in an exploratory manner on the export stimuli and motivations of Iranian firms. It attempts to identify managers’ mental models of export stimuli.

Governmental interaction with advanced countries and consultation for joint ventures are the innovations of this study, identified as potential export stimuli in the government-based mental model. This can be an effective solution to the development of international relations of Iranian firms and expansion of their exports to trans-regional markets. Another point identified in this study as a potential export stimulus is free competition. According to managers, if the government allows firms to engage in free market competition, managers will have a higher motivation for promoting the quality standards of products, invest on research and development, increase exports, and resolve export barriers.

To the best of our knowledge, the direct benefits resulting from exports (e.g. Profitability and liquidity) have already been introduced in previous studies as export stimuli. However, indirect benefits resulting from exports as a sub-theme in the benefit-based mental model is introduced in this study for the first time in the context of Iranian dairy firms. Increasing brand reputation and brand expansion are factors introduced in this study for the first time as export stimuli in the brand-based mental model. In this study, codes identified in the sub-themes of manager's subjective qualities (e.g. benefit in the business, patriotism, and gaining personal reputation from exports) are stimuli identified in the context of Iranian dairy factories as the innovations of this study.

Moreover, by comparing the mental models identified in two groups of exporters and non-exporters, we concluded that government-, benefit-, and brand-based mental models are more prominent among exporters, while the government-based mental model is dominant among non-exporters. This conclusion further emphasizes the important role of policy-making and governmental supports for motivating the managers of Iranian firms for investment on foreign activities. Iranian firms require governmental help in terms of export financial support, lenient rules, and provision of transportation infrastructure in order to initiate exports and decrease the risk of exports.

Similar to other studies, this study is limited by some factors. Therefore, further studies on this topic are necessary. In this study, exporting firms were considered as a homogeneous group, while they differ in terms of firm size, volume of exports, and export level. Future studies can employ cluster analysis for categorizing mental models based on the characteristics of managers and firms. The present study focused on a particular industry among Iranian firms. Therefore, to complete and generalize the findings, further evidence from other developing markets and industries is essential. The model proposed here was based on the qualitative method. Thus, it is recommended that the validity of this model be examined using quantitative methods, e.g. Factor analysis, in future studies. Finally, the
examination of the relationship between mental models of export stimuli and export performance can result in a better understanding of the role of mental models in the internationalization process of firms active in developing countries.

References